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**Date:** February 20, 2020

**To:** **State Board of Fire Services**

**From:** Kevin Conant, Fire Service Training Specialist III  
Caryn Petty, Deputy State Fire Marshal

**SUBJECT/AGENDA ACTION ITEM:**  
FF1A-Behavioral Health and Cancer Awareness (2020)

**Recommended Actions:**  
Approval – FF1A Behavioral Health and Cancer Awareness (2020)

### **Background Information:**

Staff is presenting this curriculum for the second reading to STEAC for approval. The Steering Committee and other stakeholders directed staff to develop a series of courses integral in addressing the need to develop curriculum on firefighter behavioral health and cancer awareness. Behavioral Health and Cancer Awareness is an emerging topic with significant resources, research, and attention being devoted to the subject. NFPA standards have not yet been developed, however, stakeholders are demanding these subjects be addressed with the intention of educating the workforce and simultaneously influencing the standards making process.

The FSTEP Instructor requirements remain in development with State Fire Training. The FSTEP Behavioral Health and Cancer Awareness Course Plan is complete and intended to function as both a “stand alone” FSTEP course, and be integrated into the CFSTES curriculum for professional development. A cadre of experienced subject matter experts with extensive technical expertise in these disciplines were selected from various agencies and backgrounds with the mission of further developing and validating the content and instructor requirements for the FSTEP course.

### **Cadre Leadership**

Kevin Conant, Fire Service Training Specialist III; Caryn Petty, Deputy State Fire Marshal; Laura Garwood, Cadre Editor, Sacramento State.

## **Development/Validation Cadre Members**

Tim Andre, Battalion Chief, Huntington Beach Fire Department; Robert Anthony, Assistant Director, Firefighter Cancer Support Network; Brent Brainard, Wellness Officer, San Diego Fire-Rescue Department; Noah Brownlow, Battalion Chief, Richmond Fire Department; Dr. Alana Brunacini, Licensed Counselor and Behavioral Health specialist; Chris Emmons, Battalion Chief, Humboldt Fire Department; Mike Massone, Captain, San Diego Federal Firefighters; Mike Ming, Deputy Fire Chief Employee Support Services, CAL FIRE; Dionisio Mitchell, Ph.D. (c), Battalion Chief, Kern County Fire Department; Mary Murphy, RN, Medical Services Officer, North County Fire Protection District; Mynda Ohs, Ph.D., Author and Psychologist, Private Practice; Kristin Thompson, EMS Chief, Newport Beach Fire Department; Derek Urwin, Ph.D. (c), Engineer, Los Angeles County Fire Department; Rob Wheatley, Division Chief and Director of Fire Training, CAL FIRE.

Several of the cadre members are State Fire Training Registered Instructors and all have extensive experience in the clinical, practical, or operational setting with this subject matter. The diversity of experience, education, training, and practical application of the subject matter included members of the Labor/Management California Fire Service Behavioral Health Task Force, licensed therapists, Ph.Ds., two Ph.D. candidates, Master's thesis subject matter authors, program directors, program coordinators, peer members, RNs, paramedics, EMTs, and cancer and trauma survivors. The development of the course required a week-long session, with additional work by the editor, cadre members, and cadre leads to finalize the course plan. Since this is an FSTEP Course, the development of a Certification Training Standards (CTS) was not required. Terminal Learning Objectives (TLO) were established and the supporting Enabling Learning Objectives (ELO) were developed using the latest evidence-based research and industry best practice, using several others references as supporting documents in creating the Course Plan.

### **Analysis/Summary of Issue:**

1. FF1A Behavioral Health and Cancer Awareness (2020) is an 8-hour course, including 6:15 (hours: minutes) of lecture/discussion and 1:45 (hours: minutes) of application and skills. The course may be delivered within the fire academy setting by a Fire Fighter Academy Instructor, Subject Matter Experts and Guest Lecturers. This delivery would not result in an SFT diploma.
2. The cadre members and staff are strongly encouraging the use of culturally-competent clinicians and lecturers due to the technical nature of the curriculum.
3. The Registered Course (FSTEP) with instructor requirements will return to STEAC in April 2020. The FSTEP course will provide a diploma upon successful completion. This delivery allows access to the Awareness Level curriculum for incumbent members seeking personal and professional development.
4. This series of courses is intended to address the need for creating an Awareness level course (firefighter, crew member), an Operations level course (company officer), and Technician level course (Chief Officer/Program Manager-Coordinator) for fire service behavioral health and cancer awareness education.
5. This course provides the student the opportunity for learning and demonstrating the basics of behavioral health and cancer awareness by describing stress and listing stressors, identifying and describing the impacts of stress, describing factors and demonstrating practices for resilience, describing types, prevalence, and causes of cancer, describing exposure to carcinogenic chemicals, and describing and demonstrating minimizing exposure and risk to cancerous contaminants.



# BEHAVIORAL HEALTH AND CANCER AWARENESS (2020) Course Implementation Plan

Issued: January 23, 2020

## OVERVIEW

This document is intended to provide information for all State Fire Training (SFT) stakeholders on the new (2019) FF1A Behavioral Health and Cancer Awareness 1A (2020) Course Plan. Stakeholders are encouraged to study this information carefully and seek clarification from SFT if questions arise.

Behavioral Health and Cancer Awareness 1A (2020) is an 8-hour course and is the first in a series of courses intended to address the need for creating an Awareness level course (firefighter, crew member), an Operations level course (company officer), and Technician level course (Chief Officer/Program Manager-Coordinator) for fire service behavioral health and cancer awareness education.

This course is intended for the new student of the fire service, i.e., Firefighter 1 academy student. The Behavioral Health and Cancer Awareness 1A (2020) course provides the student the opportunity for learning the basics of Behavioral Health and Cancer Awareness by describing stress and listing stressors; identifying and describing the impacts of stress; describing factors and demonstrating practices for resilience; describing types, prevalence, and causes of cancer; describing exposure to carcinogenic chemicals; and describing and demonstrating minimizing exposure and risk to cancerous contaminants.

This new Course Plan has been developed based on the latest evidence-based research and industry best practice, and using several others references as supporting documents. Behavioral health and cancer awareness are emerging topics where significant resources, research, and attention is being dedicated to the study of the topics. To date, NFPA standards have not yet been developed, however, stakeholders are demanding information on these subjects be addressed with the intention of educating the workforce and simultaneously influencing policy and the standards-making process.

The Course Plan is available on the SFT website.

## IMPLEMENTATION

**New Behavioral Health and Cancer Awareness 1A (2020) Curriculum ..... Available January 1, 2020**



## INSTRUCTOR REQUIREMENTS

**Instructor Registration ..... Available January 1, 2020**

The FF1A Behavioral Health and Cancer Awareness (2019) Course may be delivered in the academy setting as part of the 2019 FF1A Structural Course Plan.

### Course Delivery-Academy Setting

The Behavioral Health and Cancer Awareness 1A (2019) Course may be delivered in an Academy setting utilizing an SFT Fire Fighter Instructor satisfying the following:

1. Certification:
  - a. Fire Fighter 2 or higher
2. Instructor Requirements:
  - a. Has fulfilled one of the following instructor qualifications:
    - i. Certified SFT Instructor 1 **or**;
    - ii. Certified SFT Training Instructor 1 **or**;
    - iii. Certified SFT Fire Instructor 1 **or**;
    - iv. SFT Historically Recognized Fire Fighter 1 & 2 Academy Instructor **and**;
    - v. Ethical Leadership in the Classroom **or**;
    - vi. Ethical Leadership for Instructors
3. Position:
  - a. Held the rank of a Fire Fighter performing suppression duties within a recognized fire agency in California for a minimum of three years **OR** working a volunteer position or paid-call Fire Fighter with a recognized fire agency in California for a minimum of six years **and**;
  - b. Authority Having Jurisdiction (AHJ) letter verifying the applicant's qualification to deliver training

### **POTENTIAL AGENCY IMPACTS**

Fire agencies desiring to utilize the course completion as a requirement for their recruitment/promotion activities need to review the curriculum and certification requirements to be sure that all agency training needs are being met. After review, Fire Agencies should update their job specifications and recruitment documentation to reflect these new courses and certification requirements.

Accredited Regional Training Programs (ARTP), Accredited Local Academies (ALA), community colleges, and all other local delivery venues need to review the curriculum and seek approval from their curriculum committee / program sponsor, as appropriate. ARTPs should review the new curriculum and discuss potential impacts with their advisory committees.



# Structure (2019)

## Course Plan

### Course Details

<b>Certification:</b>	Fire Fighter 1
<b>CTS Guide:</b>	Fire Fighter Certification Training Standards Guide (2019)
<b>Description:</b>	This course provides the skills and knowledge needed for the entry-level fire fighter to perform structural suppression activities. Key learning concepts include: fire fighter safety; communications; cleaning, maintaining, and utilizing equipment and tools; building construction and fire behavior; water supply; ladder operations; forcing entry into a structure; conducting search and rescue operations; attacking an interior structure fire; horizontal and vertical ventilation; property conservation; fire scene overhaul; fire fighter survival; and fire suppression with Class A materials, vehicles, and ground cover.
<b>Designed For:</b>	Entry level fire fighters
<b>Prerequisites:</b>	Prerequisites must be completed prior to enrollment in this course. <ul style="list-style-type: none"><li>• Public Safety First Aid or higher qualification (<i>See SFT Procedures Manual</i> (January 2019) section 7.12.3 for requirements.)</li><li>• CPR healthcare provider certification or equivalent (<i>See SFT Procedures Manual</i> (January 2019) section 7.12.3 for requirements.)</li></ul>
<b>Corequisites:</b>	Students must complete the FEMA independent study courses IS-100, IS-200, IS-700, and IS-800 prior to the teaching of Topic 2-1: Operating within the Incident Command System.
<b>Standard:</b>	Complete all activities, skills, and formative tests. Complete all summative tests with a minimum score of 80%.
<b>Hours (Total):</b>	264 hours (80.25 lecture / 183.75 application / AHJ determines practice and assessment times)

**NOTE:** This modified Fire Fighter 1A Course Plan is reduced to show how the Behavioral Health and Cancer Awareness 1A (2020) standalone course is embedded into Fire Fighter 1A: Structure (Module 2-3 and 2-4).

## Fire Fighter 1A

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**Maximum Class Size:** 50

**Instructor Level:** Fire Fighter Instructor (See *SFT Procedures Manual* (January 2019) section 6.6 for requirements.)\*

**Instructor/Student Ratio:** 1:50 (Lecture) / 1:10 (Application)\*

**Restrictions:** None

**SFT Designation:** CFSTES

\* If any portion of this course curriculum is taught using another course plan, the instructor level and ratio of that course plan supersedes this requirement.

**Time Table**

Segment	Lecture	Application	Unit Total
<b>Unit 1: Introduction</b>			
Topic 1-1: Orientation and Administration	0.5	0.0	
Topic 1-2: Fire Fighter 1 and 2 Certification Process	0.5	0.0	
Topic 1-3: Fire Fighter 1 Roles and Responsibilities	1.0	0.0	
<b>Unit 1 Totals</b>	<b>2.0</b>	<b>0.0</b>	<b>2.0</b>
<b>Unit 2: Fire Fighter Safety</b>			
Topic 2-1: Operating within the Incident Command System	4.0	4.0	
Topic 2-2: Health and Safety Awareness	2.0	0.0	
Topic 2-3: Stress and Resilience	3.25	0.75	
Topic 2-4: Cancer Awareness	3.0	1.0	
Topic 2-5: Structural Personal Protective Ensemble	2.0	3.0	
Topic 2-6: Self-Contained Breathing Apparatus	3.0	8.0	
Topic 2-7: Using SCBA During Emergency Operations	1.0	1.0	
Topic 2-8: Doffing SCBA and PPE for Gross Decontamination	0.5	1.0	
Topic 2-9: Responding on an Apparatus to an Emergency Scene	0.5	0.5	
Topic 2-10: Establishing and Operating in Work Areas at Emergency Scenes	1.0	1.0	
<b>Unit 2 Totals</b>	<b>20.25</b>	<b>20.25</b>	<b>40.5</b>
<b>Unit 3: Communications</b>			
Topic 3-1: Receiving a Non-Emergency Telephone Call	0.5	0.0	
Topic 3-2: Initiating a Response to a Reported Emergency	0.5	0.0	
Topic 3-3: Transmitting and Receiving Messages Via Radio	0.5	0.5	
<b>Unit 3 Totals</b>	<b>1.5</b>	<b>0.5</b>	<b>2.0</b>
<b>Unit 4: Fire Tools and Equipment</b>			
Topic 4-1: Utilizing Ropes and Knots	2.0	4.0	
Topic 4-2: Utilizing Hand and Power Tools	2.0	2.0	
Topic 4-3: Operating Emergency Scene Lighting	1.0	0.5	
Topic 4-4: Operating an Air-Monitoring Instrument	1.0	0.0	
<b>Unit 4 Totals</b>	<b>6.0</b>	<b>6.5</b>	<b>12.5</b>
<b>Unit 5: Structural Fire Suppression</b>			
Topic 5-1: Building Construction	3.0	1.0	
Topic 5-2: Fire Behavior	4.0	0.0	
Topic 5-3: Extinguishing Fire with Fire Extinguishers	1.0	2.0	
Topic 5-4: Water Supply Systems	2.0	6.0	
Topic 5-5: Cleaning, Inspecting, and Returning Fire Hose to Service	2.0	2.0	
Topic 5-6: Deploy and Connect Fire Hose	4.0	36.0	

## Fire Fighter 1A

Segment	Lecture	Application	Unit Total
Topic 5-7: Utility Control at Emergencies	1.5	0.5	
Topic 5-8: Cleaning, Inspecting, and Maintaining Fire Service Ladders	2.0	2.0	
Topic 5-9: Ground Ladder Operations	4.0	38.0	
Topic 5-10: Forcing Entry into a Structure	2.0	6.0	
Topic 5-11: Conducting a Search and Rescue Operation in a Structure	2.0	12.0	
Topic 5-12: Attacking an Interior Structure Fire	4.0	8.0	
Topic 5-13: Horizontal Ventilation Operations	1.5	4.0	
Topic 5-14: Vertical Ventilation Operations	4.0	12.0	
Topic 5-15: Conserving Property	2.0	4.0	
Topic 5-16: Overhauling a Fire Scene	2.0	2.0	
<b>Unit 5 Totals</b>	<b>41.0</b>	<b>135.5</b>	<b>176.5</b>
<b>Unit 6: Fire Fighter Survival</b>			
Topic 6-1: Structural Fire Fighter Survival	4.0	12.0	
<b>Unit 6 Totals</b>	<b>4.0</b>	<b>12.0</b>	<b>16.0</b>
<b>Unit 7: Suppression of Fires Outside of a Structure</b>			
Topic 7-1: Extinguishing Fires in Exterior Class A Materials	2.0	4.0	
Topic 7-2: Attacking a Passenger Vehicle Fire	3.0	5.0	
Topic 7-3: Combatting a Ground Cover Fire	0.5	0.0	
<b>Unit 7 Totals</b>	<b>5.5</b>	<b>9.0</b>	<b>14.5</b>
<b>Summative Assessment</b>			
Determined by AHJ or educational institution	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Skills Practice (Lab / Sets and Reps)</b>			
Determined by AHJ or educational institution	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Course Totals</b>	<b>80.25</b>	<b>183.75</b>	<b>264.0</b>

## Unit 2: Fire Fighter Safety

### Topic 2-3: Stress and Resilience

**Note:** The State Board of Fire Service (SBFS) did not review Topics 2-3: Stress and Resilience when they approved the Fire Fighter 1 (2019) curriculum and certification. SFT has placed Topic 2-3 as reference material in anticipation of SBFS approval of BHCA 1A: Behavioral Health and Cancer Awareness course. BHCA 1A course was developed to be delivered as a standalone course and imbedded into Fire Fighter 1A. SFT will be seeking the approval of BHCA 1A from the Statewide Training and Education Advisory Committee (STEAC) and SBFS approval in early 2020. SFT encourages agencies and instructors delivering Fire Fighter 1A to deliver this portion of the course plan.

#### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to identify and describe common sources and impacts of stress and demonstrate practices that contribute to resilience.

#### Enabling Learning Objectives

1. Define types of stress
2. Describe signs and symptoms of stress
3. Describe reactions to stress
4. Identify common stressors found in various situations and environments
5. Describe physiological and emotional impacts of stress
6. Describe behaviors associated with unmanaged stress
7. Describe the role of nutrition, sleep, exercise, relaxation techniques, and rest in mediating and mitigating stress
8. Describe healthy and unhealthy coping mechanisms
9. Identify potential consequences of unhealthy coping mechanisms
10. Describe the role of communication in coping with stress
11. Describe behavioral health resources available through an AHJ
12. Describe behavioral health resources available outside of the fire service
13. Demonstrate the self-assessment process
14. Demonstrate relaxation techniques

#### Discussion Questions

1. See BHCA 1A course plan

#### Application

1. See BHCA 1A course plan

#### Instructor Notes

1. Use the BHCA 1A: Behavioral Health and Cancer Awareness course plan to deliver this topic.

**CTS Guide Reference:** 1-12

**Skill Sheet:** None

### Topic 2-4: Cancer Awareness

**Note:** The State Board of Fire Service (SBFS) did not review Topics 2-4: Cancer Awareness when they approved the Fire Fighter 1 (2019) curriculum and certification. SFT has placed Topic 2-4 as reference material in anticipation of SBFS approval of BHCA 1A: Behavioral Health and Cancer Awareness course. BHCA 1A course was developed to be delivered as a standalone course and imbedded into Fire Fighter 1A. SFT will be seeking the Statewide Training and Education Advisory Committee (STEAC) and SBFS approval in early 2020. SFT encourages agencies and instructors delivering Fire Fighter 1A to deliver this portion of the course plan.

#### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to describe the types, prevalence of, and common causes of cancer in the fire service; describe exposure to carcinogenic chemicals; and demonstrate best practices to minimize exposure and risk.

#### Enabling Learning Objectives

1. Describe cancer prevalence in the fire service
2. Define “carcinogenic agent”
3. Identify risk factors specific to the fire service
4. Identify risk or protective factors specific to lifestyle
5. Identify exposure sources
6. Identify common states of carcinogenic chemicals
7. Identify common categories of carcinogenic chemicals
8. Identify exposure routes
9. Identify common activities, objects, and locations associated with exposure
10. Identify modifiable and unmodifiable risk factors
11. Define “exclusion (hot) zones,” “contamination reduction (warm) zones,” and “support (cold) zones”
12. Identify and demonstrate best practices that minimize contaminant exposure and risk during fire suppression, overhaul, mop-up, and post-incident activities
13. Identify and demonstrate best practices for PPE that minimize contaminant exposure and risk
14. Identify and demonstrate best practices for equipment that minimize contaminant exposure and risk
15. Identify and demonstrate best practices that minimize contaminant exposure and risk at the station
16. Identify and demonstrate best practices that minimize contaminant exposure and risk at home
17. Document all exposures, injuries, and illnesses within AHJ reporting system

#### Discussion Questions

1. See BHCA 1A course plan

#### Application

1. See BHCA 1A course plan

## Fire Fighter 1A

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### Instructor Notes

2. Use the BHCA 1A: Behavioral Health and Cancer Awareness course plan to deliver this topic.

**CTS Guide Reference:** 1-13

**Skill Sheet:** None



# Behavioral Health and Cancer Awareness (2020)

## Course Plan

### Course Details

**Description:** This course provides awareness-level information on behavioral health and best practice cancer risk reduction in the fire service.

**Designed For:** Fire service personnel

**Prerequisites:** None

**Corequisites:** None

**Standard:** Complete all activities and formative tests.

**Hours (Total):** 8 hours

(6 hours and 15 minutes lecture / 1 hour 45 minutes application / AHJ determines practice and assessment times)

**Maximum Class Size:** 50

**Instructor Level:** Fire academy instructor

**Instructor/Student Ratio:** 1:50 (Lecture) / 1:10 (Application)\*

**SFT Designation:** FSTEP

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## Required Resources

### Instructor Resources

To teach this course, instructors need:

- Full structural and wildland PPE
- Access to the following digital resources:
  - Everyone Goes Home (<https://www.everyonegoeshome.com>)
  - Fire Fighter Cancer Cohort Study (<https://www.ffccs.org>)
  - Fire Hero Learning Network ([https://www.fireherolearningnetwork.com/Training\\_Programs/Default.aspx](https://www.fireherolearningnetwork.com/Training_Programs/Default.aspx))
  - Firefighter Behavioral Health Alliance (<http://www.ffbha.org>)
  - Firefighter Cancer Support Network (<https://firefightercancersupport.org>)
  - Firefighter Safety Through Advanced Research (<http://www.fstaresearch.org>)
  - Firestrong (<https://www.firestrong.org>)
  - First Responder Center for Excellence (<https://www.firstrespondercenter.org>)
  - Florida Firefighter Safety and Health Collaborative (<https://www.floridafirefightersafety.org>)
  - Healing Our Own (<https://healingourown.org>)
  - Healthy In – Healthy Out (<https://www.wscff.org/health-wellness/healthy-in-healthy-out/>)
  - IAFC Lavender Ribbon Report Best Practices for Preventing Firefighter Cancer ([https://www.iafc.org/docs/default-source/1vcos/vcoslavendarribbonreport.pdf?sfvrsn=13f88b0d\\_8](https://www.iafc.org/docs/default-source/1vcos/vcoslavendarribbonreport.pdf?sfvrsn=13f88b0d_8))
  - IAFF Health and Safety (<http://client.prod.iaff.org/#page=ProgramsAndServices>)
  - National Fallen Firefighter Foundation (<https://www.firehero.org>)
  - National Volunteer Fire Council (<https://www.nvfc.org>)
  - Trauma Screening Questionnaire (<https://www.everyonegoeshome.com/wp-content/uploads/sites/2/2014/04/FLSI13TSQ.pdf>)
  - UL Firefighter Safety: Health Research (<https://ulfirefightersafety.org/research-projects/health/index.html>)
- Self-assessment resources (samples and one per student for Topic 2-2)
- Case studies (speakers, videos, etc. for Topic 2-2)

### Online Instructor Resources

The following instructor resources are available online at

<http://osfm.fire.ca.gov/training/instructorresources.php>:

- Instructors are responsible for acquiring the digital resources listed above. State Fire Training has not reposted them with the BHCA 1A course plan on the SFT website.

## **Student Resources**

To participate in this course, students need:

- Full structural and wildland PPE
- Access to all digital resources listed above under Instructor Resources

## **Facilities, Equipment, and Personnel**

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

### **Facilities**

- Classroom equipped for 50 students
- Open area to practice decontamination
- Yoga or relaxation activity space

### **Equipment**

- Whiteboards, projectors, markers, erasers, and other classroom materials
- Complete wildland and structural PPE
- Selection of fire fighting tools and equipment
- Wipes (can be simulations, e.g., paper towels)
- Isolation bags
- Gross decontamination kit, including buckets, brushes (wet and dry), dish soap, water supply (hoses, nozzles, and fittings)
- Hard copies or technology for student self-assessment

### **Personnel (Optional)**

- Yoga or relaxation instructor
- Culturally competent subject matter experts
- First responders providing testimonials

## Time Table

Segment	Lecture	Application	Unit Total
<b>Unit 1: Introduction</b>			
Topic 1-1: Orientation and Administration	1.0	0.0	
<b>Unit 1 Totals</b>	<b>1.0</b>	<b>0.0</b>	<b>1.0</b>
<b>Unit 2: Stress and Resilience</b>			
Topic 2-1: Stress and Stressors	1.0	0.0	
Topic 2-2: The Impacts of Stress	1.0	.25	
Topic 2-3: Practicing Resilience	1.25	.50	
<b>Unit 2 Totals</b>	<b>3.25</b>	<b>.75</b>	<b>4.0</b>
<b>Unit 3: Cancer Awareness</b>			
Topic 3-1: Types, Prevalence, and Causes of Cancer	0.5	0.0	
Topic 3-2: Exposure to Carcinogenic Chemicals	0.5	0.0	
Topic 3-3: Minimizing Exposure and Risk	1.0	1.0	
<b>Unit 3 Totals</b>	<b>2.0</b>	<b>1.0</b>	<b>3.0</b>
<b>Summative Assessment</b>			
Determined by AHJ or educational institution	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Skills Practice (Lab / Sets and Reps)</b>			
Determined by AHJ or educational institution	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
<b>Course Totals</b>	<b>6.25</b>	<b>1.75</b>	<b>8.0</b>

### Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. Time is documented using the quarter system: 15 min. = .25 / 30 min. = .50 / 45 min. = .75 / 60 min. = 1.0.
3. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
4. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled. The Application time documented is based on the maximum class size identified in the Course Details section.
5. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

## 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 and skills exercises
  - Required student resources
  - Class participation requirements

#### Discussion Questions

1. Determined by instructor

#### Application

1. Determined by instructor

#### Instructor Notes

1. When teaching this course as part of a fire academy, it is not necessary to repeat this topic if the students are already familiar with the facilities, participation requirements, and each other.

## Unit 2: Stress and Resilience

### Topic 2-1: Stress and Stressors

#### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to describe stress and list common sources of stress.

#### Enabling Learning Objectives

1. Define types of stress
2. Describe signs and symptoms of stress
3. Describe reactions to stress
4. Identify common stressors found in various situations and environments:
  - On-duty/station life
    - Relationships with peers/coworkers
    - Relationships with supervisors
    - Relationships with the community
    - Environmental stressors
  - Off-duty/family and personal life
    - Transitioning to home life
  - Responding to incidents
  - Extended deployments or shift assignments
  - Long-term injuries
  - Training

#### Discussion Questions

1. How do high-frequency calls without resolution impact job satisfaction?
2. If a fire fighter responds to multiple calls to one patient in one day, what stressors will they be exposed to?
3. What are some techniques for transitioning between work and home life?
4. What is hypervigilance and how does it manifest at work and home?

#### Application

1. Determined by instructor

#### Instructor Notes

1. Refer to the Healing Our Own, Firefighter Behavioral Health Alliance, National Fallen Firefighter Foundation, Florida Firefighter Safety and Health Collaborative, National Volunteer Firefighter Council, and Firestrong websites.

## Topic 2-2: The Impacts of Stress

### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to identify and describe the physiological and emotional impacts of stress.

### Enabling Learning Objectives

1. Describe physiological and emotional impacts of stress
  - Acute vs. cumulative
  - Stress and the brain
    - Parasympathetic vs. sympathetic (fight or flight)
  - Adrenal fatigue
  - Mood and cognitive impacts
2. Describe behaviors associated with unmanaged stress
  - Anger and irritability
  - Sleep problems
  - Depression
  - Marital and family issues
  - Substance abuse
  - Addictions
  - Thoughts of suicide
  - Other forms of self-harm or risky behavior
3. Demonstrate the self-assessment process

### Discussion Questions

1. What are the current statistics with regard to fire service suicide?
2. What is the difference between acute stress and cumulative stress?
3. What is your personal relationship with substance use, including drugs and alcohol?

### Application

1. Given sample self-assessment resources (approved by the AHJ), have students perform a self-assessment.

### Instructor Notes

1. Refer to the Healing Our Own, Firefighter Behavioral Health Alliance, National Fallen Firefighter Foundation, Florida Firefighter Safety and Health Collaborative, National Volunteer Firefighter Council, and Firestrong websites.
2. Provide statistics on issues like suicide and PTSD among first responders.
3. Provide case studies (in-person speakers, videos, etc.).
4. You may use Discussion Question 3 as a place of reflection or as a written exercise. The students may experience discomfort but this is an important part of a wellness self-assessment exercise.

## Topic 2-3: Practicing Resilience

### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to describe factors and demonstrate practices contributing to resilience.

### Enabling Learning Objectives

1. Describe the role of nutrition, sleep, exercise, relaxation techniques, and rest in mediating and mitigating stress
2. Demonstrate relaxation techniques
3. Describe healthy and unhealthy coping mechanisms
4. Identify potential consequences of unhealthy coping mechanisms
5. Describe the role of communication in coping with stress
  - Personal life
  - Professional life
6. Describe resources available in the AHJ, such as:
  - Peer support
  - Preventive tools
  - Employee assistance programs
  - Chaplains
7. Describe external resources, such as:
  - Community and faith-based groups
  - Healthcare system
  - Culturally competent clinicians
  - Hotlines and crisis resources

### Discussion Questions

1. What stressors have you encountered in the fire academy?
  - What are some coping skills for these?
2. How is a personal support system a part of resilience?
3. What internal and external resources are available in your AHJ?
  - How do you access them?
4. What would you do if a peer showed signs and symptoms of stress?

### Application

1. Given the results of their self-assessments, have students come up with specific strategies for dealing with stressors.

### Instructor Notes

1. Present information on evidence-based relaxation techniques, possibly including yoga, breathing exercises, and mindfulness exercises. Bring in someone to lead the class in relaxation techniques, such as a yoga instructor or someone familiar with breathing exercises, if applicable.
2. Use culturally competent providers and clinicians such as peer counselors, psychologists with experience in fire culture, or chaplains to help provide information for this topic.

## Unit 3: Cancer Awareness

### Topic 3-1: Types, Prevalence, and Causes of Cancer

#### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to describe types and the prevalence of occupational cancer and list common causes of cancer in the fire service.

#### Enabling Learning Objectives

1. Describe cancer prevalence in the fire service
  - Types/locations
  - Statistics
2. Define “carcinogenic agent”
  - Occupational
  - Activities
  - Chemicals
3. Identify risk factors specific to the fire service
  - Exposure to carcinogenic chemicals
  - Sleep disruption
  - Shift work
  - UV radiation
4. Identify risk or protective factors specific to lifestyle, including but not limited to:
  - Tobacco
  - Alcohol
  - Stress
  - Diet
  - Exercise
  - Infectious agents
  - Age
  - Metabolic syndrome
  - Overweight
  - Mental health
  - Genetic history
  - Hormones

#### Discussion Questions

1. How does tobacco use impact your ability to claim workers compensation for cancer?
2. How are behavioral health, lifestyle, your occupation, and cancer risk related?
3. How do factors such as race and gender impact occupational cancer risk?
4. What are some types of carcinogenic agents other than chemical carcinogens?

#### Application

1. Determined by instructor

#### Instructor Notes

1. Consider having the students perform a risk self-assessment.

2. Refer to Tucson best practices document and Washington state's "Healthy In, Healthy Out" document and video.

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## Topic 3-2: Exposure to Carcinogenic Chemicals

### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to describe exposure to carcinogenic chemicals.

### Enabling Learning Objectives

1. Identify sources of exposure
  - Fires and products of combustion
  - Hazardous materials
  - Environmental
  - Cross-contamination
2. Identify common states of carcinogenic chemicals
  - Gases
  - Particulates
3. Identify common categories of carcinogenic chemicals
  - Polycyclic aromatic hydrocarbon (PAHs)
  - Volatile organic compounds (VOCs)
4. Identify routes of exposure
  - Absorption
  - Inhalation
  - Ingestion
  - Injection or penetration
5. Identify common activities, objects, and locations associated with exposure
  - Fire suppression
  - Overhaul, mop-up, and post-incident activities
  - PPE
  - Equipment
  - Apparatus
  - Station
  - Home

### Discussion Questions

1. What are some sources of exposure after a fire is extinguished?
2. How does duration of exposure relate to absorption of carcinogenic chemicals?
3. How might a firefighter ingest carcinogenic chemicals?
4. What are the exposure risks for members not engaged in the IDLH environment?

### Application

1. Determined by instructor

### Instructor Notes

1. None

## Topic 3-3: Minimizing Exposure and Risk

### Terminal Learning Objective

At the end of this topic a student, given an assignment in the fire service, will be able to describe factors and behaviors, and demonstrate best practices, that minimize contaminant exposure and risk.

### Enabling Learning Objectives

1. Identify unmodifiable risk factors
  - Infectious agents
  - Genetic history
  - Hormones
  - Age
2. Identify modifiable risk factors
  - Exposures
  - Sleep
  - Tobacco use
  - Alcohol use
  - Diet
  - Exercise
  - Metabolic syndrome
  - Overweight/obesity
  - UV radiation
3. Define:
  - Exclusion (hot) zones
  - Contamination reduction (warm) zones
  - Support (cold) zones
4. Identify and demonstrate best practices that minimize contaminant exposure and risk during fire suppression, overhaul, mop-up, and post-incident activities
  - At structure fires, wear full PPE with SCBA until no longer exposed to carcinogenic chemicals (smoke, char, and soot = carcinogenic material present)
  - At wildland fires, wear full PPE with respiratory protection until gross decontamination occurs
  - Complete gross decontamination procedures in warm zone prior to rehabilitation
  - Follow appropriate placement and cleaning procedures for rehabilitation
    - Establish rehabilitation in the cold zone
    - Establish rehabilitation away from smoke (uphill, upwind)
    - Establish rehabilitation away from any sources of exhaust
    - Ensure clean hands, mouth, and face prior to eating or drinking
    - Only enter rehabilitation area after gross decontamination and removal of contaminated gear
  - Store contaminated gear in isolation bags for transfer

5. Identify and demonstrate best practices for PPE that minimize contaminant exposure and risk
  - Proper fit
  - Two complete sets of everything
    - Helmet, hood, coat and liner, gloves, pants and liner, suspenders, boots, radio straps, hose/truck belts, web gear, goggles, respiratory protection, wildland coat and pants
  - Wearing PPE
    - Ensure it is clean before you put it on
    - Best practices for hood exchange
  - Transferring PPE and equipment between job sites
  - Gross decontamination
    - Performed in warm zone
    - Person being decontaminated needs to wear SCBA and remain on supplied air for duration of decontamination process
    - Person doing decontaminating needs to wear SCBA, remain on supplied air, and wear turnouts or splash protection for duration of decontamination process
    - Use EMS gloves while handling contaminated PPE
    - Dry, wet, or combination method
    - Wipe and wash your face, neck, armpits, torso, groin, and hands
    - Isolate contaminated turnouts
    - Wash turnouts
      - Air out turnouts at least 25 minutes outdoors before washing
      - Launder turnouts at approved location
      - Use commercial dishwasher for helmet, SCBA, boots, and gloves
      - Use extractor washer for turnouts
      - Hang dry indoors or use a turnout dryer
      - Wear EMS gloves, respirator, and protective clothing, and have a negative pressure environment while washing turnouts
    - Wash out or dispose of container/method used to isolate contaminated turnouts
6. Identify and demonstrate best practices for equipment that minimize contaminant exposure and risk
  - Dangers of equipment off-gassing and cross-contamination after exposure
  - Complete gross decontamination
  - Have a designated decontamination station
  - Wear PPE for all decontamination practices
  - Use cleaning products designed for purpose
  - Apparatus
    - Clean cab concept and treating contaminants as biohazards
    - Turn off apparatus and other vehicles to minimize exhaust

7. Identify and demonstrate best practices that minimize contaminant exposure and risk at the station
  - Avoid cross-contamination at all costs
  - Identify hot, warm, and cold zones in fire stations
  - Treat living quarters as cold zones
    - PPE must never enter cold zones
    - Keep all doors at zone interfaces shut
    - Wash hands, face, and neck before entering the cold zone
  - Identify possible warm zones in fire stations (areas of interface between hot and cold)
    - Shower within an hour of exposure (cold and then hot water)
    - Consider using infrared saunas as chemical decontamination units (CDUs)
    - Store PPE in the warm zone
    - Wash all uniform garments and undergarments separate from PPE at the station
  - Identify hot zones
    - Treat apparatus floor as a hot zone because of vehicle exhaust
    - DO NOT locate the following in the hot zone
      - Ice machines
      - Workout equipment
    - Situate PPE storage to prevent exhaust carcinogen contamination
      - Off-duty storage
      - Response-ready storage
    - Use exhaust systems
    - Perform tool maintenance and checks outdoors, wearing PPE, to prevent exposure
    - Perform tool decontamination in a negative pressure environment, wearing PPE, to prevent carcinogen exposure
    - Perform apparatus pre-trips outside of the apparatus floor
8. Identify and demonstrate best practices that minimize contaminant exposure and risk at home
  - Avoid cross-contamination at all costs, including with PPE
  - Don't wash work items at home
    - PPE including wildland
    - Uniforms
    - Personal items used during work hours
    - Garments or undergarments worn beneath PPE
  - Keep all work items in a sealed bag, in a vehicle, and avoid direct sunlight and heat
  - Shower prior to leaving the station
9. Document all exposures, injuries, and illnesses within AHJ reporting system

**Discussion Questions**

1. What are the best practices for hood types, wearing, and exchange?
2. Under what circumstances is it best to do dry decontamination?

- What about wet decontamination?
- 3. What are the benefits of washing versus wiping during body decontamination?
- 4. Why is it important to use a new wipe for each part of your body?
  - What can you use to wipe off contaminants?
- 5. Why is it critical to complete an exposure report for all exposures, injuries, and illnesses on all incidents?

**Application**

1. Given a simulated incident, PPE, and decontamination equipment and supplies, have students demonstrate the best practices outlined above.

**Instructor Notes**

1. This topic is interrelated with those pertaining to behavioral health and stress reduction. Some of the wellness behaviors will overlap.
2. NFPA 1500: Standard on Fire Department Occupational Safety, Health, and Wellness Program (2019), A.14.6, addresses exposure reports.
3. Refer to and share the NIOSH photo showing the limits of PPE in preventing exposure.

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## How to Read a Course Plan

A course plan identifies the details, logistics, resources, and training and education content for an individual course. Whenever possible, course content is directly tied to a national or state standard. SFT uses the course plan as the training and education standard for an individual course. Individuals at fire agencies, academies, and community colleges use course plans to obtain their institution's consent to offer course and provide credit for their completion. Instructors use course plans to develop syllabi and lesson plans for course delivery.

### Course Details

The Course Details segment identifies the logistical information required for planning, scheduling, and delivering a course.

### Required Resources

The Required Resources segment identifies the resources, equipment, facilities, and personnel required to deliver the course.

### Unit

Each Unit represents a collection of aligned topics. Unit 1 is the same for all SFT courses. An instructor is not required to repeat Unit 1 when teaching multiple courses within a single instructional period or academy.

### Topics

Each Topic documents a single Terminal Learning Objective and the instructional activities that support it.

### Terminal Learning Objective

A Terminal Learning Objective (TLO) states the instructor's expectations of student performance at the end of a specific lesson or unit. Each TLO includes a task (what the student must be able to do), a condition (the setting and supplies needed), and a standard (how well or to whose specifications the task must be performed). TLOs target the performance required when students are evaluated, not what they will do as part of the course.

### Enabling Learning Objectives

The Enabling Learning Objectives (ELO) specify a detailed sequence of student activities that make up the instructional content of a lesson plan. ELOs cover the cognitive, affective, and psychomotor skills students must master in order to complete the TLO.

### Discussion Questions

The Discussion Questions are designed to guide students into a topic or to enhance their understanding of a topic. Instructors may add to or adjust the questions to suit their students.

**Application**

The Application segment documents experiences that enable students to apply lecture content through cognitive and psychomotor activities, skills exercises, and formative testing. Application experiences included in the course plan are required. Instructors may add additional application experiences to suit their student population if time permits.

**Instructor Notes**

The Instructor Notes segment documents suggestions and resources to enhance an instructor's ability to teach a specific topic.

**CTS Guide Reference**

The CTS Guide Reference segment documents the standard(s) from the corresponding Certification Training Standard Guide upon which each topic within the course is based. This segment is eliminated if the course is not based on a standard.

**Skill Sheet**

The Skill Sheet segment documents the skill sheet that tests the content contained within the topic. This segment is eliminated if the course does not have skill sheets.

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