



**OFFICE OF THE STATE FIRE MARSHAL
STATEWIDE TRAINING AND EDUCATION ADVISORY COMMITTEE
DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

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Date: October 3, 2013

Attachment 4

To: Ronny J. Coleman, Chairman
Statewide Training and Education Advisory Committee
c/o State Fire Training

From: Mark Romer, Fire Service Training Specialist, State Fire Training

Subject/Agenda Action Item: Fire Fighter II Curriculum

Recommended Actions: Information Only

Background Information:

Fire Fighter II was last rewritten in 2001 and was written to the 1997 NFPA standard 1001 Fire Fighter Professional Qualification. A revision to the Certification Training Standards (CTS) was done in 2006 that reflected the removal of Confined Space Operations from the Fire Fighter II level.

The current program has a total of 54 hours of instructional time plus an undefined amount of manipulative lab hours and testing hours. It is important to understand that the psychomotor lessons identified do not include practice time nor did they take into account instructing more than one student.

In January 2013, the new addition of NFPA 1001 Fire Fighter Professional Qualification was published and State Fire Training issued a task order for the rewriting of Fire Fighter I and II through our contract with Sacramento State University department of Continuing Education. A development cadre was formed with 5 fire service personnel representing organizations from around the state. Members are Fire Fighter Michael Stahl with Menlo Park Fire, Fire Fighter Darin Hebert Los Angeles City Fire, Captain Jon Black Santa Clara County Fire, Captain Demmond Simmons Oakland City Fire and Division Chief Tony Mecham Department of Forestry and Fire Protection. The first development cadre meeting was in April. The responsibilities of this cadre were to review the old Fire Fighter I and II curriculum along with the latest standards from NFPA. The CTS is then used to develop course plans. The cadre met three times, each meeting consisted of four days. At the end of our third meeting the cadre had developed both Fire fighter I CTS and course plans along with the entire identified skill sheet required by IFSAC and the Pro Board and had developed the CTS and course plan for Fire Fighter II. This normally would have taken up to a year using the old system for curriculum development which also included writing lesson plans.

Once the development cadre finished, a Validation cadre was formed to review and validate the content of these new programs. The validation committee consisted of 13 members of the fire

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service from throughout the state along with representatives from the community colleges, labor and CalJac. The cadre members are Division Chief Tony Mecham, California Department of Forestry and Fire Protection; Engineer/Paramedic Michael Stahl, Menlo Park Fire Protection District; Captain Jon Black, Santa Clara County Fire Department; Battalion Chief Clinton Carson, Ophir Hill Fire Protection District; Captain Heath Cohen, Apple Valley Fire Protection District; Fire Fighter Zachary De John, Laguna Beach Fire Department; Captain Piper Denlinger, San Diego Fire-Rescue; Captain Orby Odil, City of Riverside Fire Department; Captain Brad L. Lopez, Winters Fire Department; Division Chief (Retired) Stephen Shull, Mt. San Antonio College; Fire Fighter/Paramedic Grant Smith, Rancho Santa Fe Fire Protection District; Fire Technology Director, Randy Collins, Santa Rosa Junior College; and Education Training Director, Ms. Taral Brideau, CalJAC. Their task was to review and validate the CTs and course plans to ensure they will meet the needs of the California Fire Service. This cadre met on July 8th – 12th.

Analysis/Summary of Issue:

The following is an analysis of the major differences between the old Fire Fighter II and the new.

The 2001 version of Fire Fighter II identified 54 hours of instructional time. It is important to remember this did not include skills practice time or testing. The curriculum also did not cover all elements of NFPA Fire Fighter II. When the cadre reviewed the old curriculum and compared it to the 2013 NFPA 1001 we found there were some significant differences.

1. NFPA has a prerequisite of Fire Fighter I training, Chapter 6 Entrance Requirements, 6.1 General. Prior to entering training to meet the requirements of 6 of this standard, the candidate shall meet the Training requirements in chapter 5 Fire Fighter I
2. NFPA 1001 addresses incident command system training at the Fire Fighter 2 level. 6.1.1 Requisite skills: the Fire Fighter will have 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.
3. Vehicle Extrication was moved from Fire Fighter I, which aligns it with NFPA 1001, Chapter 6.
4. The section on flammable liquids and gas fire was moved from Fire Fighter I to this Level, which aligns it with NFPA 1001, Chapter 6.
5. Over all hours break down for the program are as follows
 - a. Lecture hours 40:00 hours, this is down from 54 hours in the old curriculum
 - b. Skills/Activities 70:00 hours, the old curriculum did not identify these hours
 - c. Testing 8:00 hours this includes formative and summative as well as the all skill certification testing
 - d. Total Hours 120:00
6. The addition of the skills and activities hours is new. The new hour requirement will help ensure personnel coming out of a Fire Fighter program will have the competency with basic/advanced Fire Fighter skills. Remember these skills hours are based on a class size of 50 and may be different for other size classes.
7. The Cadre also developed skills testing sheets to meet the IFSAC and Pro Board requirements. These skill sheets will become the standardized testing requirements for all academies up and down the state.

Fire Fighter II

Certification Training Standards Guide [Month Year]



California Department of Forestry and Fire Protection
Office of the State Fire Marshal
State Fire Training

Fire Fighter II

Certification Training Standards Guide [Month Year]

This CTS guide utilizes NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013 and NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications 2012 to provide the qualifications for State Fire Training's Fire Fighter II certification.

State Fire Training coordinated the development of this CTS guide. Before its publication, the Statewide Training and Education Advisory Committee (STEAC) and the State Board of Fire Services (SBFS) recommended this CTS guide for adoption by the Office of the State Fire Marshal (OSFM).



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Cover photo courtesy of Dave Boyce, Almanac News

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State Fire Training

Mission

To enable the California Fire Service to safely protect life and property through education, training, and certification.

The California Fire Services Training and Education System

The California Fire Service Training and Education System (CFSTES) was established to provide a single statewide focus for fire service training in California. CFSTES is a composite of all the elements that contribute to the development, delivery, and administration of training for the California fire service. The authority for the central coordination of this effort is vested in the Training Division of the California State Fire Marshal's Office with oversight provided by the State Board of Fire Services.

CFSTES facilitates, coordinates, and assists in the development and implementation of standards and certification for the California fire service. CFSTES:

1. Administers the California Fire Academy System
2. Provides accredited courses leading to certification and approved standardized training programs for local and regional delivery
3. Administers the national accreditation process in California
4. Publishes certification training standards, course plans, and a capstone task book for each certified level in the California fire service

CFSTES is a fire service system developed by the fire service, for the fire service. It is only as successful and effective as the people involved in it.

Acknowledgments

State Fire Training appreciates the hard work and accomplishments of those who built the solid foundation on which this program continues to grow.

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Partners

State Fire Training also extends special acknowledgement and appreciation to the Conference and Training Services Unit with the College of Continuing Education at California State University, Sacramento, for its ongoing meeting logistics and curriculum development support, innovative ideas, and forward-thinking services. This collaboration is made possible through an interagency agreement between CAL FIRE and Sacramento State.

How to Read a CTS Guide

State Fire Training develops a Certification Training Standards (CTS) Guide for a variety of job functions in the fire service such as fire fighter, driver/operator, fire instructor, and company officer. The CTS guide lists the requisite knowledge and skills and the job performance requirements a person is expected to complete in order to become certified in a specific function. CTS guides are appropriate for fire service personnel and individuals in related occupations pursuing State Fire Training certification.

Each CTS guide serves as a foundation for the certification programs recommended for adoption by the Office of the State Fire Marshal. Any certification program must be based on job-related knowledge and measurable performance standards. To master the knowledge and skills needed for specialized operations, individuals will require additional training to augment the performance standards included in the CTS guide.

Within the CTS guide, it is impossible to capture the different policies and procedures of each organization in the California fire service. Individuals aspiring to meet State Fire Training's certification training standards must do so in accordance with the codes, standards, regulations, policies, and standard operating procedures applicable within their own departments or jurisdictions.

Format

Each certification training standard included in the CTS guide includes the following:

Section Heading

The section heading describes a general category for a group of training standards. For example, the Fire Marshal CTS includes the following sections: Administration, Risk Management, Community Relations, Professional Development, Regulatory Programs, Fire and Life Safety, and Investigation. Each section contains one or more individual training standards.

Training Standard Title

The training standard title provides a general description of the performance requirement contained within the standard.

Authority

The CTS guide references each standard with one or more paragraphs of the corresponding National Fire Protection Association (NFPA) Professional Qualifications. This ensures that each fire service function within California's certification system meets or exceeds NFPA standards.

When California requirements exceed the NFPA standard, the CTS guide cites the Office of the State Fire Marshal as the authority and prints the corresponding information in *italics*.

Given

This section lists the objects, equipment, materials, or facilities an individual needs in order to acquire the requisite knowledge and skills or to accomplish the job performance requirement(s) within a training standard.

Requisite Knowledge and Skills

This section lists the knowledge and skills that an individual must acquire in order to accomplish the job performance requirement(s) within a training standard.

This section does not include NFPA requisite knowledge or skills that are too general to teach or that individuals should develop through life experiences. For example, a training standard would not list “communicate orally and in writing” or “ability to relate interpersonally” unless they specifically apply to a job performance requirement about acquiring communication skills or developing interpersonal relationships.

Job Performance Requirements

This section includes one or more written statements that describe a specific job-related task and define measurable or observable outcomes. After an individual completes all coursework and requisite requirements, the capstone task book process verifies completion of job performance requirements.

Content

In addition to the individual certification training standards, the CTS guide also includes State Fire Training Revisions and Errata pages.

State Fire Training Content

Located at the back of the CTS guide, this table documents any significant revisions made by State Fire Training to the NFPA standards in the development of this CTS guide. This table is used to justify content additions and advise the course plan development team.

Errata

Located at the back of the CTS guide, this page documents any changes made to the CTS guide outside of the five-year NFPA revision cycle.

Fire Fighter II

Section 1: General Knowledge

1-1: General Knowledge Requirements

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.1

Given

1. None identified

Requisite Knowledge and Skills

1. *Describe the* responsibilities of the Fire Fighter II in assuming and transferring command within an incident management system
2. *Describe the* responsibilities of the Fire Fighter II in performing assigned duties in conformance with applicable NFPA *standard* and other safety regulations and AHJ procedures
 1. *Identify* the role of a Fire Fighter II within the organization
 2. Determine the need for command
 3. Organize and coordinate an incident management system until command is transferred
 4. Function within an assigned role in an incident management system

Job Performance Requirements

There are no job performance requirements identified for this training standard.

Section 2: Fire Department Communications

2-1: Completing Incident Reports

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.2.1

Given

1. Report forms
2. Guide lines
3. Information

Requisite Knowledge and Skills

1. *Identify* content requirements for basic incident reports
2. *Describe* the purpose and usefulness of accurate reports
3. *Discuss* the consequences of inaccurate reports
4. *Describe* how to obtain necessary information
5. *Identify the* required coding procedures
6. Determine necessary codes
7. Proof reports
8. Operate fire department computers or other equipment necessary to complete reports

Job Performance Requirements

1. Complete a basic incident report that completely and accurately records all pertinent information.

2-2: Basic Company Communications

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.2.2

Given

1. Fire department communications equipment
2. Fire department standard operating procedures
3. A team

Requisite Knowledge and Skills

1. *Describe* standard operating procedures for alarm assignments
2. *Describe* fire department radio communication procedures
3. Operate fire department radio communications equipment

Job Performance Requirements

1. Communicate the need for team assistance in a manner that consistently informs the supervisor, follows departmental standard operation procedures, and safely accomplishes the assignment.

A.6.2.2

The Fire Fighter II could be assigned to accomplish or coordinate tasks away from direct supervision. Many of these tasks could result in the need for additional or replacement personnel due to the ever-changing conditions on the scene of an emergency. The Fire Fighter II is expected to identify these needs and effectively communicate this information within an incident management system. Use of radio communication equipment necessitates that these communications be accurate and efficient.

Section 3: Fireground Operations

3-1: Extinguishing an Ignitable Liquid Fire

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.3.1

Given

1. An assignment
2. An attack line
3. Personal protective equipment
4. A foam proportioning device
5. A nozzle
6. Foam concentrate
7. A water supply

Requisite Knowledge and Skills

1. *Discuss* methods by which foam prevents or controls a hazard
2. *List* principles by which foam is generated
3. Identify 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. *Identify* the characteristics, uses, and limitations of fire fighting foams
6. *Discuss* the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application
7. *Describe* foam stream application techniques
8. *List* hazards associated with foam usage
9. *Describe* methods to reduce or avoid hazards
10. Prepare foam concentrate supply for use
11. Assemble foam stream components
12. Demonstrate various foam application techniques
13. Approach and retreat from spills as part of a coordinated team

Job Performance Requirements

1. Operating as a member of a team, extinguish an ignitable liquid fire, select the correct type of foam concentrate for the given fuel and conditions, apply a properly proportioned foam stream to the surface of the fuel to create and maintain a foam blanket, extinguish the fire, prevent reignition, maintain team protection, and face hazards until the team successfully retreats to safe haven.

A.6.3.1

The Fire Fighter II should be able to accomplish this task with each type of foam concentrate used by the jurisdiction. This could include the use of both Class A and B foam concentrates on appropriate fires. When using Class B foams to attack flammable or combustible liquid fires, the Fire Fighter II should extinguish a fire of at least 100 ft² (9 m²). The Fire Fighter II is not expected to calculate application rates and densities. The intent of this JPR can be met in training through the use of training foam concentrates or gas-fired training props.

DRAFT

3-2: Coordinating an Interior Attack Line

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.3.2

Given

1. Attack lines
2. Personnel
3. Personal protective equipment
4. Tools

Requisite Knowledge and Skills

1. *Describe* nozzle and hose *selection* for fire attack given different fire situations
2. *Describe* adapter and appliance *selection* used for specific fireground situations
3. *Identify* dangerous building conditions created by fire and fire suppression activities
4. *Describe* indicators of building collapse
5. *Describe* the effects of fire and fire suppression activities on wood, masonry (brick, block, stone), cast iron, steel, reinforced concrete, gypsum wallboard, glass, and plaster on lath
6. *Apply* search and rescue and ventilation procedures
7. *List* indicators of structural instability
8. *Describe different* suppression approaches and practices for various types of structural fires
9. *Discuss* the association between specific tools and special forcible entry needs
10. Assemble a team
11. Choose attack techniques for various levels of a fire (e.g., attic, grade level, upper levels, or basement)
12. Evaluate and forecast a fire's growth and development
13. Select tools for forcible entry
14. Incorporate search and rescue procedures and ventilation procedures in the completion of the attack team efforts
15. Determine developing hazardous building or fire conditions

Job Performance Requirements

1. Coordinate an interior attack line for a team's accomplishment of an assignment in a structure fire, establish crew integrity, select attack techniques for the given level of the fire (e.g., attic, grade level, upper levels, or basement), communicate attack techniques to the attack teams, maintain constant team coordination, continuously evaluate fire growth and development, communicate or manage search, rescue, and ventilation requirements, report hazards to the attack teams, and apprise incident command of changing conditions.

Fire Fighter II

Section 3: Fireground Operations

A.6.3.2

The Fire Fighter II should be able to coordinate the actions of the interior attack line team at common residential fires and small business fires in the fire department's district. Complex or large interior fire management should be left to the officers; however, this JPR will facilitate the development of the Fire Fighter II towards effectively handling specific assignments within large fires.

Jurisdictions that use Fire Fighter IIs as acting company officers should comply with the requirements of NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

DRAFT

3-3: Controlling a Flammable Gas Cylinder Fire

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.3.3

Given

1. An assignment
2. A cylinder outside of a structure
3. An attack line
4. Personal protective equipment
5. Tools

Requisite Knowledge and Skills

1. *Identify* characteristics of pressurized flammable gases
2. *List* elements of a gas cylinder
3. *Describe* effects of heat and pressure on closed cylinders
4. *Describe* boiling liquid expanding vapor explosion (BLEVE) signs and effects
5. *Discuss* methods for identifying contents
6. *Discuss* how to identify safe havens before approaching flammable gas cylinder fires
7. *Describe* water stream usage and demands for pressurized cylinder fires
8. *Discuss* what to do if the fire is prematurely extinguished
9. *Identify* valve types and their operation
10. *Discuss* alternative actions related to various hazards and when to retreat
11. Execute effective advances and retreats
12. Apply various techniques for water application
13. Assess cylinder integrity and changing cylinder conditions
14. Operate control valves
15. Choose effective procedures when conditions change

Job Performance Requirements

1. Operating as a member of a team, control a flammable gas cylinder fire, maintain crew integrity, identify contents, identify safe havens prior to advancing, close open valves, and do not extinguish flames unless the leaking gas is eliminated, the cylinder is cooled, the cylinder integrity is evaluated, hazardous conditions are recognized and acted upon, and the cylinder is faced during approach and retreat.

A.6.3.3

Fire Fighter II

Section 3: Fireground Operations

Controlling flammable gas cylinder fires can be a very dangerous operation. The Fire Fighter II should act as a team member, under the direct supervision of an officer, during these operations.

DRAFT

3-4: Protecting Evidence of Fire Cause and Origin

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.3.4

Given

1. A flashlight
2. Overhaul tools
3. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Identify* methods to assess origin and cause
2. *List* types of evidence
3. *Describe different* means to protect various types of evidence
4. *Identify* the role and relationships of Fire Fighter II, criminal investigators, and insurance investigators in fire investigations
5. *Discuss* the effects and problems associated with removing property or evidence from the scene
6. Locate the fire's origin area
7. Recognize probable causes
8. Protect the evidence

Job Performance Requirements

1. Note and protect evidence of fire cause and origin from further disturbance until investigators arrive on the scene.

A.6.3.4

The Fire Fighter II should be able to recognize important evidence to a fire's cause and maintain the evidence so that further testing can be done without contamination or chain-of-custody problems. Evidence should be left in place (when possible, otherwise chain of custody must be established), not altered by improper handling, walking, and so forth, and not destroyed. Possible means to protect evidence is to avoid touching, protect with salvage covers during overhauls, or rope off the area where the evidence lies. The Fire Fighter II is not intended to be highly proficient at origin and cause determination.

Jurisdictions that use Fire Fighters IIs to determine origin and cause should comply with the requirements in NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

Section 4: Rescue Operations

4-1: Vehicle Extrication

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.4.1

Given

1. Stabilization and extrication tools
2. *A vehicle*
3. *Personal protective equipment*

Requisite Knowledge and Skills

1. *Describe* the fire department's role at a vehicle accident
2. *Discuss* points of strength and weakness in auto body construction
3. *Discuss the* dangers associated with vehicle components and systems
4. *Describe* the uses and limitations of hand and power extrication equipment
5. *Discuss* safety procedures when using various types of extrication equipment
6. Operate hand and power tools used for forcible entry and rescue as designed
7. *Use stabilization tools and equipment*
8. Choose and apply appropriate techniques for moving or removing vehicle roofs, doors, *seats* windshields, windows, steering wheels or columns, and the dashboard

Job Performance Requirements

1. As part of a team, extricate a victim entrapped in a motor vehicle, stabilize the vehicle, disentangle the victim without further injury, and manage hazards.

A.6.4.1

In the context of this standard, the term extricate refers to those activities required to allow emergency medical personnel access to the victim, stabilization of the vehicle, the displacement or removal of vehicle components obstructing victim removal, and the protection of the victim and response personnel from hazards associated with motor vehicle accidents and the use of hand and power tools on a motor vehicles persons performing extrication can be different from those performing medical functions, this standard does not address medical care of the victim. An awareness of the needs and responsibilities of emergency medical functions is recommended to allow for efficient coordination between the "extrication" team and the "medical" team

4-2: Assisting in Technical Rescue Operations

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.4.2

Given

1. Standard operating procedures
2. Necessary rescue equipment
3. An assignment

Requisite Knowledge and Skills

1. *Discuss* the fire fighter's role at a technical rescue operation
2. Identify the hazards associated with technical rescue operations
3. *Describe* types and uses for rescue tools
4. *Discuss* rescue practices and goals
5. Identify and retrieve various types of rescue tools
6. Establish public barriers
7. Assist rescue teams as a member of the team when assigned

Job Performance Requirements

1. Assist rescue operation teams, follow procedures, recognize and retrieve rescue items in the time prescribed by the AHJ, and complete the assignment.

A.6.4.2

The Fire Fighter II is not expected to be proficient in technical rescue skills. The Fire Fighter II should be able to help technical rescue teams in their efforts to safely manage structural collapses, trench collapses, cave and tunnel emergencies, water and ice emergencies, elevator and escalator emergencies, energized electrical line emergencies, and industrial accidents.

Section 5: Prevention, Preparedness, and Maintenance

5-1: Performing a Fire Safety Survey of a Private Dwelling

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.5.1

Given

1. Survey forms
2. Procedures

Requisite Knowledge and Skills

1. *Discuss* organizational policy and procedures
2. *List* common causes of fire and their prevention
3. *Describe* the importance of a fire safety survey and public fire education programs to fire department public relations and the community
4. *Identify* referral procedures
5. Complete forms
6. Recognize hazards
7. Match findings to preapproved recommendations
8. Effectively communicate findings to occupants or referrals

Job Performance Requirements

1. Perform a fire safety survey in a private dwelling, identify fire and life safety hazards, recommend hazard corrections to the occupant, and refer unresolved issues to the proper authority.

A.6.5.1

It is the intent of the committee to recognize that there are response areas that do not have private dwellings. The term *occupied structure* allows for greater flexibility and for the AHJ to determine which structures could be used for performing a fire safety survey.

5-2: Presenting Fire Safety Information

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.5.2

Given

1. Prepared materials

Requisite Knowledge and Skills

1. *Describe types* of informational materials and how to use them
2. *Identify* basic presentation skills
3. *Discuss* departmental standard operating procedures for giving fire station tours
4. Document presentations
5. Use prepared materials

Job Performance Requirements

1. Present accurate fire safety information to station visitors or small groups and answer or refer questions.

A.6.5.2

The Fire Fighter II should be able to present basic information on how to do the following:

- 1) Stop, drop, and roll when one's clothes are on fire
- 2) Crawl low under smoke
- 3) Plan and practice a home escape plan with two ways out of each room (especially sleeping rooms), a meeting place, and how to call the fire department (from the neighbor's house)
- 4) Alert others of an emergency
- 5) Call the fire department
- 6) Test and maintain residential smoke alarms according to manufacturer's instructions

The Fire Fighter II is not expected to be an accomplished speaker or instructor.

5-3: Preparing Preincident Surveys

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.5.3

Given

1. Forms
2. Necessary tools
3. An assignment

Requisite Knowledge and Skills

1. *Identify* the sources of water supply for fire protection
2. *Describe* the fundamentals of fire suppression and detection systems
3. *Identify* common symbols used in diagramming construction features, utilities, hazards, and fire protection systems
4. *Discuss* departmental requirements for a preincident survey and form completion
5. *Discuss* the importance of accurate diagrams
6. Identify the components of fire suppression and detection systems
7. Sketch the site, buildings, and special features
8. Detect hazards and special considerations to include in the preincident sketch
9. Complete all related departmental forms

Job Performance Requirements

1. Prepare a preincident survey that records required occupancy information, note items of concern, and include accurate sketches or diagrams.

A.6.5.3

The Fire Fighter II should be able to compile information related to potential emergency incidents within their community for use by officers in the development of preincident plans. Jurisdictions that use Fire Fighter IIs to develop preincident plans should comply with the requirements of NFPA 1021, *Standard for Fire Officer Professional Qualifications*.

5-4: Maintaining Power Equipment

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.5.4

Given

1. Tools
2. Manufacturer instructions

Requisite Knowledge and Skills

1. *Identify* types of cleaning methods
2. *Describe* correct use of cleaning solvents
3. *Discuss* manufacturer and departmental guidelines for maintaining equipment and its documentation
4. *Discuss* problem-reporting practices
5. Select correct tools
6. Follow guidelines
7. Complete recording and reporting procedures
8. Operate power plants, power tools, and lighting equipment

Job Performance Requirements

1. Maintain power plants, power tools, and lighting equipment, keep equipment clean and maintained according to manufacturer and departmental guidelines, record maintenance, and place equipment in a ready state or report it otherwise.

5-5: Performing Annual Hose Service Test

Authority

NFPA 1001 Standard for Fire Fighter Professional Qualifications 2013

- Paragraph 6.5.5

Given

1. An *apparatus or hose testing device*
2. A marking device
3. Pressure gauges
4. A timer
5. Record sheets
6. Related equipment

Requisite Knowledge and Skills

1. *Describe the procedure for safely conducting hose service testing*
2. *Identify indicators that dictate any hose be removed from service*
3. *Discuss recording procedures for hose test results*
4. Operate hose testing equipment and nozzles
5. Record results

Job Performance Requirements

1. Perform an annual service test on fire hose, follow procedures, evaluate the condition of the hose, remove any damaged hose from service, and record the results.

A.6.5.5(A)

Procedures for conducting hose testing can be found in Chapter 5 of NFPA 1962, *Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose*.

State Fire Training Content

Code Key

Blocks

- G = Given
- RKS = Requisite Knowledge and Skills
- JPR = Job Performance Requirements
- NCTS = New certification training standard

Sources

- [ACRONYM = Title]
- [ACRONYM = Title]
- [ACRONYM = Title]

Certification: Fire Fighter II

CTS	Block	Addition	Justification	Source/Reference
[#-#]	[Code]	[Text]	[Text]	[Text]



Fire Fighter II

Course Plan

Course Details

Certification:	Fire Fighter II
CTS Guide:	Fire Fighter II Certification Training Standards Guide
Description:	This course provides the skills and knowledge needed for the entry level professional fire fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of <u>NFPA 1001 Standard for Fire Fighter Professional Qualifications</u> . The five overarching themes of the California State Fire Fighter II curriculum are: general knowledge germane to the profession, fire department communications, fireground operations, rescue operations, and prevention, preparedness, and maintenance.
Designed For:	Fire Fighter I
Prerequisites:	Certified Fire Fighter I
Corequisites:	None
Standard:	Complete all activities and formative tests. Complete all summative tests with a minimum score of 80%. Complete all mandatory skills testing.
Hours:	Lecture: 42:00 Activities/Skills: 70:00 Testing: 8:00
Hours (Total):	120:00
Maximum Class Size:	50
Instructor Level:	Training Instructor 1A and 1B
Instructor/Student Ratio:	1:50 (Lecture); 1:10 (Skills)
Restrictions:	None

SFT Designation: CFSTES

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Required Resources

Instructor Resources

To teach this course, instructors need:

- Fundamentals of Fire Fighter Skills (Includes Instructor's Toolkit DVDs) (Jones and Bartlett Learning, Third Edition, ISBN: 978-1-4496-7085-6), or:
- Essentials of Fire Fighting and Fire Department Operations (Stowell, Frederick M., Murnane, Lynne, Brady Publishing, a division of Pearson Education, Sixth Edition, ISBN: 978-013-3140804), or:
- Fire Engineering's Handbook for Fire Fighter I and Fire Fighter II (Includes Instructor Guide and Sample Skills Drills DVDs) (Corbett, Glenn, PennWell Corporation, First Edition, ISBN: 978-1-59370-135-2)

Online Instructor Resources

The following instructor resources are available online at <http://osfm.fire.ca.gov/training/instructorscorner.php>:

- Skill sheets

Student Resources

To participate in this course, students need:

- Fundamentals of Fire Fighter Skills (Includes Instructor's Toolkit DVDs) (Jones and Bartlett Learning, Third Edition, ISBN: 978-1-4496-7085-6), or:
- Essentials of Fire Fighting and Fire Department Operations (Stowell, Frederick M., Murnane, Lynne, Brady Publishing, a division of Pearson Education, Sixth Edition, ISBN: 978-013-3140804), or:
- Fire Engineering's Handbook for Fire Fighter I and Fire Fighter II (Includes Instructor Guide and Sample Skills Drills DVDs) (Corbett, Glenn, PennWell Corporation, First Edition, ISBN: 978-1-59370-135-2)
- Structural personal protective equipment

Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

- **Appliances and tools:** 1 ½-inch fog nozzle, 2 ½ - 1 ⅛ -inch straight tip nozzle, foam nozzle, foam proportioning device, foam concentrate or simulated foam, double female fittings, double male fittings, plug and cap, hose clamps, hose jacket, hose roller, hose strap, rope, or chain, nozzle selection as determined by AHJ, reducer or increaser (fittings), Siamese, spanner wrenches, and gated wye
- **Hose:** 1 ½- or 1 ¾-inch fire hose (300 foot minimum), 2 ½- or 3-inch fire hose (500 foot minimum), large diameter hose (LDH) (300 foot minimum), hard suction (intake) hose

Fire Fighter II

and strainer, hose and nozzles capable of flowing a minimum of 95 GPM, and soft suction hose

- **Hand tools:** Bolt cutters, crowbar/pry bar, flat head axe, halligan tool, hand saw, hydrant wrench, K-tool, pick-head axe, pike pole (8 feet), flashlight, and sledgehammer
- **Ladders:** 10-foot folding ladder, 14-foot combination ladder, 14-foot roof ladder, 24-foot extension ladder, 35-foot extension ladder, and two straight ladders
- **Power tools:** Electric and gasoline powered fan, chain saw, gasoline powered circular saw, and a generator
- **Protective equipment/clothing:** Full set of protective clothing for structural fire fighting for each trainee, including bunker pants, bunker coat, bunker boots, gloves, helmet, hood, and face piece, self-contained breathing apparatus with charged air cylinder, (one extra fully charged air cylinder), personal alert safety system (P.A.S.S.), safety harness, manufacturer-approved cleaning agent (for SCBA), manufacturer-approved cleaning equipment (for SCBA), and manufacturer-approved sanitizing agent (for SCBA)
- **Rope:** Safety line, various lengths and diameters of synthetic rope, and various lengths of 1-person or 2-person life safety rope
- **Salvage equipment/materials:** Brooms, buckets, tubs, mops, objects to cover, salvage covers, squeegees, and water vacuums
- **Simulation equipment/materials:** Burn building as recommended in NFA 1403: Standard on Live Fire Training, wood roof props, smoke-generating equipment, training tower, minimum of two stories in height, and flammable liquids and gas fire props
- **Extrication/rescue equipment/materials:** Blanket, vehicle stabilization equipment, electrical connectors, electrical (extension) cords, electrical power supply (portable or mounted), long spine board, shoring material, short spine board, KED, or equivalent, stokes basket, sked, or equivalent, stretcher, tubular webbing (20-foot), vehicle, reciprocating saw, and hydraulic extrication equipment
- **Other supplies/equipment needed:** Apparatus or hose testing device, fire hydrant, pitot tube and gauge, thermal imaging camera, portable radios, fuel and supplies for power equipment, cleaning supplies and equipment, portable lighting equipment, minimum of two apparatuses equipped with pump and two separate water supplies

Unit 1: Introduction

Topic 1-1: Orientation and Administration

Terminal Learning Objective

At the end of this topic, a student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.

Enabling Learning Objectives

1. Identify facility requirements
 - Restroom locations
 - Food locations
 - Smoking locations
 - Emergency procedures
2. Identify classroom requirements
 - Start and end times
 - Breaks
 - Electronic device policies
 - Special needs and accommodations
 - Other requirements as applicable
3. Review course syllabus
 - Course objectives
 - Calendar of events
 - Course requirements
 - Student evaluation process
 - Assignments
 - Activities
 - Required student resources
 - Class participation requirements

Discussion Questions

1. What is a formative test? What is a summative test?

Activities

1. To be determined by the instructor.

Topic 1-2: Fire Fighter II Certification Process

Terminal Learning Objective

At the end of this topic, a student will be able to identify different levels in the Fire Fighter certification track, the courses and requirements for Fire Fighter II certification, and be able to describe the capstone task book process.

Enabling Learning Objectives

1. Identify the different levels of certification in the Fire Fighter II certification track
 - Fire Fighter II

Fire Fighter II

2. Identify the courses required for Fire Fighter II
 - Fire Fighter II
3. Identify any other requirements for Fire Fighter II
4. Describe the capstone task book process
 - Complete all prerequisites and course work
 - Submit fees and request capstone task book
 - Complete all job performance requirements included in the task book
 - Must have identified evaluator verify individual task completion via signature
 - Must have Fire Chief or authorized representative verify task book completion via signature
 - Must be employed by a California Fire Agency in the position prior to submitting completed task book to State Fire Training

Discussion Questions

1. How many levels are there in the Fire Fighter II certification track? What are they?

Activities

1. To be determined by the instructor.

Topic 1-3: General Knowledge Requirements

Terminal Learning Objective

At the end of this topic, a student, given an assignment, will be able to identify and describe the role and responsibilities of a Fire Fighter II within the organization, determine the need for command, and organize and coordinate activities using the incident management system until command is transferred.

Enabling Learning Objectives

1. Describe the responsibilities of the Fire Fighter II in performing assigned duties in conformance with applicable NFPA standards and other safety regulations and AHJ procedures
2. Identify the role of a Fire Fighter II within the organization
3. Determine the need for command
4. Describe the responsibilities of the Fire Fighter II in assuming and transferring command within the incident management system
 - Size-up
 - Arrival report
 - Initial strategies and tactics or initial incident action plan (IAP)
 - Assign resources
 - Implement the incident command system
 - Complete transfer of command briefing
5. Organize and coordinate the incident management system until command is transferred
6. Function within an assigned role in the incident management system

Discussion Questions

1. When should a fire fighter assume command of an incident?
2. How does command enhance fire fighter safety?

Fire Fighter II

3. What are three responsibilities of the initial incident commander?
4. When transferring command, what are some key pieces of information to communicate?

Activities

1. Using a simulated incident, ask students to complete an initial size up and establish command with a transfer of command.

CTS Guide Reference:

CTS 1-1

Unit 2: Fire Department Communications

Topic 2-1: Completing Incident Reports

Terminal Learning Objective

At the end of this topic, a student, given report forms, guidelines, and information, will be able to complete a basic incident report that completely and accurately records all pertinent information.

Enabling Learning Objectives

1. Identify content requirements for basic incident reports
2. Describe the purpose and usefulness of accurate reports
3. Discuss the consequences of inaccurate reports
4. Describe how to obtain necessary information
5. Identify the required coding procedures
6. Determine necessary codes
7. Proofread reports
8. Operate fire department computers or other equipment necessary to complete reports

Discussion Questions

1. What is National Fire Incident Reporting System (NFIRS)?
2. What are the uses of NFIRS?
3. What is the importance of accurate incident reporting?

Activities

1. Using the simulation completed in topic 1-3, ask students to complete a basic incident report.

CTS Guide Reference:

CTS 2-1

Topic 2-2: Basic Company Communications

Terminal Learning Objective

At the end of this topic, a student, given fire department communications equipment, fire department standard operating procedures, and a team, will be able to communicate the need for team assistance in a manner that consistently informs the supervisor, follows department standard operating procedures, and safely accomplishes the assignment.

Enabling Learning Objectives

1. Describe standard operating procedures for alarm assignments

Fire Fighter II

2. Describe fire department radio communication procedures
3. Operate fire department radio communications equipment

Discussion Questions

1. What is the importance of radio discipline?
2. What does a standard first alarm assignment consist of?

Activities

1. To be determined by the instructor.

CTS Guide Reference

CTS 2-2

Unit 3: Fireground Operations

Topic 3-1: Extinguishing an Ignitable Liquid Fire

Terminal Learning Objective

At the end of this topic, a student, given an assignment, an attack line, personal protective equipment, a foam proportioning device, a nozzle, foam concentrate, and a water supply, will be able to operate as a member of a team, extinguish an ignitable liquid fire, select the correct type of foam concentrate for the given fuel and conditions, apply a properly proportioned foam stream to the surface of the fuel to create and maintain a foam blanket, extinguish the fire, prevent reignition, maintain team protection, and face hazards until the team successfully retreats to a safe haven.

Enabling Learning Objectives

1. Discuss methods by which foam prevents or controls a hazard
2. List principles by which foam is generated
3. Identify 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. Identify the characteristics, uses, and limitations of fire fighting foams
6. Discuss the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application
7. Describe foam stream application techniques
8. List hazards associated with foam use
9. Describe methods to reduce or avoid hazards
10. Prepare foam concentrate supply for use
11. Assemble foam stream components
12. Demonstrate various foam application techniques
13. Approach and retreat from spills as part of a coordinated team

Discussion Questions

1. What are some limitations of foam use?
2. What are some hazards of foam use?
3. What are the advantages and disadvantages of smooth bore, fog, and foam nozzles for foam application?

Fire Fighter II

Activities

1. To be determined by the instructor.

Instructor Notes

1. FSTEP Fire Control 4A, State Fire Training

CTS Guide Reference:

CTS 3-1

Topic 3-2: Controlling a Flammable Gas Cylinder Fire

Terminal Learning Objective

At the end of this topic, a student, given an assignment, a cylinder outside of a structure, an attack line, personal protective equipment, and tools, will be able to operate as a member of a team, control a flammable gas cylinder fire, maintain crew integrity, identify contents, identify safe havens prior to advancing, close any open valves, and extinguish flames only when 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.

Enabling Learning Objectives

1. Identify characteristics of pressurized flammable gases
2. List elements of a gas cylinder
3. Describe effects of heat and pressure on closed cylinders
4. Describe boiling liquid expanding vapor explosion (BLEVE) signs and effects
5. Discuss methods for identifying contents
6. Discuss how to identify safe havens before approaching flammable gas cylinder fires
7. Describe water stream usage and demands for pressurized cylinder fires
8. Discuss what to do if the fire is prematurely extinguished
9. Identify valve types and their operation
10. Discuss alternative actions related to various hazards and when to retreat
11. Execute effective advances and retreats
12. Apply various techniques for water application
13. Assess cylinder integrity and changing cylinder conditions
14. Operate control valves
15. Choose effective procedures when conditions change

Discussion Questions

1. What safety precautions should be taken in the anticipation of a BLEVE?
2. What changes in conditions might occur during fire impingement on a gas cylinder?

Activities

1. To be determined by the instructor.

Instructor Note

1. FSTEP Fire Control 4B, State Fire Training

CTS Guide Reference:

CTS 3-3

Topic 3-3: Coordinating an Interior Attack Line

Terminal Learning Objective

At the end of this topic, a student, given attack lines, personnel, personal protective equipment, and tools, will be able to coordinate an interior attack line for a team's accomplishment of an assignment at a structure fire, establish crew integrity, select attack techniques for the given level of the fire (e.g., attic, grade level, upper levels, or basement), communicate attack techniques to the attack teams, maintain constant team coordination, continuously evaluate fire growth and development, communicate or manage search, rescue, and ventilation requirements, report hazards to the attack teams, and apprise incident command of changing conditions.

Enabling Learning Objectives

1. Describe nozzle and hose selection for fire attack given different fire situations
 - 1 ½-, 1 ¾-, or 2 ½-inch hand line
 - Smooth bore selection versus fog
 - Bundle versus preconnect
 - Wyed line versus single lines
 - Special use nozzles
2. Describe adapter and appliance selection used for specific fireground situations
3. Identify dangerous building conditions created by fire and fire suppression activities
 - Conditions and signs preceding flashover
 - Anticipating rapid fire development
 - Reading smoke (volume, velocity, density, and color)
4. Describe indicators of building collapse
5. Describe the effects of fire and fire suppression activities on wood, masonry (brick, block, stone), cast iron, steel, reinforced concrete, gypsum wallboard, glass, and lath and plaster
6. Apply search and rescue and ventilation procedures
 - Vent
 - Enter
 - Isolate
 - Search
7. List indicators of structural instability
8. Describe different suppression approaches and practices for various types of structural fires
 - Single-family
 - Multi-family
 - Commercial
 - High-rise
9. Discuss the association between specific tools and special forcible entry needs
 - Forcible entry size up
 - Lock recognition

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- Accurate tool selection
- 10. Evaluate and forecast a fire's growth and development
- 11. Assemble a team
- 12. Choose attack techniques for various levels of a fire
 - Attic
 - Grade level
 - Upper levels
 - Basement
- 13. Select tools for forcible entry
- 14. Incorporate search and rescue and ventilation procedures in the completion of the attack team efforts
- 15. Determine developing hazardous building or fire conditions

Discussion Questions

1. What are some considerations for line selection and placement?
2. Why is reading smoke essential for fire fighter safety?
3. What are some indicators of a below grade or basement fires and what are some appropriate tasks to complete?

Activities

1. Given simulated incidents, ask students to compose a safety briefing prior to entry.
2. Given simulated incidents, ask students to identify appropriate strategies and tactics for initial operations.

CTS Guide Reference:

CTS 3-2

Topic 3-4: Protecting Evidence of Fire Cause and Origin

Terminal Learning Objective

At the end of this topic, a student, given a flashlight and overhaul tools, will be able to note and protect evidence of fire cause and origin from further disturbance until investigators arrive on the scene.

Enabling Learning Objectives

1. Identify methods to assess origin and cause
2. List types of evidence
3. Describe different means to protect various types of evidence
4. Identify the roles and relationships of the Fire Fighter II, criminal investigators, and insurance investigators in fire investigations
5. Discuss the effects and problems associated with removing property or evidence from the scene
6. Locate the fire's origin area
7. Recognize probable causes
8. Protect the evidence

Discussion Questions

1. What is the importance of area of origin preservation?

2. Why is it important to determine the area of origin prior to initiating overhaul operations?
3. What are some indicators of point of origin?
4. What are some ways to protect potential evidence?

Activities

1. To be determined by the instructor.

CTS Guide Reference:

CTS 3-4

Unit 4: Rescue Operations

Topic 4-1: Vehicle Extrication

Terminal Learning Objective

At the end of this topic, a student, given stabilization and extrication tools, a vehicle, and personal protective equipment, will be able to extricate a victim entrapped in a motor vehicle, stabilize the vehicle, disentangle the victim without further injury, and manage hazards, as a member of a team.

Enabling Learning Objectives

1. Describe the fire department's role at a vehicle accident
2. Discuss points of strength and weakness in auto body construction
3. Discuss the dangers associated with vehicle components and systems
 - Conventional
 - Alternative fuel
4. Analyze the uses and limitations of hand and power extrication equipment
5. Discuss safety procedures when using various types of extrication equipment
6. Operate hand and power tools used for forcible entry and rescue as designed
7. Use stabilization tools and equipment
8. Choose and apply appropriate techniques for moving or removing vehicle roofs, doors, seats, windshields, windows, steering wheels or columns, and the dashboard

Discussion Questions

1. What are some safety concerns associated with alternative fuel vehicle extrication?
2. How is modern vehicle construction different from older vehicle construction and what challenges do each present?
3. What safety precautions should be taken when working on modern vehicles?
4. What level of personal protective equipment should be used during vehicle extrication?

Activities

1. To be determined by the instructor.

Instructor Note

1. FSTEP Auto Extrication, State Fire Training

CTS Guide Reference:

CTS 4-1

Topic 4-2: Assisting in Rescue Operations

Terminal Learning Objective

At the end of this topic, a student, given standard operating procedures, necessary rescue equipment, and an assignment, will be able to assist rescue operation teams, follow procedures, recognize and retrieve rescue items in the time prescribed by the AHJ, and complete the assignment.

Enabling Learning Objectives

1. Discuss the fire fighter's role at a technical rescue operation and the hazards associated with each
 - Rope
 - Trench
 - Confined space
 - Structural collapse
 - Water and ice rescue
 - Wilderness search and rescue
 - Industrial machinery
2. Describe types and uses for rescue tools
3. Discuss rescue practices and goals
4. Identify and retrieve various types of rescue tools
5. Establish public barriers
6. Assist rescue teams when assigned

Discussion Questions

1. What types of technical rescue operations might a fire fighter find themselves operating within?
2. What level of personal protective equipment is appropriate for each type of technical rescue?
3. What are some specific hazards associated with each type of technical rescue?
4. Why is operational discipline important during technical rescue incidents?
5. What are some mandatory reporting agencies?
6. What are some allied agencies that may be used at technical rescue incidents?

Activities

1. To be determined by the instructor.

CTS Guide Reference:

CTS 4-2

Unit 5: Prevention, Preparedness, and Maintenance

Topic 5-1: Performing a Fire Safety Survey at a Private Dwelling

Terminal Learning Objective

At the end of this topic, a student, given survey forms and procedures, will be able to perform a fire safety survey in a private dwelling, identify fire and life safety hazards,

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recommend hazard corrections to the occupant, and refer unresolved issues to the proper authority.

Enabling Learning Objectives

1. Discuss organizational policy and procedures
2. List common causes of fire and their prevention
3. Describe the importance of a fire safety survey and public fire education programs to fire department public relations and the community
4. Identify referral procedures
5. Complete forms
6. Recognize hazards
7. Match findings to preapproved recommendations
8. Effectively communicate findings to occupants or referrals

Discussion Questions

1. What is the importance of conducting fire safety surveys at private dwellings?
2. What are some essential items to inspect during fire safety surveys at private dwellings?

Activities

1. To be determined by the instructor.

CTS Guide Reference:

CTS 5-1

Topic 5-2: Presenting Fire Safety Information

Terminal Learning Objective

At the end of this topic, a student, given prepared materials, will be able to present accurate fire safety information to station visitors or small groups and answer or refer questions.

Enabling Learning Objectives

1. Describe types of informational materials and how to use them
2. Identify basic presentation skills
3. Discuss departmental standard operating procedures for giving fire station tours
4. Document presentations
5. Use prepared materials

Discussion Questions

1. What types of presentations might a fire fighter have to provide?
2. Why is it important to make your presentations age-appropriate?

Activities

1. Ask students to prepare and present a fire safety information presentation for an assigned age group.

CTS Guide Reference:

CTS 5-2

Topic 5-3: Preparing Preincident Surveys

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Terminal Learning Objective

At the end of this topic, a student, given forms, necessary tools, and an assignment, will be able to prepare a preincident survey that records required occupancy information, note items of concern, and include accurate sketches or diagrams.

Enabling Learning Objectives

1. Identify the sources of water supply for fire protection
2. Describe the fundamentals of fire suppression and detection systems
3. Identify common symbols used in diagramming construction features, utilities, hazards, and fire protection systems
4. Discuss departmental requirements for a preincident survey and form completion
5. Discuss the importance of accurate diagrams
6. Identify the components of fire suppression and detection systems
7. Sketch the site, buildings, and special features
8. Detect hazards and special considerations to include in the preincident sketch
9. Complete all related departmental forms

Discussion Questions

1. What are the essential elements of a preincident plan?
2. What is the importance of an accurate preincident plan?
3. Why is it important to update preincident plans on a regular basis?

Activities

1. Given a building, ask students to develop a preincident plan.

CTS Guide Reference:

CTS 5-3

Topic 5-4: Maintaining Power Equipment

Terminal Learning Objective

At the end of this topic, a student, given tools and manufacturer instructions, will be able to maintain power plants, power tools, and lighting equipment, keep equipment clean and maintained according to manufacturer and departmental guidelines, record maintenance, and place equipment in a ready state or report it otherwise.

Enabling Learning Objectives

1. Discuss manufacturer and departmental guidelines for maintaining equipment and its documentation
2. Identify types of cleaning methods
3. Describe correct use of cleaning solvents
4. Discuss problem-reporting practices
5. Select correct tools
6. Follow guidelines
7. Operate power plants, power tools, and lighting equipment
8. Complete recording and reporting procedures

Discussion Questions

1. Why is it important to properly maintain power equipment?

2. What is the importance of following manufacturer guidelines for maintenance?

Activities

1. To be determined by the instructor.

CTS Guide Reference:

CTS 5-4

Topic 5-5: Performing Annual Hose Service Test

Terminal Learning Objective

At the end of this topic, a student, given an apparatus or hose testing device, a marking device, pressure gauges, a timer, record sheets, and related equipment, will be able to perform an annual service test on fire hose, follow procedures, evaluate the condition of the hose, remove any damaged hose from service, and record the results.

Enabling Learning Objectives

1. Describe the procedure for safely conducting hose service testing
2. Identify indicators that may require a hose to be removed from service
3. Discuss recording procedures for hose test results
4. Operate hose testing equipment and nozzles
5. Record results

Discussion Questions

1. What is the proper personal protective equipment for hose testing?
2. How often is hose testing conducted?
3. What pieces of equipment are used in conjunction with hose testing?
4. Why is hose testing important?

Activities

1. To be determined by the instructor.

CTS Guide Reference

CTS 5-5

Fire Fighter II

Time Table

Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Unit 1: Introduction			
Topic 1-1: Orientation and Administration			
Lecture	00:30		
Activity 1-1		00:00	
Topic 1-2: Fire Fighter II Certification Process			
Lecture	00:30		
Activity 1-2		00:00	
Topic 1-3: General Knowledge Requirements			
Lecture	3:00		
Activity 1-3		1:00	
Unit 1 Totals	4:00	1:00	5:00
Unit 2: Fire Department Communications			
Topic 2-1: Completing Incident Reports			
Lecture	1:00		
Activity 2-1		1:00	
Topic 2-2: Basic Company Communications			
Lecture	1:00		
Activity 2-2		00:00	
Unit 2 Totals	2:00	1:00	3:00
Unit 3: Fireground Operations			
Topic 3-1: Extinguishing an Ignitable Liquid Fire			
Lecture	4:00		
Activity 3-1		00:00	
Skills		8:00	
Topic 3-2: Controlling a Flammable Gas Cylinder Fire			
Lecture	3:00		
Activity 3-2		00:00	
Skills		5:00	
Topic 3-3: Coordinating an Interior Attack Line			
Lecture	6:00		
Activity 3-3		2:00	
Skills		40:00	
Topic 3-4: Protecting Evidence of Fire Cause and Origin			
Lecture	2:00		
Activity 3-4		00:00	

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Segment	Lecture Time	Activity/Skills Time	Total Unit Time
Unit 3 Totals	15:00	55:00	70:00
Unit 4: Rescue Operations			
Topic 4-1: Vehicle Extrication			
Lecture	8:00		
Activity 4-1		00:00	
Skills		8:00	
Topic 4-2: Assisting in Rescue Operations			
Lecture	3:00		
Activity 4-2		00:00	
Skills		1:00	
Unit 4 Totals	11:00	9:00	20:00
Unit 5: Prevention, Preparedness, and Maintenance			
Topic 5-1: Performing a Fire Safety Survey at a Private Dwelling			
Lecture	1:00		
Activity 5-1		00:00	
Topic 5-2: Presenting Fire Safety Information			
Lecture	1:00		
Activity 5-2		1:00	
Skills		1:00	
Topic 5-3: Preparing Preincident Surveys			
Lecture	5:00		
Activity 5-3		1:00	
Topic 5-4: Maintaining Fire Equipment			
Lecture	2:00		
Activity 5-4		00:00	
Topic 5-5: Performing Annual Hose Service Test			
Lecture	1:00		
Activity 5-5		00:00	
Skills		1:00	
Unit 5 Totals	10:00	4:00	14:00
Lecture, Activity, and Unit Totals:	42:00	70:00	112:00

Total Lecture Time (LT)	42:00
Total Activity/Skills Time (AT)	70:00
Total Testing Time (TT)	8:00
Total Course Time	120:00

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