Module 1: Firefighter I (Intro)

SECTION 1 FIRE DEPARTMENT ORGANIZATION

1-I.01 Trainee shall identify the organizational structure of the fire department and his/her role in it.

NFPA 1001 5.1.1 / SFFMA (1-01.01)

1-I.02 Trainee shall identify the size of the fire department, the scope of its operation, and the Standard Operational Procedures (SOPs).

NFPA 1001 5.1.1 / SFFMA (1-01.02)

1-I.03 Trainee shall identify the fire department rules and regulations as they apply to all members of the department. NFPA 1001 5.1.1 A-B/ SFFMA (1-01.03)

SECTION 2 FORCIBLE ENTRY

2-I.01 Trainee shall identify and demonstrate the use of various types of manual and/or powered forcible entry tools used in the AHJ (Document with Forcible Entry #4 Skillsheet found in appendix and retain on file):

NFPA 1001 5.3.4.A-B / SFFMA (2-01.01)

A. Cutting tools

C. Pushing/Pulling tools

B. Prying tools

D. Striking tools

2-I.02 Trainee shall identify the method and procedure of proper cleaning, maintenance and inspection of various types of the following forcible entry tools and equipment.

NFPA 1001 5.5.1.A-B / SFFMA (2-01.02)

A. Axe heads and cutting edges

D. Plated surfaces

B. Wooden handles

E. Unprotected metal surfaces

C. Fiberglass handles

F. Power equipment

SECTION 3 FIRE SERVICE LADDER PRACTICES

3-I.01 Trainee shall identify each type of ladder and define its use.

NFPA 1001 5.3.6.A-B / SFFMA (3-01.01)

A. Single ladders

D. Extension ladders

B. Roof ladders

E. Pole ladders

C. Folding ladders

F. Combination ladders

3-I.02 Trainee, operating as an individual and as a member of a team, shall demonstrate or explain properly picking-up, carrying, and lowering a ladder using the following methods:

NFPA 1001 5.3.6, 5.3.6.A-B, 5.3.12.A-B / SFFMA (3-01.06)

(Document with Ladders #14 skillsheet found in appendix and retain on file)

A. one-firefighter carry

1. 10' collapsible

2. 14' combination

a. Low-shoulder

b. High-shoulder

3. 14' with folding hooks

a. Low-shoulder

b. High-shoulder

D. four-firefighter carry

1. 35' or extension ladder

a. Flat-shoulder

c. Low-shoulderd. Arm's length on-edge

b. Flat arm's length E. five-firefighter carry

F. six-firefighter carry

G. Roof

H. Attic

4. 14' with folding hooks, for carrying up a ladder

a. Low-shoulder

B. two-firefighter carry

1. 24' 2-section extension ladder

a. Low-shoulder

C. three-firefighter carry

1. 35' or extension ladder

a. Flat-shoulder

o. Flat arm's length

3-I.03 Trainee shall identify the load capacities for ground ladders, according to NFPA 1931.

NFPA 1001 5.3.6., 5.3.6.A / SFFMA (3-01.07)

- A. Trainee shall identify the load capacities for folding ladders, pompier ladders, single roof ladders, all extension ladders, and combination ladders, according to NFPA 1931.
- B. Trainee shall identify "ladder load."

3-I.04 Trainee shall climb the full length of each of the following types of ground ladder:

NFPA 1001 5.3.6, 5.3.12, 5.3.12.B / SFFMA (3-01.08)

1. 10' folding ladder

- 4. 24' extension ladder
- 2. 14' combination ladder
- 5. 35' extension ladder
- 3. 14' with folding hooks

NFPA 1001 5.5.1, 5.5.1.A-B / SFFMA (3-01.09)

(Document with Ladders #9 skillsheet found in appendix and retain on file)

A. Trainee shall identify the requirements pertaining to the frequency for cleaning ground ladders.

Trainee shall demonstrate identify, describe, and demonstrate the techniques of cleaning ladders.

B. Trainee shall describe and demonstrate the procedures for cleaning ground ladders.

SECTION 4 FIRE HOSE PRACTICES

4-I.01 Trainee shall identify the sizes, types, amounts, and use of hose carried on fire apparatus.

NFPA 1001 5.3.10 / SFFMA (4-01.01)

4-I.02 Trainee shall demonstrate the use of nozzles, hose adapters, and hose appliances carried on the local fire apparatus.

NFPA 1001 5.3.10.A-B / SFFMA (4-01.02)

A. Nozzles

3-I.05

- 1. Solid stream nozzle
- 4. Applicator nozzle
- 2. Fog nozzle
- 5. Master stream device (Playpipe)
- 3. Cellar nozzle
- B. Water Valves
 - 1. Gate

4. Clapper

2. Ball

5. Piston

- 3. Butterfly
- C. Hose Adapters
 - 1. Double male
- 4. Increasers
- 7. Plugs

- 2. Double female
- 5. Elbows

8. Blindcaps

3. Reducers

- 6. Caps
- D. Hose Appliances
 - 1. Manifold
- 4. Siamese
- 2. Water thief
- 5. In-line relay valve

3. Wye

6. Intake relief valve

- E. Hose Tools
 - 1. Spanner wrench
- 5. Hose chain
- 9. Suction hose strainer

- 2. Hydrant wrench
- 6. Hose roller
- 10. Hose bridges

- 3. Hose strap4. Hose rope
- 7. Hose jacket8. Hose clamp
- 11. Hose wringers
- 4-I.03 Trainee, given the necessary equipment and operating as an individual and as a member of a team, shall advance dry and charged hose lines of two different sizes, both 1½" or larger, from fire apparatus:

NFPA 1001 5.3.10.A-B, 5.3.13.A-B / SFFMA (4-01.03, 4-01.04)

A. into a structure

- E. down an inside stairway to a lower level
- B. up a ladder into an upper floor window
- F. down an outside stairway to a lower level
- C. up an inside stairway to an upper floor
- G. to an upper floor by hoisting
- D. up an outside stairway to an upper floor
- 4-I.04 Trainee shall demonstrate the techniques for cleaning fire hose, couplings, and nozzles; and inspecting for damage.

NFPA 1001 5.5.2 / SFFMA (4-01.05)

(Document with Hose #16 skillsheet found in appendix and retain on file)

4-I.05 Trainee shall connect a fire hose to a hydrant, and fully open and close the hydrant.

NFPA 1001 5.3.15.A-B / SFFMA (4-01.06)

4-I.06 Trainee shall demonstrate the loading of fire hose on fire apparatus and identify the purpose of at least three types of hose loads and finishes.

NFPA 1001 5.5.2.A-B / SFFMA (4-01.07)

(Document with Hose #13 skillsheet found in appendix and retain on file)

4-I.07 Trainee shall demonstrate three (3) types of hose rolls.

NFPA 1001 5.5.2.A-B/ SFFMA (4-01.08)

(Document with Hose #5 skillsheet found in appendix and retain on file)

A. Straight roll

C. Twin donut roll

B. Donut roll

4-I.08

D. Self-locking twin donut roll

- 1. Method one Method two
- Trainee shall demonstrate two (2) types of hose carries.

NFPA 1001 5.3.10.A-B, 5.5.2 / SFFMA (4-01.09)

A. Working line drag

E. Minuteman load

B. Wyed lines

- Triple layer load
- C. Accordion or flat shoulder method
- G. Horseshoe shoulder carry

- D. Pre-connected flat load
- 4-I.09 Trainee shall demonstrate coupling and uncoupling fire hose.

NFPA 1001 5.3.10.A-B / SFFMA (4-01.10)

- A. Trainee, given fire hose used for fire attack, 1½" or larger, and water supply hose, 2½" or larger, shall describe and demonstrate the one-person methods of connecting hose lines.
 - One firefighter foot-tilt method
 - 2. Between-the-feet method
 - 3. Across-the-leg method
- B. Trainee, operating as a member of a team, given fire hose used for fire attack, 1½" or larger, and water supply hose, 2½" or larger, shall describe and demonstrate the two person methods of connecting hose lines.
- C. Trainee, operating as an individual or a member of a team, shall describe and demonstrate the methods of breaking a tight screw-thread connection.
 - One firefighter knee-press method
 - Two firefighter stiff arm method
 - Spanner wrench 3.
- Trainee shall work from a ladder with a charged attack line, 1½" or larger. 4-I.10

NFPA 1001 5.3.10.A-B / SFFMA (4-01.11)

4-I.11 Trainee, given fire hose used for fire attack, 1½" or larger, and water supply, 2½" or larger, shall demonstrate the method for extending a hose line.

NFPA 1001 5.3.10.A-B / SFFMA (4-01.13)

SECTION 5 SALVAGE AND OVERHAUL

There are no objectives required for this certification level.

SECTION 6 FIRE STREAMS

6-I.01 Trainee shall define a fire stream.

NFPA 1001 5.3.10.A / SFFMA (6-01.01)

6-I.02 Trainee shall manipulate a nozzle so as to attack a Class A and a Class B fire.

NFPA 1001 5.3.10.B / SFFMA (6-01.02)

6-I.03 Trainee shall define water hammer and at least one method for its prevention.

NFPA 1001 5.3.10.A-B / SFFMA (6-01.03)

6-I.04 Trainee shall demonstrate how to open and close a nozzle and how to adjust its stream pattern and flow setting when applicable.

NFPA 1001 5.3.10.B / SFFMA (6-01.04)

SECTION 7 APPARATUS FAMILIARIZATION

There are no objectives required for this certification level.

VENTILATION PRACTICES **SECTION 8**

8-I.01 Trainee shall define the principles of ventilation, and identify the advantages and effects of proper ventilation.

NFPA 1001 5.3.11.A-B / SFFMA (8-01.01)

(Document with Ventilation #1 skillsheet found in appendix and retain on file)

8-I.02 Trainee shall identify the dangers present, and the precautions to be taken in performing ventilation.

(Document with Ventilation #1 skillsheet found in appendix and retain on file)

A. Trainee shall describe the considerations involving basic size-up.

NFPA 1001 5.3.11.A-B, 5.3.12.A-B / SFFMA (8-01.02A)

- 1. Life safety hazards
- 2. Determining the location and extent of the fire
- 3. Identifying building construction features
- B. Trainee shall describe the considerations affecting the decision to ventilate.

NFPA 1001 5.3.11 / SFFMA (8-01.02B)

- 1. Assessing the need for ventilation
- 2. Deciding where ventilation is needed
- 3. Deciding how ventilation should be accomplished
- **8-I.03** Trainee shall demonstrate opening various types of windows from inside and outside, with and without fire department tools.

NFPA 1001 5.3.11.B / SFFMA (8-01.03)

(Document with Ventilation #1 skillsheet found in appendix and retain on file)

8-I.04 Trainee shall demonstrate breaking window or door glass, and removing obstructions.

NFPA 1001 5.3.11.B / SFFMA (8-01.04)

(Document with Ventilation #1 skillsheet found in appendix and retain on file)

8-I.05 Trainee shall describe and safely demonstrate, using both hand and power tools, the ventilation of a roof and a floor.

NFPA 1001 5.3.12, 5.3.12.A-B / SFFMA (8-01.05)

(Document with Ventilation #1 skillsheet found in appendix and retain on file)

8-I.06 Trainee shall identify and describe the signs, causes, and effects of a back draft explosion.

NFPA 1001 5.3.11.A / SFFMA (8-01.07)

SECTION 9 RESCUE OPERATIONS

9-I.01 Trainee shall, given victims and the proper equipment, demonstrate the proper techniques for removal of injured person(s) from hazards by the use of the following carries, drags and stretchers:

(Document with Search and Rescue #1 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.9.A / SFFMA (9-01.04)

A. one/two person victim standing

B. seat carry

C. extremities carry

D. chair carry

E. three-person carry

F. lift and carry

G. blanket drag

9-I.02 Trainee shall demonstrate searching for victims in burning, smoke-filled buildings, or other hostile environments:

(Document with Search and Rescue #1 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.9.B / SFFMA (9-01.06)

- A. given the proper information, shall list two (2) objectives to be achieved while searching for victims in a building on fire and
 - 1. Finding victims
 - 2. Obtaining information on the extent of the fire
- B. given a small one story building filled with simulated smoke, shall demonstrate the establishing of a search pattern for the building and multiple rooms that are involved.
 - 1. With a rope or hose line
 - 2. Without a rope or hose line

SECTION 10 FIRST AID

10-I.01 Trainee shall list the three (3) major roles and responsibilities of the first responder.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.01)

10-I.02 Trainee shall identify the medical identification symbol.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.04)

10-I.03 Trainee shall state the time in which brain cells will die without oxygen.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.05)

10-I.04 Trainee shall identify a primary survey for life-threatening injuries.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.06)

10-I.05 Trainee shall describe the signs of adequate and inadequate breathing.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.07)

- 10-I.06 Trainee shall demonstrate mouth-to-mouth and mouth-to-nose resuscitation.

 Removed from program effective September 2012
- 10-I.07 Trainee shall list the signs of cardiac arrest.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.12)

10-I.08 Trainee shall list the signs of effective CPR.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.14)

10-I.09 Trainee shall demonstrate one and two person cardiopulmonary resuscitation.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.15)

10-I.10 Trainee shall demonstrate the proper technique for prevention and/or spread of infectious diseases and occupational exposure to bloodborne pathogens associated with emergency medical care.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.19)

10-I.11 Trainee shall demonstrate the use, decontamination, disinfecting, and proper disposal of personal protective equipment used for protection from infectious diseases.

NFPA 1001 4.3 Emergency Medical Care / SFFMA (10-01.20)

SECTION 11 INSPECTION PRACTICES

There are no objectives required for this certification level.

SECTION 12 WATER SUPPLIES

There are no objectives required for this certification level.

SECTION 13 FIRE PROTECTION SYSTEMS

There are no objectives required for this certification level.

SECTION 14 TRANSPORTATION EMERGENCIES

There are no objectives required for this certification level.

SECTION 15 FIRE BEHAVIOR (FIRE SCIENCE)

15-I.01 Trainee shall define heat and fire.

NFPA 1001 5.1.1 / SFFMA (15-01.01)

15-I.02 Trainee shall define the fire triangle and tetrahedron.

NFPA 1001 5.1.1 / SFFMA (15-01.02)

15-I.03 Trainee shall identify two (2) chemical, mechanical, and electrical energy heat sources.

NFPA 1001 5.1.1 / SFFMA (15-01.03)

15-I.04 Trainee shall define the following stages of fire:

NFPA 1001 5.1.1 / SFFMA (15-01.04)

A. incipient D. flashover G. back draft explosion

B. flame spread E. steady state

C. hot smoldering F. clear or free burning

15-I.05 Trainee shall define the $\underline{\text{four } (4)}$ methods of heat transfer.

NFPA 1001 5.1.1 / SFFMA (15-01.05)

A. Conduction C. Radiation

B. Convection D. Direct Flame Impingement

15-I.06 Trainee shall define the three (3) physical states of matter in which fuels are commonly found.

NFPA 1001 5.1.1 / SFFMA (15-01.06)

A. solid

B. liquid

C. gaseous

15-I.07 Trainee shall define the hazard of finely divided fuels as they relate to the combustion process.

NFPA 1001 5.1.1 / SFFMA (15-01.07)

15-I.08 Trainee shall define:

NFPA 1001 5.1.1 / SFFMA (15-01.08)

A. flash point C. ignition temperature

B. fire point D. upper and lower explosive limits

15-I.09 Trainee shall define concentrations of oxygen in air as it affects combustion.

NFPA 1001 5.1.1 / SFFMA (15-01.09)

15-I.10 Trainee shall identify three (3) products of combustion commonly found in structural fires which create a life hazard.

NFPA 1001 5.1.1 / SFFMA (15-01.10)

15-I.11 Trainee shall identify characteristics of water as it relates to its fire extinguishing potential.

NFPA 1001 5.1.1 / SFFMA (15-01.11)

SECTION 16 FIRE ALARMS AND COMMUNICATION

There are no objectives required for this certification level.

SECTION 17 PUBLIC RELATIONS

There are no objectives required for this certification level.

SECTION 18 RECORDS AND REPORTS

There are no objectives required for this certification level.

SECTION 19 EMERGENCY VEHICLE OPERATIONS

There are no objectives required for this certification level.

SECTION 20 EMERGENCY MANAGEMENT

There are no objectives required for this certification level.

SECTION 21 FIRE CAUSE AND ORIGIN

There are no objectives required for this certification level.

SECTION 22 LIVE FIRE TRAINING

22-I.01 Trainee shall identify the current edition of NFPA 1403: Standard on Live Fire Training Evolutions and shall:

NFPA 1403 / SFFMA (22-01.01)

- A. identify the purpose of NFPA 1403
- B. define evolution
- C. define student
- D. define instructor
- E. define training center burn building
- F. identify subjects required prior to participating in live fire training
- G. identify the minimum flow, in gallons per minute, required by each hose line used in live fire training
- H. identify the protective equipment required during live fire training

THESE LIVE FIRE TRAINING EVOLUTIONS SHOULD CONSIST OF A COMBINATION OF VARIOUS STAGES OF HOSE HANDLING, FIRE STREAMS, VENTILATION, ETC., NECESSARY IN THE ACTUAL EXTINGUISHMENT OF A FIRE. THE TRAINING CONDUCTED UNDER THIS SECTION MUST BE CARRIED OUT AS A PREPLANNED OPERATION WITH REFERENCE TO THE STANDARDS OF NFPA 1403: STANDARD ON LIVE FIRE TRAINING EVOLUTIONS. UNDER NO CIRCUMSTANCES SHALL RESPONSE TO ACTUAL ALARMS BE COUNTED AS TRAINING.

SECTION 23 FIREFIGHTER SAFETY/PERSONAL PROTECTIVE CLOTHING

23-I.01 Trainee shall identify the various types of fire service protective clothing such as structural, wildland, and ARFF. Trainee shall also identify their components:

(Document with Personal Protective Equipment #2 skillsheet found in appendix and retain on file) (Document with Safety #2 skillsheet found in appendix and retain on file)

NFPA 1001 5.1.2 / SFFMA (23-01.01)

A. turnouts D. boots B. helmets E. SCBA

C. gloves

23-I.02 Trainee shall identify dangerous building conditions created by fire.

NFPA 1001 5.3.10 / SFFMA (23-01.06)

23-I.03 Trainee shall define fire service lighting equipment.

(Document with Safety #5 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.17.A / SFFMA (23-01.09)

23-I.04 Trainee shall identify and describe safety procedures given the following fire service lighting equipment:

(Document with Safety #5 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.17.A / SFFMA (23-01.10)

- A. Power supply (portable or mounted)
- B. Lights
- C. Auxiliary equipment
 - i. Cords
 - ii. Connectors
- 23-I.05 Trainee shall demonstrate the use of portable power plants, lights, cords, and connectors.

(Document with Safety #5 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.17.B / SFFMA (23-01.11)

23-I.06 Trainee shall define safety procedures as they apply to emergency operations, specifically:

(Document with Safety #2 skillsheet found in appendix and retain on file) (Document with Safety #9 skillsheet found in appendix and retain on file)

NFPA 1001 5.1.2, 5.3.2.A-B, 5.1.1 / SFFMA (23-01.12)

A. protective equipment

D. riding on apparatus

B. team concept

E. hazardous materials incidents

C. portable tools and equipment

23-I.07 Trainee shall identify the safety purpose of the 2 in 2 out rule per NFPA 1403.

(Document with Safety #2 skillsheet found in appendix and retain on file) (Document with Safety #7 skillsheet found in appendix and retain on file)

NFPA 1403 / SFFMA (23-01.13)

SECTION 24 PUMP OPERATIONS/HYDRAULICS

There are no objectives required for this certification level.

SECTION 25 GROUND COVER FIREFIGHTING

25-I.01 Trainee shall correctly define wildfire terms as used in the fire service:

NFPA 1001 5.3.19, 5.3.19.A-B / SFFMA (25-01.01)

A. mop-up I. fire behavior

B. direct attack
C. indirect attack
D. fuel
J. incident commander
K. incendiary fire
L. mutual aid

E. backfire/burnoutM. fire seasonF. barrierN. convection column

G. topography O. tools used in ground cover fires

H. suppression

25-I.02 Trainee shall, given a specific wildland fire situation, describe the effect of fuel, weather and topography on wildland fire, and predict the direction and speed of the fire spread.

NFPA 1001 5.3.19, 5.3.19.A-B / SFFMA (25-01.02)

<u>PLEASE NOTE</u>: IT IS RECOMMENDED THAT THE TEXAS FOREST SERVICE COURSE "WILDLAND FIRE SUPPRESSION FOR VOLUNTEER DEPARTMENTS", OR ITS EQUIVALENT, IS USED AS REFERENCE MATERIALS IN MEETING THE OBJECTIVES OF THIS SECTION.

SECTION 26 HAZARDOUS MATERIALS

There are no objectives required for this certification level.

SECTION 27 SELF-CONTAINED BREATHING APPARATUS

27-I.01 Trainee shall identify at least four (4) hazardous respiratory environments encountered in fire fighting. NFPA 1001 5.3.1.A / SFFMA (27-01.01)

27-I.02 Trainee shall demonstrate the use of SCBA in conditions of obscured visibility.

NFPA 1001 5.3.5, 5.3.5.A-B / SFFMA (27-01.02)

27-I.03 Trainee shall identify the physical requirements of the wearer, the limitations of the self-contained breathing apparatus, and the safety features of types of SCBA available to local AHJ.

NFPA 1001 5.3.1.A-B / SFFMA (27-01.03)

27-I.04 Trainee shall demonstrate donning SCBA while wearing protective clothing in a seated position on an apparatus with a seat belt on.

NFPA 1001 5.3.2.A-B / SFFMA (27-01.04)

27-I.05 Trainee shall demonstrate that the SCBA is in a safe condition for immediate use.

(Document with SCBA #17 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.1 / SFFMA (27-01.05)

27-I.06 Trainee shall identify the procedure for cleaning and sanitizing SCBA for future use.

(Document with SCBA #16 skillsheet found in appendix and retain on file)

NFPA 1001 5.5.1 / SFFMA (27-01.06)

27-I.07 Trainee shall demonstrate the use of SCBA in conditions of restricted passage.

NFPA 1001 5.3.1.A-B /SFFMA (27-01.07)

27-I.08 Trainee shall demonstrate replacement of an expended cylinder on an SCBA assembly with a full cylinder.

(Document with SCBA #17 skillsheet found in appendix and retain on file)

NFPA 1001 5.3.1.B / SFFMA (27-01.08)

SECTION 28 ROPES

There are no objectives required for this certification level.

SECTION 29 PORTABLE EXTINGUISHERS

There are no objectives required for this certification level.

SECTION 30 BUILDING CONSTRUCTION

There are no objectives required for this certification level.

SECTION 31 PUBLIC FIRE EDUCATION

There are no objectives required for this certification level.