

STATE FIRE TRAINING



COURSE INFORMATION AND REQUIRED MATERIALS MANUAL

APRIL 2011





COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

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COMMAND COURSES

Course:	Fire Command 1A: Command Principles for Company Officers (1995)	CFSTES
Hours:	40	
Designed For:	First-in incident commander and company officers	
Description:	This course provides instruction and simulation time pertaining to the initial decision and action processes at a working fire. Topics include the fire officer, fire behavior, fireground resources, operations, and management.	
Prerequisites:	I-200	
Certification:	Fire Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1995	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1995	SFT
▪ Instructor Guide		1995	SFT
▪ Student Manual		1995	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE COMMAND 1A COURSE OUTLINE

Course Objectives: To provide the student with...

- An introduction to human resource management.
- An overview of the organizational structure used within the fire service, including duties and responsibilities.
- Communication skills appropriate for reporting on conditions and managing resources at an emergency incident.
- Information on how to compile a prefire plan, and how to utilize that information when responding to an emergency incident.
- The opportunity to size-up emergencies; and identify the strategies, tactics, and methods necessary to manage given scenarios.
- An overview of the common causes of fire fighter deaths and injuries, and appropriate safety measures to protect personnel.

Course Content:.....	40:00
Orientation and Administration	1:30
The Learning Process.....	0:15
Fire Command Overview	0:30
Fire Chemistry	0:30
Fire Phases	0:45
Effects of Time.....	0:30
Fire Behavior within Structures	0:30
Extinguishing Agents	0:30
Water Application	0:45
Protection Systems	1:00
Building Construction.....	0:45
Occupancy Types.....	0:15
Prefire Planning.....	0:30
Fire Data	0:15
Local Resources	0:15
State and Federal Resources	0:15
Fireground Safety	0:30
Size-up.....	1:00
Strategy, Tactics, and Methods.....	0:30
Report on Conditions	0:15
Role of the First-In Officer	0:45
Company Operations	0:15
Determining Resources Requirements	0:30



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FIRE COMMAND 1A COURSE OUTLINE

Apparatus Placement.....	0:30
Initial Fire Attack	0:30
Management Overview	0:30
The Fire Service.....	0:30
The Company Officer	0:30
Pressure of Command	0:45
Performance Standards	1:15
Levels of Emergency.....	0:15
Decision Making	1:00
Communications	0:30
Management by Objectives (MBO).....	0:30
Divisions of Fire Fighting.....	0:45
Command/Control Components	0:45
Simulation Overview.....	1:00
Skull Session Exercises	3:00
Simulator Use.....	12:00
Daily Reviews	2:00
Course Review and Certification Exam	1:00



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Course:	Fire Command 1B: Incident Management for Company Officers (1998)	CFSTES
Hours:	40	
Designed For:	First-in incident commander and company officers	
Description:	This course provides the student with information on tactics, strategies, and scene management for multi-casualty incidents, hazardous materials incidents, and wildland fires. Each student also has the opportunity to increase his or her knowledge and skills by handling initial operations at these types of incidents through simulation and class activities.	
Prerequisites:	I-200, Fire Command 1A	
Certification:	Fire Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1998	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1998	SFT
▪ Instructor Guide		1998	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		1998	SFT
▪ Student Manual		1998	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE COMMAND 1B COURSE OUTLINE

Course Objectives: To provide the student with...

- Information in which to direct the initial operations of a multi-casualty incident.
- Information in which to direct the initial operations of a hazardous materials incident.
- Information in which to direct the initial operations of a wildland fire incident.
- The opportunity to demonstrate the knowledge and skills learned in handling initial operations at hazardous materials, wildland fire, and multi-casualty incidents through simulation and class activities.

Course Content:.....	40:00
Unit 1: Course Overview and ICS Review	
Orientation and Administration	1:00
Course Overview	1:00
Fire Command 1A Review.....	2:00
Concepts of ICS Organization.....	3:00
Unit 2: Multi-Casualty Incidents	
Components of Triage and START	2:00
ICS and EMS Multi-Casualty	1:30
ICS-MCI Implementation Overview	1:30
Unit 3: Hazardous Materials Incidents	
Hazardous Materials Overview	0:30
Properties of Hazardous Materials	1:00
Toxicology	0:30
Site Control/Work Zones	0:30
Evacuation Considerations.....	1:00
Decision-Making Process.....	0:30
ICS and the Hazardous Materials Incident	1:30
Unit 4: Wildland Fire Incidents	
Factors Affecting Wildland Fires	2:00
Defensive and Offensive Strategies in Wildland Fire Fighting.....	0:30
Use of Direct and Indirect Attack Methods on Wildland Fires.....	1:00
Structure Protection and Triage in Wildland Fires	2:00
Wildland Fire Safety	1:00
Simulation Exercises	14:00
Course Review and Certification Exam.....	2:00



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Course:	Fire Command 1C: I-Zone Fire Fighting for Company Officers (2004)	CFSTES
Hours:	40	
Designed For:	Fire fighters, company officers, and chief officers with limited wildland experience	
Description:	This course is designed around the responsibilities of the Company Officer at a wildland/urban interface incident. It will bring the structural Company Officer out of the city and into the urban/interface; in other words, from his or her comfort zone into an area that could very well be quite unfamiliar.	
Prerequisites:	I-200, Fire Command 1A	
Certification:	Fire Officer	
Class Size:	25	
Restrictions:	None	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ Fireline Handbook (NFES 0065)	2004	NWCG
▪ ICS 420-1 Field Operations Guide (Pocket)	2004	FIRESCOPE
▪ Incident Response Pocket Guide (NFES 1077)	2006	NWCG
▪ Introduction to Wildland Fire Behavior S-190 Student Workbook (NFES 2901)	2006	NWCG
▪ Student Supplement	2004	SFT

REQUIRED INSTRUCTOR MATERIALS	EDITION	VENDORS
▪ Certification Exam	2004	SFT
▪ Fireline Handbook (NFES 0065)	2004	NWCG
▪ ICS 420-1 Field Operations Guide	2004	FIRESCOPE
▪ Incident Response Pocket Guide (NFES 1077)	2006	NWCG
▪ Instructor Guide	2004	SFT
▪ Introduction to Wildland Fire Behavior S-190 Instructor Guide (NFES 2900)	2006	NWCG
▪ Introduction to Wildland Fire Behavior S-190 Student Workbook (NFES 2901)	2006	NWCG
▪ PowerPoint Slides on CD-ROM (Optional)	2004	SFT
▪ Student Supplement	2004	SFT
▪ Videos		
▪ "Firefighter Safety in the Wildland/Urban Interface" Video Series (Order FWC-602-03-VST for Video or DVD/FWC-602-03-DV for disk)	2003	WUI
▪ "Introduction to Wildland Fire Behavior" Video (NFES 1861)		NWCG

VENDORS		
FIRESCOPE	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org
NWCG	National Wildlife Coordinating Group (208-387-5119)	www.nwcg.gov
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov
WUI	National Wildland/Urban Interface Fire Program	www.firewise.org

FIRE COMMAND 1C COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the three elements of wildland fire behavior including fuel, weather, and topography.
- The elements of the ICS as it relates to I-Zone fire fighting, including an Incident Action Plan.
- Information on the duties and responsibilities of the strike team Company Officer.
- Information on the communications process as it relates to I-Zone fire fighting.
- The fundamental elements of size-up as they relate to I-Zone fire fighting and components of a report on conditions.
- Information on I-Zone fire fighting resources and their capabilities.
- An understanding of fire fighter safety and survival in I-Zone fire fighting.
- A basic knowledge of evacuation as it relates to I-Zone fire fighting.
- Procedures for structure triage and protection.
- The opportunity to perform under simulated conditions in the classroom.

Course Content..... 40:00

Unit 1: Introduction

Orientation and Administration 1:00

Authority 0:30

Unit 2: Fire Environment



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FIRE COMMAND 1C COURSE OUTLINE

Fire Behavior and Weather	2:30
Fire Prediction Systems.....	1:00
Unit 3: ICS	
Review of the Incident Command System.....	1:00
Duties and Responsibilities of the Company Officer	2:00
Incident Action Plan	1:30
Unit 4: I-Zone Operation Principles	
Resources.....	3:00
Communications	1:30
Strategy and Tactics	1:00
I-Zone Size-up	1:00
Report on Conditions	2:30
Unit 5: Safety and Survival	
Introduction to Safety and Survival in the I-Zone.....	0:45
The Risk Management Process.....	1:00
Entrapment Avoidance	0:45
Last Resort Survival	1:00
Properly Refusing Risk.....	0:30
Fire Fighter Fatality and Near-miss Case Studies.....	4:30
Unit 6: I-Zone Incident Operations	
Pre-incident Operations.....	2:00
Incident Operations.....	5:00
Post-incident Operations	1:00
Unit Tests	3:00
Course Review and Certification Exam.....	2:00



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Course:	Fire Command 2A: Command Tactics at Major Fires (1989)	CFSTES
Hours:	40	
Designed For:	Chief officers, company officers, and training officers	
Description:	This course prepares the officer to use management techniques and the Incident Command System when commanding multiple alarms or large suppression forces.	
Prerequisites:	I-300, Fire Command 1A	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Supplement		1985	SFT
▪ ICS 420-1 Field Operations Guide		2004	FIRESCOPE
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1989	SFT
▪ ICS 420-1 Field Operations Guide		2004	FIRESCOPE
▪ Instructor Guide		1985	SFT
▪ Student Supplement		1985	SFT
▪ Fire Fighter Safety and Survival Video		1996	NTIS
▪ Overview of a Major Emergency Video, Los Angeles Library Fire (optional)			
▪ Detroit Fatalities Flashover Video (optional)			
▪ End of the Line Video, Phoenix Fire Incident (optional)			
VENDORS			
FIRESCOPE	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org	
NTIS	National Technical Information Service (800-553-6847)	www.ntis.gov	
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

FIRE COMMAND 2A COURSE OUTLINE

Course Objectives: To provide the student with...

- A review of the essential topics and activities from Fire Command 1A, including ICS, fire behavior within structures, pre-fire plan, and the role of the first-in officer.
- Information to assume or transfer command at major structure fires.
- A summary of considerations specific to major structure fire incidents.
- A summary of major fire incident operations and management procedures.
- Information and practices that enhance fire fighter safety and survival at major structure fires.
- The opportunity to apply expanded incident command principles under simulated conditions.

Course Content:	40:00
Course Introduction and Overview	1:00
Fire Command 1A Review	4:00
Assuming and Transferring Command	7:00
Major Fire Considerations	8:00
Safety	6:00
Simulation Exercises	12:00
Certification Review and Certification Exam	2:00



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Course:	Fire Command 2B: Management of Major Hazardous Materials Incidents (2009)	CFSTES
Hours:	40	
Designed For:	Chief officers, company officers, and training officers	
Description:	This course provides Incident Commanders with the skills and competency necessary to mitigate an incident, initiate remedial action, and ensure the restoration of normal services with a comprehensive resource management approach. The course is also intended to bring the student to the standard of competency established for On-Scene Commander by OSHA's Final Rule 29 CFR 1910.120 and NFPA 472. Students will participate in simulated incident scenarios and justify their actions in a mock civil court setting.	
Prerequisites:	I-300, Fire Command 1B, Fire Command 2A	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Hazardous Materials On Scene Commander		2009	ETS
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		2009	SFT
▪ Hazardous Materials On Scene Commander		2009	ETS
▪ Instructor Guide		2009	ETS
VENDORS			
ETS	Emergency Training Services (800-700-8444)	www.etsclassroom.com	
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

FIRE COMMAND 2B COURSE OUTLINE

Course Objectives: To provide the student with...

- An understanding of what haz mats are; the problems they pose; the risks and outcomes of events; their clues, warning signs, placards, labels, shipping papers, and data sheets; the need for a positive safety approach including a mental safe approach tactic upon recognition of the haz mat event.
- The basic principles of first responder and operational actions; recognizing the need for use of ICS safety and isolation, and making the required notifications and contacts in mitigating a haz mat incident; and identifying the role of the Incident Commander/Scene Manager.
- Information to enhance their ability to communicate and coordinate with any agency having authorized activities dealing with a haz mat incident, and recognizing those agencies' roles and capabilities.
- Information to enhance their ability to conduct local pre-event haz mat plan and techniques to implement the management system used in that plan; and to identify methods of interaction with the state and federal regional response teams.

Course Content:	40:00
Course Introduction and Overview	1:00
Introduction to Hazardous Materials and the IC/Scene Manager	1:00
Haz Mat Recognition and Safety	1:00
Safety, Isolation, and Notification	1:00
Agency Coordination at the IC/SM Level	1:00
Pre-event and Event Specific Planning	1:00
Managing the Media at a Haz Mat Incident	1:00
Command and Scene Management	2:00
IDHA and Action Plans	2:00
Protective Equipment	1:00
Containment and Control Methods	1:00
Protective Actions Options	1:00
Decontamination and Clean-Up Considerations	1:00
Disposal and Funding Issues	1:00
Documentation and Reporting	1:00
Toxicology	1:00
Safety and Isolation via Perimeters and Zones	1:00
Investigations	1:00



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FIRE COMMAND 2B COURSE OUTLINE

Managing a Haz Mat Event and Medical Response	1:00
Managing Actual Haz Mat Events	0:30
Exercises, Critiques and IC/SM Exercise Briefing	5:30
The EOC and Haz Mat - an Overview	1:00
Review and Team Tabletop Exercises	8:00
Legal Aspects and Liabilities	1:00
Course Review and Certification Exam	2:00



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Course:	Fire Command 2C: High-rise Fire Fighting Tactics (1995)	CFSTES
Hours:	40	
Designed For:	Chief officers and experienced company officers	
Description:	This course is approached from a system basis and is applied to both small and large high-rise buildings. Topics include prefire planning, building inventory, problem identification, ventilation methods, water supply, elevators, life safety, strategy and tactics, application of the ICS, and specific responsibilities. Case studies and simulation are used.	
Prerequisites:	I-300, Fire Command 2A	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ ICS-HR-102-1 High-rise Structure Fire Operational System Description	1999	FIREScope
▪ ICS-HR-222-1 Base Manager – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-2 Ground Support Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-3 Lobby Control Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-4 Systems Control Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-5 Staging Area Manager – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-6 Medical Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-7 Safety Officer – High-rise Incident	1999	FIREScope
▪ Student Manual	1995	SFT
REQUIRED INSTRUCTOR MATERIALS		
▪ Certification Exam	1995	SFT
▪ ICS-HR-102-1 High-rise Structure Fire Operational System Description	1999	FIREScope
▪ ICS-HR-222-1 Base Manager – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-2 Ground Support Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-3 Lobby Control Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-4 Systems Control Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-5 Staging Area Manager – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-6 Medical Unit Leader – High-rise Incident	1999	FIREScope
▪ ICS-HR-222-7 Safety Officer – High-rise Incident	1999	FIREScope
▪ Student Manual	1995	SFT
▪ Incendio/Highrise Video		FETN
▪ Out of Chaos Video		

VENDORS		
FETN	Fire and Emergency Training Network (800-845-2443)	www.fetn.com
FIREScope	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

FIRE COMMAND 2C COURSE OUTLINE	
Course Content:	40:00
Do You Have High Rise In Your Community/Jurisdiction?	
Construction Features Specific To High-rise Buildings	
Water Systems Unique To High-rise Buildings	
Occupant Life Safety	
Prefire Planning and Training For High-rise Fire Fighting	
Building Inventory and Prefire Survey Systems	
Communications Systems	
Specific Areas of Assignment As They Relate To High-rise ICS	
Strategy, Tactics, and Priority Placement of Resources	
Ventilation As It Relates To High-rise buildings	
High-rise Elevator Systems	
Fire Fighter Safety	
Simulation Exercises With Post Fire Analysis and Case Studies	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Command 2D: Planning for Large Scale Disasters (1996)	CFSTES
Hours:	40	
Designed For:	Chief officers, company officers, and planners	
Description:	Key topics include: Principles of disaster planning and management, fire service emergency plans, emergency operations centers, case studies of various natural and man made disasters, roles of local, state and federal OES and emergency management agencies, discussion of multi-hazard planning techniques, ICS and SEMS concepts, and principles of exercising emergency management staffs.	
Prerequisites:	I-300, Fire Command 2A	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1996	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1996	SFT
▪ Instructor Guide		1996	SFT
▪ Student Manual		1996	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE COMMAND 2D COURSE OUTLINE

Course Objectives: To provide the student with...

- A brief history of emergency management programs at the local, state, and federal level, their current function, and available funding sources.
- The management tools, techniques, and resources currently available to develop an on-going emergency management program that would involve a range of local government departments, community agencies, and private entities.
- The basic principles and components of emergency management plan development, available guidance, and related terminology to include the usage of the Incident Command System (ICS) and Standardized Emergency Management System (SEMS) concept.
- The basic principles, technical aspects, equipment components, and common features of facilities/areas that may be used as an Emergency Operations Center (EOC), and a description of mutual aid agreement and their application in disaster situations.
- Basic techniques for day-to-day management and how to make the emergency management program a valuable asset to their jurisdiction; to include interface with community groups, private businesses, support groups, and other organizations through training and an exercise development program.
- The current legislative and liability issues, as well as community pressures that are currently influencing emergency management programs to include current information received from recent disaster situations and their impact upon emergency management programs.
- An opportunity to demonstrate their acquired knowledge through programmed exercises and simulations.

Course Content:	40:00
Orientation and Administrative Details	1:00
Introductions and Purpose of the Course	1:00
Description of Emergency Situations	1:30
Project Assignment Description	0:30
Incident Command System	0:30
Functions of an Emergency Operations Center	2:00
Design of an Emergency Operating Center	1:30
History and Purpose of Federal Emergency Management Program	1:00
Structure of Emergency Management Organizations	1:00
Jurisdictional Responsibility for Emergency Management	1:30
Fire Department Role in Emergency Management	1:00
Role of Emergency Management Coordinator	1:00
The Planning Process	1:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE COMMAND 2D COURSE OUTLINE

A Useable Plan.....	1:00
Disaster Service Worker	0:30
Comprehensive Emergency Management - Mitigation.....	1:30
Comprehensive Emergency Management - Preparedness	1:00
Comprehensive Emergency Management - Response.....	1:00
Comprehensive Emergency Management - Recovery	2:00
Mutual Aid	1:30
Procedures for Declaring a Local Disaster.....	1:00
Resources and Other Types of Assistance	2:00
Types of Exercises	1:30
Exercise Development Program	1:00
Tabletop Exercise Development	1:30
Functional and Full-Scale Exercises.....	1:00
Project Presentations	4:00
Review of Recent Emergency Situations.....	2:00
Course Review and Certification Exam	2:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Command 2E: Wildland Fire Fighting Tactics (1996)	CFSTES
Hours:	40	
Designed For:	Fire officers who have command responsibilities at wildland fires	
Description:	This course contains such topics as California's wildland fire problem, wildland fire safety, weather effects, wildland fuels, wildland fire behavior, initial attack methods, using support equipment, using topographic maps, strategy and tactics, and air attack operations. Involves class participation and simulation.	
Prerequisites:	I-300, Fire Command 1C, Fire Command 2A	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Supplement		1994	SFT
▪ I-100 Introduction to the Incident Command System		2006	NWCG
▪ ICS 420-1 Field Operations Guide		2004	FIREScope
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1996	SFT
▪ I-100 Introduction to the Incident Command System		2006	NWCG
▪ ICS 420-1 Field Operations Guide		2004	FIREScope
▪ Instructor Guide		1994	SFT
▪ Introduction to Wildland Fire Behavior S-190 Student Workbook, (NFES 2901), with Unit/Final Tests (Appendix B)		2006	NWCG
▪ Preassignment		1994	SFT
▪ Student Supplement		1994	SFT
▪ Wildland Calculator			NWCG
VENDORS			
FIREScope	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org	
NWCG	National Wildlife Coordinating Group (208-387-5119)	www.nwcg.gov	
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

FIRE COMMAND 2E COURSE OUTLINE

Course Objectives: To provide the student with...

- Information about the command responsibilities pertinent to emergency operations involving wildland fires.
- Information on the principles and methods for planned suppression of wildland fires.
- Information on the tactics and strategies common to wildland fires.
- Information on the resources specifically designed for wildland fire control.
- Information on the specific applications of the Incident Command System used in wildland fires and emergencies.
- The tools and techniques relative to reading maps and assessing topography that can be utilized in their own agency to improve pre-emergency planning and resource deployment.
- The opportunity to gain experience in a controlled environment through simulations.
- Information to manage an incident in a wildland fire.

Course Content:	40:00
Historical Development of the Wildland Fire Problem	2:00
Command Responsibilities	2:00
Pre-emergency Planning	2:00
Tactics and Strategy for Wildland Operations	4:00
Specialized Wildland Fire Fighting Resource Capability	8:00
Wildland Fire Behavior	4:00
Map Reading and Usage	4:00
Wildland Incident Command Systems	4:00
Fire Fighter Safety and Survival	1:00
Simulations	7:00
Course Review and Certification Exam	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

DRIVER/OPERATOR COURSES

Course:	Basic Emergency Vehicle Operations (1996)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course provides information and skills training. Topics include applicable laws, defensive driving techniques, basic inspection, and maintenance. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions.	
Prerequisites:	None	
Certification:	None	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
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None

REQUIRED INSTRUCTOR MATERIALS	EDITION	VENDORS
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None

BASIC EMERGENCY VEHICLE OPERATIONS COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on driver responsibilities, vehicle laws, and defensive driving techniques.
- Information and techniques on basic inspections and maintenance of emergency vehicles
- Information and techniques for operating an emergency vehicle prior to the run, during the run, while at the emergency and when returning to the unit's quarters.
- An opportunity to increase his or her driving skills using simulated driving conditions.

Course Content:.....	16:00
Introduction to Emergency Vehicle Operation	0:30
State and Local Laws Relating to Emergency Vehicle Operations	0:20
Department Driving Rules and Regulations	0:30
Principles of Driving Techniques.....	1:00
Principles of Safe Driving of Emergency Vehicles During "Code 3" Response	1:00
Driving Safety Considerations for Off Road Operations.....	0:30
Driver Safety While Working on Freeway Emergencies.....	0:30
Placement of Emergency Vehicles at an Emergency Scene.....	0:10
Mobile Pumping Safety Considerations.....	0:20
How to Perform Routine Emergency Inspection.....	0:10
How to Read and Interpret Vehicle Gauges	0:30
How to Perform Routine Emergency Vehicle Maintenance	0:45
How to Complete Routine Maintenance Records and Reports	0:15
Development of an Equipment Inventory Checks	0:30
How to Make Daily Equipment Inventory Checks.....	0:30
Development of a Route Map Book.....	0:30
How to Drive Apparatus.....	1:00
How to Maneuver Apparatus Through Serpentine Exercise	1:00
How to Maneuver Apparatus Through Offset Alley Exercise	1:00
How to Maneuver Apparatus Through Straight Line Exercise	1:00
How to Maneuver Apparatus Through Turn Around Exercise.....	1:00
How to Maneuver Apparatus Through Diminishing Clearance Exercise	1:00
How to Maneuver Apparatus While Mobile Pumping.....	1:00
How to Maneuver Apparatus on Up and Down Hill Exercise.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Basic Pump Operations (1993)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course provides the student with the information and skills training for operating fire service pumps. Topics include types of pumps, engine and pump gauges, maintenance, unsafe pumping conditions, pressure relief devices, cooling systems, water supplies, drafting, and field hydraulics. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions.	
Prerequisites:	None	
Certification:	None	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
None			
REQUIRED INSTRUCTOR MATERIALS			
Instructor Guide		1993	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

BASIC PUMP OPERATIONS COURSE OUTLINE

Course Objectives: To provide the student with...

- Information and theory on pump operation.
- Methods of performing basic field hydraulics
- Methods and techniques for routine maintenance on pumping apparatus.
- Methods and procedures for pump operations from the tank, a hydrant and at draft.

Course Content:	16:00
Introduction to Pump Operations	0:30
Types of Pumps	0:30
Types of Priming Devices	0:15
Single and Multi-Stage Centrifugal Pumps	0:30
Engine and Pump Gages	0:15
Maintenance Records and Reports	0:15
Rated Performance of Fire Service Pumps	0:15
Unsafe Pumping Conditions	0:30
Pressure Relief Valves	0:15
Auxiliary Cooling Systems	0:15
Check Valves	0:10
Water Supplies for Pump Operations	0:20
Tank Supply Operations	0:15
Water Tender Relay Operations	0:15
Fire Hydrant Operations	0:30
Tandem Pumping Operations	0:30
Forward Hose Lay Supply Operations	0:30
Drafting Theory	0:30
Static Water Supply Operations	0:30
Ejector Pump Operations	0:30
Relay Pumping Operations	0:30
Field Hydraulics	2:00
How to Provide Power to the Pump	1:00
How to Use Tank Water	1:00
How to Use a Hydrant	1:00
How to Relay Pump	1:00
How to Draft Water	1:00
How to Use an Ejector Pump	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Apparatus Driver/Operator 1A: Emergency Vehicle Operations (2008)	CFSTES
Hours:	40	
Designed For:	Fire service emergency response personnel	
Description:	Updated to reflect current California Vehicle Code (CVC) requirements and the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications. This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions.	
Prerequisites:	Fire apparatus driving experience on a public way. Option 1: Signed verification from the Fire Chief (form is on the SFT website); Option 2: California Class B driver's license, fire fighter restricted; or Option 3: California Class A, B, or C driver's license, fire fighter endorsed Fire Fighter I training recommended	
Certification:	Fire Apparatus Driver/Operator I	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
California Commercial Driver Handbook		Current	DMV
Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
Student Supplement		2011	SFT
REQUIRED INSTRUCTOR MATERIALS			
California Commercial Driver Handbook		Current	DMV
Certification Exam		2011	SFT
Instructor Guide		2011	SFT
PowerPoint Slides on CD-ROM (Optional)		2008	SFT
Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
Student Supplement		2011	SFT
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE APPARATUS DRIVER/OPERATOR 1A COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on driver responsibilities, recognized standards, and related laws for fire apparatus.
- Information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire apparatus.
- Information and techniques on driving and positioning fire apparatus.
- The opportunity to increase their driving skills during simulated driving conditions.

Course Content:..... 40:00

Unit 1: Responsibilities, Standards, and Laws

Orientation and Administration 1:00

Fire Apparatus Driver/Operator Responsibilities 0:45

Legal Aspects of Emergency and Nonemergency Driving..... 1:00

Unit 2: Inspection, Basic Maintenance, Documentation, and Troubleshooting

Introduction to Inspection, Basic Maintenance, and Troubleshooting..... 0:30

Inspection and Basic Maintenance of the Driver and Crew Areas, Apparatus Body, and Compartmentation 0:15

Inspection and Basic Maintenance of the Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, and Tires..... 0:15

Troubleshooting the Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, And Tires 0:30

Inspection and Basic Maintenance of Engine Systems 0:45

Troubleshooting Engine Systems..... 0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE APPARATUS DRIVER/OPERATOR 1A COURSE OUTLINE

Inspection and Basic Maintenance of the Transmission and Clutch	0:15
Troubleshooting the Transmission and Clutch	0:15
Inspection and Basic Maintenance of the Starting, Charging, and Other Electrical Systems.....	0:30
Troubleshooting the Starting, Charging, and Other Electrical Systems	2:00
Inspection and Basic Maintenance of Brake Systems.....	1:30
Troubleshooting Brake Systems	1:00
Inspection and Basic Maintenance of Auxiliary and Accessory Equipment	0:15
Inspection Documentation and Reports	0:15
Pretrip Inspection Procedures	2:00
Unit 3: Driving Practices	
Accident Statistics and Liability.....	0:30
Principles of Defensive Driving	2:00
Driving Apparatus to Incidents	1:00
Principles of Off-Road Driving.....	1:00
Principles of Braking and Stopping	0:30
Principles of Steering and Load Control	1:30
Driving During Adverse Weather Conditions.....	0:15
Positioning Apparatus.....	1:00
Unit 4: Mandatory Driving Exercises	
Introduction to the Mandatory Driving Exercises.....	0:30
Unit 5: Optional Driving Exercises	
Introduction to the Optional Driving Exercises	0:15
Practice and Testing the Driving Exercises.....	14:00
Unit Tests	3:00
Course Review and Certification Exam.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Apparatus Driver/Operator 1B: Pump Operations (2008)	CFSTES
Hours:	40	
Designed For:	Fire service emergency response personnel	
Description:	Updated to reflect the 2009 NFPA 1002 Standard for Fire Apparatus Driver/Operator Professional Qualifications and requires a textbook and student supplement. This course provides the student with information on pump construction and theory of pump operations. Topics include methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions.	
Prerequisites:	California drivers license, Class A, B or C, with a fire fighter endorsement Fire Fighter I training recommended	
Certification:	Fire Apparatus Driver/Operator I	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
Student Supplement		2008	SFT
REQUIRED INSTRUCTOR MATERIALS			
Certification Exam		2008	SFT
Instructor Guide		2008	SFT
PowerPoint Slides on CD-ROM (Optional)		2008	SFT
Pumping Apparatus Driver/Operator Handbook		Second	CFCA or FPP
Student Supplement		2008	SFT
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE APPARATUS DRIVER/OPERATOR 1B COURSE OUTLINE

Course Objectives: To provide students with...

- Information on pump construction and theory of pump operations.
- Methods for performing basic hydraulics.
- Information and techniques on inspections, documentation, maintenance, and troubleshooting.
- The opportunity to increase their pumping skills during simulated pumping conditions.

Course Content:..... 40:00

Unit 1: Responsibilities, Standards, and Laws

Orientation and Administration 1:30

Fire Apparatus Driver/Operator Responsibilities 0:30

Unit 2: Fire Pump Construction and Theory

Types of Fire Pumps 0:45

Pump Mounting and Drive Arrangements..... 0:30

Pump Piping and Valves..... 0:15

Automatic Pressure Control Devices..... 0:15

Priming Devices..... 0:15

Pump Panel Instrumentation..... 0:15

Auxiliary Cooling Devices..... 0:15

Unit 3: Hydraulics

Basic Hydraulic Terminology and Symbols..... 0:30

Mathematics Review 1:00

Characteristics of Water and Principles of Pressure 0:30

Principle Features of Water Systems 0:15

Nozzle Theory 0:30

Calculating Gallons Per Minute 0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE APPARATUS DRIVER/OPERATOR 1B COURSE OUTLINE

Principles of Friction Loss	0:15
Friction Loss Formulas and Calculations	4:00
Pump Discharge Pressure	0:30
Fireground Hydraulic Calculations	1:00
Unit 4: Inspection, Maintenance, and Troubleshooting	
Inspecting the Pump Drive Systems	0:15
Inspecting the Pump Priming Systems	0:15
Inspecting the Pump Pressure Control Systems	0:15
Pump Service Testing	0:45
Maintenance of the Pump and Control Systems	1:00
Unit 5: Pump Practices	
Making the Pump Operational (From Tank)	0:30
Transitioning to an External Water Supply	0:30
Operating From a Hydrant	0:30
Principles and Practices of Drafting Operations	0:30
Principles of Relay Pump Operations	1:30
Troubleshooting Pump Operations	1:00
Principles of Tandem Pump Operations	0:15
Principles of Dual Pumping Operations	0:15
Principles and Practices of Foam Operations	1:00
Sprinkler and Standpipe Support	0:30
Unit 6: Pumping Exercises	
Introduction to the Pumping Exercises	0:30
Practice and Testing the Pumping Exercises	13:00
Unit Tests	2:00
Course Review and Certification Exam	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE FIGHTING/RESCUE COURSES

Course:	Auto Extrication (1996)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	Provides hands-on experience in the procedures and systems utilized during an automobile extrication. Subjects covered include: Auto extrication, types of hand and power tools, removing windows, opening doors, removing roofs, pulling steering wheels, moving foot pedals, raising dashboards, pulling seats, stabilization of vehicles, and simulated rescues of trapped victims.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio 10:1 (for skills proficiency)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

AUTO EXTRICATION COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the incidents they might encounter and the procedures and systems used during auto extrication.
- Information on the types of auto extrication tools and their uses.
- The proper procedure for maintaining auto extrication tools.
- An opportunity to perform a rescue and use auto extrication tools during an exercise involving simulated victims and damaged vehicles.

Course Content.....	16:00
Introduction and Course Procedures.....	0:30
Safety Precautions	0:10
Auto Extrication Size-up	1:00
Types of Incidents That May be Encountered.....	1:00
Types of Tools and Their Application	1:00
Incident Command System for Auto Extrication	0:30
How to Remove the Front Windshield.....	0:20
How to Remove Side and Rear Windows	0:10
How to Open a Door Using a Panel Cutter.....	0:10
How to Open a Door Using a Spreader and Wedge	0:20
How to Pull a Door Using a Come-along.....	0:15
How to Remove a Roof Using an Air Chisel	0:10
How to Cut "A" Pillars Using a Hacksaw	0:10
How to Remove a Roof Using an Air Chisel, Hacksaw, and High-lift Jack.....	0:20
How to Pull a Steering Wheel Using a Come-along	0:15
How to Pull a Steering Wheel Using a High-lift Jack	0:15
How to Pull a Steering Wheel Using Seatbelts and the Hood.....	0:10
How to Pull a Steering Wheel Using a Scissor Jack	0:10
How to Cut a Steering Wheel Ring With a Bolt Cutter	0:05
How to Move Foot Peddles Using Seatbelts.....	0:10
How to Raise a Dash Using High-lift Jacks.....	0:20
How to Pull a Front Seat Using a Come-along	0:10
How to Pull a Front Seat Using a High-lift Jack	0:10
How to Take Out a "B" Pillar Using an Air Chisel.....	0:10
How to Use Cribbing to Stabilize a Vehicle.....	0:10
How to Make a Three-door Out of a Two-door for Rear Seat Rescue.....	0:15
Maintenance of Auto Extrication Tools	0:15
Using Auto Extrication Tools on Vehicles	4:00
Simulation Rescues of Trapped Victims	3:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Command and Control of the RIC Deployment (2011)	FSTEP
Hours:	8	
Designed For:	Fire officers who may be Incident Commanders at a fire fighter emergency	
Description:	This command level awareness course provides students with the terminology and methodology that is employed during a RIC deployment. Classroom simulations based on case studies allow students to participate in simulated RIC deployments. Students who wish to progress to the operational level may initiate a task book for additional experience.	
Prerequisites:	I-200, Fire Command 1A, and successful completion of precourse work RIC Tactics or RIC Operations is recommended	
Certification:	None	
Class Size:	20	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		2011	SFT Website
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		2011	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2010	SFT
▪ Student Manual		2011	SFT
VENDORS			
SFT Website	http://osfm.fire.ca.gov/training/trainingresources.php		
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

COMMAND & CONTROL OF THE RIC DEPLOYMENT COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on rapid intervention crew terminology and the tools required to conduct a rescue operation.
- A methodology for conducting a risk management assessment of structural fire fighting critical fireground factors.
- An analysis of fire fighter line-of-duty injuries and fatalities case studies, taking into account both risk and critical fireground factors.
- A command awareness and the control techniques required to effectively manage an emergency traffic event.
- Techniques to properly manage an emergency traffic situation when fire fighters become lost or trapped inside a burning structure.

Course Content.....	8:00
Orientation and Administration	0:45
Critical Fireground Factors and the Risk Management Process.....	1:15
Fire Fighter Line-of-duty Death and Injury Case Studies.....	1:00
Command Awareness and Managing A RIC Deployment.....	1:30
Emergency Traffic Simulations.....	3:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Confined Space Rescue Awareness (1995)	FSTEP
Hours:	7	
Designed For:	All fire service personnel	
Description:	This course provides instruction in identifying a permit and nonpermit required confined space, the hazards associated with confined spaces, target industries and hazards, state regulations, communications, and equipment requirements. This course does not qualify participants to make permit required entries.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		1995	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

CONFINED SPACE RESCUE AWARENESS COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the codes that affect operations within confined spaces.
- Information to identify confined spaces and permit confined spaces.
- Information on the hazards of confined spaces.
- Information on the equipment and procedures required to deal with a confined space rescue safely and legally.
- Information on the basic operational positions, and their responsibilities as set forth by Cal/OSHA.

Course Content.....	7:00
Introduction to Cal/OSHA Code, Confined Space Identification and Dangers	1:30
Atmospheric Hazards and Air Monitors	1:00
Physical and Engulfment Hazards	0:30
Lock-Out/Tag-Out Procedures and Entry Permits.....	0:30
Ventilation Equipment and Techniques	0:30
Respiratory Equipment and Techniques	0:30
Communications Equipment and Techniques	0:30
Entrant Retrieval Equipment	0:30
Confined Space Operational Positions and Responsibilities	0:30
Course Review and Final Exam.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Emergency Response to Alternative Fuel Vehicles (2010)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This training program provides emergency response personnel with information for each of the alternative fuel technologies currently available, ethanol, biodiesel, natural gas, propane, and hydrogen along with electric, hybrid electric, and fuel cell vehicles.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	This course requires alternative fuel/energy vehicles and available refueling facilities.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ The Emergency Response Guide to Alternative Fuel Vehicles		2009	SFT Website
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		2010	SFT
▪ PowerPoint Slides on CD-ROM		2010	SFT
VENDORS			
SFT Website	http://osfm.fire.ca.gov/training/alternativefuelvehicles.php		
SFT	State Fire Training Website under Training Resources		http://sft.fire.ca.gov

EMERGENCY RESPONSE TO ALTERNATIVE FUEL VEHICLES COURSE OUTLINE

Course Objectives: To provide the student with...

- An overview of the social, economic and ecological issues of alternative fuel vehicles
- Information on the hazards associated with each fuel/energy source
- Techniques to identify alternative fuel/energy vehicles
- Information on the safety features and components of the refueling facilities
- An application of standard operating guidelines to new fuel/energy vehicle technologies

Course Content.....	16:00
Introduction and Course Procedures.....	0:30
Introduction to Internal Combustion Vehicles.....	0:15
Ethanol Fuel	1:00
Biodiesel	0:45
Compressed Natural Gas (CNG)	1:00
Liquified Natural Gas Propane (LNG)	1:00
Propane	0:30
Hydrogen	1:00
Introduction to Electric Vehicles	0:15
Electric Vehicles	1:00
Hybrid Electric Vehicles	0:30
Hybrid Electric Buses	0:30
Fuel Cell Vehicles	1:00
Introduction to Emergency Response	0:15
Alternative Fuel Vehicle Emergencies & Fires	1:00
Extrication Safety & Organization	2:00
Vehicle & Refueling Activities	4:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 1: Basic Fire Chemistry (1996)	FSTEP
Hours:	16	
Designed For:	All entry-level fire service personnel	
Description:	This course is a basic overview of fire chemistry and fire behavior designed for the beginning or a volunteer fire fighter. Includes: Classes of fire, fundamentals of heat transfer, fire characteristics of materials, products of combustion, hazardous and explosive materials, extinguishing agents, size-up, and exposure protection.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

FIRE CONTROL 1 COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on how and why fires start.
- Information on how and why fires spread.
- Information on how and why fires are controlled.

Course Content.....	16:00
1. Course Introduction.....	0:30
2. Classes of Fire.....	0:30
3. Fundamentals of Combustion	1:00
4. Fundamentals of Heat Transfer	0:30
5. Fundamentals of Extinguishment.....	0:30
6. Fire Characteristics of Ordinary Combustible Solids.....	0:30
7. Fire Characteristics of Flammable and Combustible Solids	0:30
8. Products of Combustion	1:00
9. Hazardous and Explosive Materials.....	1:00
10. Effects of Extinguishing Agent Application	1:00
11. Procedures for Size-Up	1:00
12. Rescue Techniques.....	1:00
13. Exposure Protection Tactics	1:00
14. Ventilation Methods and Procedures	1:00
15. Methods Used to Confine Fire	1:00
16. Methods Used to Extinguish Fire.....	1:00
17. Methods Used to Overhaul Fire	0:30
18. Salvage Operations.....	1:00
19. Pre-Fire Plans	1:00
20. Methods Used to Attain Additional Assistance During Multiple Alarm Fires	0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 2: Basic Operations – Structural (1996)	FSTEP
Hours:	16	
Designed For:	All entry-level fire service personnel	
Description:	A hands-on course designed to provide the student with information, methods, and techniques for operating basic fire fighting tools and carrying out basic fire fighting evolutions. Areas covered include Hose, nozzles, and fittings, ground ladders, self-contained breathing apparatus, pump operations in theory, pump operations in the field, and the use of fire extinguishers.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

FIRE CONTROL 2 COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the types of tools used for basic fire operations.
- Methods and techniques for utilizing basic fire fighting tools.
- Methods and techniques for maintaining basic fire fighting tools.
- Information and utilization of pump operations and procedures.

Course Content.....	16:00
Introduction to Basic Operations	1:00
Use of Hose Nozzle and Fittings	2:30
Use of Ground Ladders	2:30
Use of Self Contained Breathing Apparatus.....	2:30
Pump Operations in Theory	2:30
Pump Operations in the Field.....	2:30
Use of Fire Extinguishers	2:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 3A: Structural Fire Fighting in Acquired Structures (2009)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course is designed to develop fundamental skills in combating structure fires by providing the students with a thorough understanding of fire behavior, ventilation procedures and techniques, interior fire attack, and exterior fire attack. In many cases, this will be the fire fighter's first exposure to live structural fire fighting. The structures used in class are generally donated buildings with a written agreement between the owner and the authority having jurisdiction (AHJ) specifying the live fire training that will be conducted and acknowledges the expected condition of the structure upon completion of the training.	
Prerequisites:	Fire Control 2 (recommended)	
Certification:	None	
Class Size:	Dependent on the number of structures and size of the burn	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires both a Primary Coordinator and a Senior Coordinator. This course also requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Course Guide		2009	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE CONTROL 3A COURSE OUTLINE

Course Objectives: To provide the student with hands-on fire fighting experience in four mandatory exercises...

- Fire behavior.
- Interior attack.
- Ventilation.
- Exterior attack.

Course Content.....	8:00
Introduction and Briefing.....	0:30
Fire Behavior Exercise	2:00
Ventilation Exercise	2:00
Interior Attack Exercise	1:30
Exterior Attack Exercise	1:30
Debriefing	0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 3B: Structural Fire Fighting in Live-fire Simulators (2009)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course is designed to develop fundamental skills in combating structure fires by providing the students with a thorough understanding of fire behavior, ventilation procedures and techniques, interior fire attack, and exterior fire attack using a live-fire simulator. In many cases, this will be the fire fighter's first exposure to live structural fire fighting.	
Prerequisites:	Fire Control 2 (recommended)	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires both a Primary Coordinator and a Senior Coordinator. This course also requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
<ul style="list-style-type: none"> None 			
REQUIRED INSTRUCTOR MATERIALS			
<ul style="list-style-type: none"> Course Guide 		2009	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE CONTROL 3B COURSE OUTLINE

Course Objectives: To provide the student with hands-on fire fighting experience in four mandatory exercises...

- Fire behavior.
- Interior attack.
- Ventilation.
- Exterior attack.

Course Content.....	8:00
Introduction and Briefing.....	0:30
Fire Behavior Exercise	2:00
Ventilation Exercise	2:00
Interior Attack Exercise	1:30
Exterior Attack Exercise	1:30
Debriefing	0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 4: Oil and Gas Fire Fighting (1997)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course utilizes live fire situations to hands-on experience in combating fire involving LPG and flammable liquids. Topics include flammable liquid and gas fire behavior, safety, extinguishing agents, transportation fires, water flow requirements, and live fire fighting.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires both a Primary Instructor and a Senior Instructor. This course also requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
<ul style="list-style-type: none"> None 		
REQUIRED INSTRUCTOR MATERIALS		
<ul style="list-style-type: none"> None 		

FIRE CONTROL 4 COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the concept of chemistry of foam for fire suppression.
- Information on the use of proportional and nonproportional concentrate injection systems.
- Methods for operation and performance of fog nozzles, aspirating nozzles, and foam tubes (NAFS) as well as compressed air foam systems (CAFS).
- Information on application techniques, current research, and report on the use of Class B foaming agents for urban, rural, refinery, and pipeline emergencies.

Course Content.....	16:00
Introduction	0:30
Characteristics of Flammable Liquids.....	0:30
Resources Available for Spills Without Fire.....	0:15
Safety Procedures for Foam Application.....	0:15
Foaming Agents.....	1:00
Introduction to Pipeline Related Emergencies	1:00
Eductors, Proportioners, and Systems.....	1:00
Aspirating Nozzles and Foam Delivery.....	0:15
Flammable Liquids Case Histories and Review	1:15
Field Exercises.....	10:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Fire Control 4A: Flammable Gases Fire Fighting (1996)

FSTEP

Hours: 6

Designed For: All fire service personnel

Description: This course utilizes the flammable liquids and gas (FLAG) trailer to generate live fire situations and provide hands-on experience in combating fires involving flammable gases. Subjects include flammable gas fire behavior, safety, control methods and extinguishing agents, transportation fires, and water flow requirements.

Prerequisites: None

Certification: None

Class Size: 40

Student/Instructor: Ratio: 10:1 (Skills Proficiency)

Restrictions: This course requires both a Primary Instructor and a Senior Instructor. This course also requires a site with adequate materials, equipment, and FLAG trailer to deliver the training according to the course outline.

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		1996	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

FIRE CONTROL 4A COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the characteristics and hazards of flammable gases.
- Methods and procedures on handling flammable gases whether involved in fire or not.
- An opportunity to utilize control methods on flammable gases.

Course Content.....	6:00
Course Introduction and Administration	0:30
Characteristics of Flammable Gases	0:30
Hazards of Flammable Gases	0:30
Tactics to Utilize on Flammable Gases Not Involved With Fire.....	0:30
Tactics to Utilize on Flammable Gases Involved With Fire.....	0:30
BLEVE Situations	0:30
Field Exercises.....	3:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 4B: Flammable Liquids Fire Fighting (1996)	FSTEP
Hours:	6	
Designed For:	All fire service personnel	
Description:	This course utilizes the flammable liquids and gas (FLAG) trailer to generate live fire situations and provide hands-on experience in combating flammable and combustible liquid fires. Subjects include fire behavior, safety, control methods and extinguishing agents, transportation fires, and water flow requirements.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires both a Primary Instructor and a Senior Instructor. This course also requires a site with adequate materials, equipment, and FLAG trailer to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
<ul style="list-style-type: none"> None 			
REQUIRED INSTRUCTOR MATERIALS			
<ul style="list-style-type: none"> Instructor Guide 		1996	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

FIRE CONTROL 4B COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the characteristics and hazards of flammable liquids.
- Methods and procedures on handling flammable liquids whether involved or not involved with fire.
- Laws and regulations pertaining to flammable liquids in California and at the national level.
- An opportunity to utilize control methods on flammable liquids.

Course Content.....	6:00
Course Introduction and Administration	0:30
Characteristics of Flammable Liquids	0:30
Hazards of Flammable Liquids	0:30
Tactics to Utilize on Flammable Liquids Not Involved With Fire.....	0:30
Tactics to Utilize on Flammable Liquids Involved With Fire.....	0:30
Case Studies of Flammable Liquid Incidents	0:30
Field Exercises.....	3:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 4A and 4B: Flammable Gases and Liquids Fire Fighting (1996)	FSTEP
Hours:	8	
Designed For:	All fire service personnel	
Description:	This course utilizes the flammable liquids and gas (FLAG) trailer to generate live fire situations and provide hands-on experience in combating flammable and combustible liquid fires. Subjects include fire behavior, safety, control methods and extinguishing agents, transportation fires, and water flow requirements.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires both a Primary Instructor and a Senior Instructor. This course also requires a site with adequate materials, equipment, and FLAG trailer to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
<ul style="list-style-type: none"> None 			
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
<ul style="list-style-type: none"> Instructor Guide 		1996	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE CONTROL 4A/4B COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the characteristics and hazards of flammable gases and liquids.
- Methods and procedures on handling flammable gases and liquids whether involved in fire or not.
- Laws and regulations pertaining to flammable liquids in California and at the national level.
- An opportunity to utilize control methods on flammable gases and liquids.

Course Content.....	8:00
Course Introduction and Administration	0:30
Characteristics of Flammable Gases and Liquids	0:45
Hazards of Flammable Gases and Liquids.....	0:45
Tactics to Utilize on Flammable Gases and Liquids Not Involved With Fire	0:45
Tactics to Utilize on Flammable Gases and Liquids Involved With Fire.....	0:45
BLEVE Situations	0:30
Case Studies of Flammable Liquid Incidents	0:30
Field Exercises.....	3:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 5: Aircraft Rescue and Fire Fighting (1988)	FSTEP
Hours:	16 without a live burn or 24 with a live burn	
Designed For:	All fire service personnel	
Description:	This course provides students with the methods and techniques necessary for crash fire rescue services at airports. Subjects include using conventional fire and specialized CFR apparatus, CFR extinguishing agents, types of aircraft, standby procedures, aqueous film forming foam, dual agent systems, and operations at crash scenes. The 24-hour class delivery includes a live burn.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires a Senior Instructor if the class includes the live burn. This course also requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
None			
REQUIRED INSTRUCTOR MATERIALS			
None			
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE CONTROL 5 COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on organizing and equipping an airport CFR service.
- Information on procedures and techniques for CFR operations.
- The methods and techniques of utilizing CFR tools and equipment.
- Proper procedures on the maintenance and storage of CFR tools and equipment.

Course Content.....	24:00
Identify Organization of an Airport CFR System	0:30
Identify Types of Specialized Tools and Equipment Used for CFR	0:20
Utilizing Conventional Fire Apparatus and Equipment for CFR	0:20
Identify Types of Extinguishing Agents Used for CFR	0:30
Identify Types of Aircraft	0:30
Identify Safety Procedures When Working With Aircraft	0:20
Describe Standby Procedures for Incoming Aircraft With Possible CFR Problems.....	0:30
Identify Methods of Positioning Apparatus and Personnel at the CFR Scene	1:00
Operate Dry and CO ₂ Chemical Fire Extinguishers	1:00
Operate Pressurized Water Fire Extinguishers With AFFF Additive.....	1:00
Operate Dry Chemical and PW With AFFF Extinguishers in Dual Agent Application	1:30
Operate Conventional and Specialized CFR Apparatus	2:00
Use a Refractometer to Verify Proper Foam Delivery	0:30
Position Apparatus for CFR Standby Position	2:00
Position Apparatus at an On-Field Crash Position	2:00
Use Specialized CFR Apparatus to Control an On-Field Crash	4:00
Use Conventional Apparatus to Control an On-Field Crash.....	4:00
Recharge Specialized CFR Apparatus.....	0:30
Inspect and Maintain Specialized CFR Apparatus.....	1:00
Store Airport CFR Apparatus.....	0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 6: Wildland Fire Fighting Essentials (1992)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course provides information, methods, and techniques for the utilization of the California Fire and Rescue Mutual Aid Plan, Incident Command System, wildland fire fighting strategy and tactics, structure triage, terminology, survival skills and operating safely in a wildland fire-fighting incident.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		1992	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

FIRE CONTROL 6 COURSE OUTLINE

Course Objectives: To provide the student with...

- An overview of the California Fire and Rescue Mutual Aid Plan and their responsibilities participating in a strike team.
- Information using the ICS during emergency operations while responding as strike team.
- A variety of methods and techniques to operate in a wildland suppression effort with safety.
- An opportunity to apply major principles of strategy and tactics in wildland fire fighting operations.
- The tactics and methods to provide structure protection during wildland fire suppression.
- Wildland fire fighting survival skills for potential extreme wildland fire conditions.

Course Content	16:00
Orientation and Administration.....	0:30
Wildland/Urban Interface Fire.....	1:00
Concepts of ICS Organization	2:00
State Fire and Rescue Mutual Aid Plan	1:00
Surviving the Strike Team Response.....	1:00
"Agency Specific" Strike Team Standard Operating Procedures	1:00
Wildland Fire Terminology	0:30
Factors Affecting Wildland Fires.....	1:00
Defensive and Offensive Strategies in Wildland Fire Fighting	0:30
The Use of Direct and Indirect Attacks on Wildland Fires.....	0:30
Structure Triage	1:00
Using Structures and Vehicles for Refuge in Wildland Fires.....	0:30
Wildland Fire Safety	1:00
Safety Precautions to Be Used Around Aircraft	0:30
Fundamentals of Fire Shelters.....	2:00
How to Deploy Fire Shelters.....	0:30
Course Review and Evaluation.....	1:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Control 7: Wildland Fire Fighting	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course provides hands-on experience in fighting wildland or agricultural crop fires. Exercises include: Fire behavior, hand tools, helicopter support, dozer operations, mobile pumping, backfiring/burning out safety, progressive hose lays, water tender shuttle, initial attack, and wildland fire investigation.	
Prerequisites:	Fire Control 6 (recommended)	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires both a Primary Instructor and a Senior Instructor. This course also requires a site with adequate materials and equipment to deliver the training according to the course outline. A course outline must be submitted and approved by State Fire Training.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

FIRE CONTROL 7 COURSE OUTLINE
▪ None



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Fighter I (2001)	CFSTES
Hours:	259 plus manipulative performance testing	
Designed For:	Entry-level fire fighters	
Description:	This course provides the fire fighter with the knowledge and skills to safely perform, under minimal supervision, essential and advanced fireground tasks, basic rescue operations, basic fire prevention and fire investigation tasks, and to use, inspect, and maintain fire fighting and rescue equipment.	
Prerequisites:	None	
Certification:	Fire Fighter I	
Class Size:	Department determination	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
<ul style="list-style-type: none"> Various Fire Service Training Manuals (refer to Instructor Guide) 		CFCA or FPP Delmar JB FIREScope NWCG

REQUIRED INSTRUCTOR MATERIALS	EDITION	VENDORS
<ul style="list-style-type: none"> Instructor Guide 	2001	SFT
<ul style="list-style-type: none"> Fire Fighter I Training Record *available on-line at: http://osfm.fire.ca.gov/training/training_information.php 	2001	SFT

VENDORS		
CFCA	California Fire Chief's Association Bookstore (800-733-2314)	www.calchiefs.org
Delmar	Delmar Thomson Learning (800-347-7707)	esales@thomsonlearning.com
FIREScope	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org
FPP	Fire Protection Publications (800-654-4055)	www.ifsta.org
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com
NWCG	National Wildlife Coordinating Group (208-387-5119)	www.nwcg.gov
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Fighter II (2001)	CFSTES
Hours:	111 plus manipulative performance testing	
Designed For:	Probationary fire fighters	
Description:	This course expands upon the depth of knowledge provided to those fire service personnel certified to the Fire Fighter I level. It includes information, techniques, and methods of essential and advanced fireground tasks, rescue operations, inspection and maintenance of hand, power, and hydraulic tools, techniques for educating the public.	
Prerequisites:	Fire Fighter I	
Certification:	Fire Fighter II	
Class Size:	Department determination	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
<ul style="list-style-type: none"> Various Fire Service Training Manuals (refer to Instructor Guide) 		CFCA or FPP Delmar JB FIREScope NWCG

REQUIRED INSTRUCTOR MATERIALS	EDITION	VENDORS
<ul style="list-style-type: none"> Instructor Guide 	2001	SFT
<ul style="list-style-type: none"> Fire Fighter II Training Record *available on-line http://osfm.fire.ca.gov/training/training_information.php 	2001	SFT

VENDORS		
CFCA	California Fire Chief's Association Bookstore (800-733-2314)	www.calchiefs.org
Delmar	Delmar Thomson Learning (800-347-7707)	esales@thomsonlearning.com
FIREScope	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org
FPP	Fire Protection Publications (800-654-4055)	www.ifsta.org
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com
NWCG	National Wildlife Coordinating Group (208-387-5119)	www.nwcg.gov
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Fighter Survival (2010)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course was developed in the continuing effort to reduce the number of fire fighter injuries and fatalities that occur on an annual basis and provides a greater understanding how to avoid committing fatal errors on the fireground. Avoiding situations that could cause you to become lost, trapped, or injured is the best way to prevent tragedies at a fire scene. Topics include fire fighter survival terminology, developing a survival attitude, increasing situational awareness, and being trained in problem-solving techniques so you can become more self reliant in an emergency. Case studies will be reviewed to outline factors common in many line-of-duty deaths (LODDs) across the nation.	
Prerequisites:	None	
Certification:	None	
Class Size:	Student/Instructor ratio is 10:1 (40 students maximum with four Primary Instructors)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
Instructor/Student Manual (combined document)		2010	SFT
REQUIRED INSTRUCTOR MATERIALS			
Instructor/Student Manual (combined document)		2010	SFT
PowerPoint Slides on CD-ROM (Optional)		2010	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE FIGHTER SURVIVAL COURSE OUTLINE

Course Objectives: To provide the student with...

- Fire fighter survival terminology.
- Knowledge of the federal government involvement to reduce fire fighter injuries and fatalities and the guidelines and laws put in place from tragic fire loss events.
- Fire fighter fatality case study recommendations to enhance fire fighter training to handle their own emergencies on the fireground.
- Techniques for developing fire fighter survival attitude and identify personal equipment that fire fighters should carry in their possession for self-preparedness measures.
- Situational awareness to prevent the fire fighter emergency and recognize critical structural fireground factors.
- Knowledge and the application of "When to call a fire fighter emergency" and emergency communications when fire fighters become lost, trapped, or disoriented inside a burning structure.
- SCBA knowledge and techniques for air awareness and SCBA air emergencies, and applying them during hands-on evolutions.

Course Content.....	16:00
Orientation and Administration	1:00
Developing A Survival Attitude	0:45
Preventing the Fire Fighter Emergency	0:45
The Fire Fighter Emergency	0:45
SCBA Emergencies	0:45
Fire Fighter Survival Skills.....	8:00
▪ #1: SCBA Emergency Procedure Check	
▪ #2: Calling "Mayday"	
▪ #3: Reading Couplings	
▪ #4: Window Hang	
▪ #5: Hose Slide	
▪ #6: Emergency Ladder Escape – Hook-two/Slide-to-four Method	
▪ #7: Entanglement Emergencies – Swim or Sweep Method	
▪ #8: Entanglement Emergencies – SCBA Removal Method	
▪ #9: Wall Breach	
▪ #10: Changing Your SCBA Profile – Nonremoval Method	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE FIGHTER SURVIVAL COURSE OUTLINE

- #11: Changing Your SCBA Profile – Low or Reduced Profile (Partial-removal Method)
- #12: Changing Your SCBA Profile – Zero or No Profile (Full-removal Method)

Fire Fighter Survival Evolutions..... 4:00

- #1: SCBA Confidence Course
- #2: SCBA Awareness



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fireline Safety Awareness for Hired Vendors (2011)	FSTEP
Hours:	8:00	
Designed For:	Hired vendors working with CAL FIRE or USFS on any active wildland fire, including water tender operators, heavy equipment with water operators (Skidgine), dozer operators, crew bus drivers, vehicle drivers, mechanics, fallers, swampers, and chain saw operators.	
Description:	This course provides an awareness of fireline safety to hired vendors who plan to engage in wildland fire suppression and other incident support activities. Topics include current safety training, relevant policy and procedures, how to recognize and mitigate risk, and maintain safe and effective practices while working under agency supervision on an incident. Upon successful completion of training, participants will receive a course completion card valid for one (1) year from date of issue.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	5:1 student/skills evaluator ratio for fire shelter deployment skill	
Training Expiration:	Valid for one (1) year from date of training	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Incident Response Pocket Guide (NFES #1077) one for each student		Current	NWCG
▪ Instructor Guide		2011	SFT
▪ New Generation Practice Fire Shelters (1/5 shelter/student ratio)		Minimum of two large	NWCG; Online Retailers
▪ The New Generation Fire Shelter Video (NFES #2712)		2003	NWCG
▪ Wildland Personal Protective Equipment (One set as listed in Topic 13)		---	---
VENDORS			
NWCG	National Wildlife Coordinating Group (208-387-5119)		www.nwcg.gov
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRELINE SAFETY AWARENESS FOR HIRED VENDORS COURSE SYLLABUS

Course Objectives: To provide the student with...

- Information on recent wildland events and hot topics
- Information for working on a wildland fire, including parts of a vegetation fire, situational awareness, fireline hazards, incident check-in, and radio procedures
- The 10 Standard Fire Orders and 18 Watch-out Situations
- Information on using the Incident Response Pocket Guide
- Techniques on the care, maintenance, and deployment of the new generation fire shelter
- Guidelines when working with California inmate fire crew

Course Content:	8:00
Overview And Administration	0:15
Introduction to the Incident Response Pocket Guide	0:30
Parts of a Vegetation Fire	0:30
Situational Awareness/Look up-Look down/Weather	0:45
The 10 Standard Fire Orders/LCES	0:30
The 18 Situations that Shout Watch Out	0:30
Fireline Hazards and Strategies	0:30
Entrapment Avoidance	0:30
Lessons Learned and Hot Topics	0:30
Radio Procedures	0:30
Working with California Inmate Fire Crews	0:30
Incident Organization	0:30
Wildland Personal Protective Equipment	0:30
New Generation Fire Shelter and Deployment Skill	1:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Large Animal Rescue Operational (2003)	FSTEP
Hours:	8	
Designed For:	Fire fighters, fire service personnel, animal control officers, and law enforcement officers	
Description:	Fire departments are beginning to play a vital role in large animal rescues. Moreover, since these rescues can be a hazardous activity and pose a risk of serious injury or death, the safety of rescuers must be the first priority. This course provides the knowledge and skills necessary so responders can work in "concert" with each other, guided by an understanding of horse characteristics and behavior.	
Prerequisites:	None	
Certification:	None	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		2003	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		2003	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2003	SFT
▪ Student Manual		2003	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

LARGE ANIMAL RESCUE OPERATIONAL COURSE OUTLINE

Course Objectives: To provide the student with...

- Information about large animal rescue as a technical rescue.
- Information about prey animal behavior and characteristics.
- Information and training on emergency containment of large animals.
- Information and training on scene management and large animal operations.
- Information and training on large animal rescue equipment and application.
- Information and training on horse trailers and on-road accidents.
- Information and training on rope operations and large animals.
- Information and training on hauling, lifting, and lowering large animals.
- Information and training on vertical lifting operations with large animals.
- Information and training on water rescue with large animals.

Course Content.....	8:00
Unit 1: Introduction to Large Animal Rescue	
Introduction and History	0:30
Horse Characteristics and Behavior	0:30
The Emergency Rope Halter and Lead Line.....	0:30
How to Approach a Loose Horse.....	0:15
How to Apply an Emergency Rope Halter	0:15
Unit 2: Operations and Equipment	
Scene Management and Operations	0:30
Large Animal Rescue Equipment	0:30
How to Apply a Rescue Strap, Forward Application.....	0:15
How to Apply the Vertical Lift Tie	0:15
Trailers and Trailer Operations	1:00
Raising and Lowering Systems and Operations	0:45
How to Apply a Rescue Strap, Rear Drag Application	0:15
How to Assemble a Set of Tandem Prusik Loops to an Anchor Rope.....	0:15
How to Assemble a Set of Parallel Prusik Loops to a Double Anchor Rope	0:15
How to Set Up a Piggyback Haul System.....	0:15
How to Operate a Piggyback Haul System.....	0:15
Water Operations.....	0:30
Course Review and Final Exam	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Low Angle Rope Rescue Operational (2007)	FSTEP
Hours:	24	
Designed For:	All fire service personnel	
Description:	Designed to equip the student with the techniques and methods for using rope, webbing, hardware friction devices, litters in low angle rescue situations. Areas covered include rope and related equipment, anchor systems, safety lines, stretcher lashing and rigging, mechanical advantage systems, and single-line and two-line rescue systems.	
Prerequisites:	None	
Certification:	None	
Class Size:	Student/Instructor ratio is 12:1 (48 students maximum with four Primary Instructors)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪	Low Angle Rope Rescue Operational Instructor and Student Manual	2007	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪	Low Angle Rope Rescue Operational Instructor and Student Manual	2007	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

LOW ANGLE ROPE RESCUE OPERATIONAL COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on rope rescue equipment, rescue knots and hitches, anchor systems, system attachments and fall restraint, belay/safety line systems, load-releasing devices.
- Methods and techniques used to inspect and maintain rescue rope, webbing, and hardware.
- Methods and techniques to tie knots and package victims and rescuers.
- Methods and techniques for using rescue equipment to build lower/raise systems.
- Information on rescue scene organization and management.
- An opportunity to demonstrate and apply basic low angle rope rescue techniques.
- Optional information on litter walkouts and ladder systems used in low angle rope rescue operations.

Course Content.....	24:00
Introduction	1:00
Rope Rescue Equipment.....	1:00
Rescue Knots and Hitches	1:00
Anchor Systems.....	2:00
Rescuer and Ambulatory Victim Packaging.....	1:00
Types of Rescue Litters and Victim Packaging.....	2:00
System Attachments and Fall Restraint.....	1:00
Three Main Components of a Low Angle Rope Rescue System	2:00
Belay/Safety Line Systems.....	1:00
Descending and Ascending Techniques.....	2:00
Lower/Raise (Mechanical Advantage) Systems	3:00
Load-releasing Methods.....	1:00
Rescue Scene Organization and Management	1:00
<i>Litter Walkouts (Optional)</i>	<i>1:00</i>
<i>Ladder Systems (Optional).....</i>	<i>2:00</i>
Evolutions	5:00
Evolutions (Optional).....	5:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Personal Watercraft Rescue Operations (1996)	FSTEP
Hours:	16	
Designed For:	Water rescue personnel	
Description:	This course provides the skills needed to operate a personal watercraft (PWC) and perform rescue in river and flood situations. Safety, course philosophy, and PWC terminology are covered. "In water" experiences for students include how to read dynamics flow for safety travel, perform self-rescue and victim-rescue operations, along with executing pre/post-inspections of the PWC.	
Prerequisites:	River and Flood Water Rescue	
Certification:	None	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		1996	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

PERSONAL WATERCRAFT RESCUE OPERATIONS COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the codes and regulations that impact personal watercraft operations.
- A thorough knowledge of personal watercraft operations.
- A strong working knowledge of personal watercraft operations in both static and dynamic water.
- Information on performing inspections and maintaining personal watercraft.
- An opportunity to apply their knowledge through demonstrations.

Course Content.....	16:00
Personal Watercraft Safety Training	1:30
Philosophy of Personal Watercraft Use	0:30
Orientation and Terminology of Personal Watercraft	1:00
Performing Pre-operation Inspections	0:30
Launching Personal Watercraft	0:30
Rescuer Mounts for Personal Watercraft	0:30
Methods for Reading Rivers	1:00
Traveling in Dynamic Water.....	1:00
Hovering and Ferrying a Personal Watercraft.....	0:30
Righting a Tipped Personal Watercraft.....	1:00
Serving a Flooded Personal Watercraft.....	1:00
Shoring a Personal Watercraft.....	0:30
Performing a Rope Crossing	1:00
Performing a Victim Pickup with a Rescue Litter	1:00
Performing a Victim Pickoff.....	1:00
Trailing a personal Watercraft.....	0:30
Placing a Personal Watercraft Back In-service	1:00
Performing Daily and Weekly Checks on Personal Watercraft	0:30
Course Review and Final Exam.....	1:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Rapid Intervention Crew Tactics (2000)	FSTEP
Hours:	16	
Designed For:	All personnel involved in structural fire fighting	
Description:	All departments have policies or guidelines in place requiring Rapid Intervention Crews (RIC). However, once you have been assigned as the RIC, what do you do? This course provides the answers by teaching some effective techniques for rescuing fire fighters in a variety of situations.	
Prerequisites:	Fire Fighter I or equivalent training	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ Student Supplement	2002	SFT
REQUIRED INSTRUCTOR MATERIALS		
▪ Instructor Guide	2000	SFT
▪ PowerPoint Slides on CD-ROM (Optional)	2000	SFT
VENDORS		
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

RAPID INTERVENTION CREW TACTICS COURSE OUTLINE

Course Objectives: To provide the student with...

- The history of fire fighter injuries and fatalities at structure fires.
- The knowledge and techniques of Rapid Intervention Crews.
- The knowledge and techniques of self-survival.
- An opportunity to demonstrate and apply fire fighter rescue and self-survival techniques.

Course Content:	16:00
Welcome and Course Overview	0:30
Fire Fighter Injuries and Fatalities	2:00
Tactical Considerations of the Rapid Intervention Crew	1:30
Fire Fighter Self-Survival Techniques	1:00
How to Change Your SCBA Profile	0:30
How to Drag a Down Fire Fighter	1:00
How to Drag a Down Fire Fighter Down Stairs	0:30
How to Drag a Down Fire Fighter Up Stairs	0:30
How to Remove SCBA From Down Fire Fighter	0:30
How to Lift a Down Fire Fighter Out a Window	0:30
How to Lower a Down Fire Fighter Down a Ladder	0:30
How to Lift a Down Fire Fighter in a Confined Area	1:00
Indications, Contraindications, and Safety Awareness for the Low-Profile Ladder Escape (Optional)	1:00
How to Set-Up a Safety Belay System for the Low-Profile Ladder Escape (Optional)	1:00
How to Perform a Low-Profile Ladder Escape (Optional)	0:30
How to Tie a Handcuff Knot	0:30
How to Lift a Down Fire Fighter Through Hole in Floor	1:00
Combined Evolutions	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Rescue Boat Operations (1998)	FSTEP
Hours:	24	
Designed For:	Water rescue personnel	
Description:	This course provides the skills needed to operate a rescue boat and perform rescue in river and flood situations. Safety, course philosophy, and terminology are covered. "In water" experiences for students include how to read dynamics flow for safety travel, perform self-rescue and victim-rescue operations, along with executing pre/post-inspections of the PWC.	
Prerequisites:	River and Flood Water Rescue	
Certification:	None	
Class Size:	25	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1998	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		1998	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

RESCUE BOAT OPERATIONS COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the codes and regulations that impact rescue boat operations.
- A strong working knowledge of rescue boat operations in both static and dynamic water.
- Information on performing inspections and maintaining rescue boats.
- An opportunity to apply their knowledge through demonstrations.

Course Content.....	24:00
Rescue Boat Safety Training.....	1:00
Philosophy of Rescue Boat Use.....	0:30
Rescue Boat Types, Uses, and Limitation.....	1:00
Recognized Standard Set-up for an IRB.....	1:00
Methods of Reading Rivers.....	1:00
Traveling in Dynamic Water.....	1:30
Operational Terminology.....	1:00
IRB Crew Positions.....	0:30
How To Perform Daily and Weekly Checks.....	0:30
Boat Care and Maintenance.....	0:30
Performing a Pre-operation Inspections.....	0:30
Launching a Rescue Boat.....	0:30
How to Hover and Ferry a Rescue Boat.....	1:00
Shoring A Rescue Boat.....	0:30
How to Trailer A Rescue Boat.....	1:00
IRB High Speed Turns.....	2:00
How to Execute a Rescuer Drop-off.....	2:00
Performing A Victim Pickup.....	2:00
Performing A Victim Pickoff.....	2:00
Righting an Overturned IRB.....	1:00
Paddle Operations.....	1:00
Rescue Boat Operations During Floods.....	1:00
Boat Wraps and Pins.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	River and Flood Water Rescue (1996)	FSTEP
Hours:	16	
Designed For:	All fire service personnel	
Description:	This course is intended for the training of fire service personnel in water rescue techniques. Topics include swift water rescue, submerged vehicles, drowning, use of engine/truck company equipment for water rescue, use of rafts and boats, and underwater search and recovery.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Student/Instructor:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

RIVER AND FLOOD WATER RESCUE COURSE OUTLINE

Course Objectives: To provide the student with...

- Basic rescue techniques to water rescue problems.
- Information on the special hazards and problems in swift water rescue.
- Basic skills to make safe moving water rescues.
- Skills in rope handling, rigging, and repelling.

Course Content.....	16:00
Introduction	0:30
Cold Water Emersion, Hypothermia, and Mammalian Reflex.....	0:30
White Water Regarding Body Surfing, Boat Handling, and Shallow Water Crossing.....	1:00
Introduction to Vertical Rescue.....	1:00
How to Tie Rescue Knots	1:00
Field Exercises.....	3:00
Water Briefing.....	0:30
Field Exercises With the Tyrolian Line	2:00
Field Exercises With Water Crossing Techniques	2:00
Waterside Briefing.....	0:30
Rescue Simulations	4:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Tire Fire Prevention and Suppression (2004)	FSTEP
Hours:	6	
Designed For:	All fire service personnel	
Description:	This course provides information on the growing problem of scrap tire storage throughout California. Topics include: History, chemical compounds, sources of ignition, codes and regulations, ground rubber operations and hazards, pre-incident planning of outdoor tire storage yards, tire fire behavior, and hazardous materials response.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual (included in Instructor Media Kit)		2004	SFT
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪ Media Kit: Instructor Guide, Student Manual, Multimedia Presentation, and Program Notes		2004	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

TIRE FIRE PREVENTION AND SUPPRESSION COURSE OUTLINE	
Course Objectives: To provide the student with...	
<ul style="list-style-type: none"> ▪ Information on the background and history of the scrap tire industry. ▪ Information on chemical compounds used in tire manufacturing. ▪ Information on traditional sources of ignition. ▪ Information on the current codes and regulations. ▪ Information on ground rubber operations and hazards. ▪ Pre-incident planning of outdoor tire storage yards. ▪ Information on tire fire behavior. ▪ Information on hazardous materials response. 	
Course Content.....	6:00
Introduction: Defining the Problem	0:30
Tire History	0:30
Tire Markets	0:30
Tire Storage	0:30
Sources of Ignition.....	0:30
Codes and Regulations	1:00
Ground Rubber	0:30
Preplanning.....	0:30
Fire Behavior.....	0:30
Hazardous Materials Response	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Trench Rescue

FSTEP

Hours: 16

Designed For: All fire service personnel

Description: This course is designed to train fire service personnel in hands-on application of the techniques necessary to safely affect a rescue from an excavation or trenching cave-in. Topics include: Critical considerations while responding to trenching emergencies, evaluation of cave-in scenes, basic life support procedures and temporary protection for victims, specialized tool usage, shoring techniques, and below grade rescue safety procedures.

Prerequisites: None

Certification: None

Class Size: 40

Student/Instructor: Ratio: 10:1 (Skills Proficiency)

Restrictions: This course requires a site with adequate materials and equipment to deliver the training according to the course outline.

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

TRENCH RESCUE COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the common causes for trench collapse.
- Information on the personal safety equipment used for trench rescues.
- Techniques for using scene safety equipment.
- The procedures for placing edge protection to make the lip of the trench safe.
- The procedures for sheeting and shoring.
- Different methods for removing victims from a trench.
- Techniques for safely removing tools and equipment from a trench.
- An opportunity to demonstrate and apply trench rescue techniques.

Course Content..... 16:00

Introduction

The Law

Confined Space Regulations

Soil Analysis

Types of Trenches and Collapse Patterns

Emergency Rescue Guide

Making the Trench Safe



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

HAZ MAT COURSES

Course:	Hazardous Materials First Responder Awareness Level (1996)	FSTEP
Hours:	8	
Designed For:	Fire prevention personnel, fire inspectors, and fire department support staff	
Description:	Hazardous Materials notification and reporting requirements for Fire Department personnel who may witness or discover a Hazardous Materials Leak, spill, or discharge. Meets the requirements of CFR 29 1910.120 and CCR Title 8.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

HAZARDOUS MATERIALS FIRST RESPONDER AWARENESS LEVEL COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on hazardous materials relevant to the risks and negative outcomes hazardous materials events/incidents present.
- Methods and procedures to identify a hazardous materials event/incident.
- With methods and procedures to isolate a hazardous materials event/incident and make proper modifications to mitigate an event/incident.
- Information on safety and hazard assessment techniques when dealing with a hazardous materials event/incident.
- A tabletop exercise to apply the information provided in this course.

Course Content.....	8:00
Course Orientation and Administration	1:00
Introduction to Hazardous Materials at the Awareness Level.....	1:00
Hazardous Materials Recognition	1:00
Safety, Isolation, and Notifications.....	1:00
Basic Command, IDHA, and Action Plans	1:00
Tabletop Exercise	1:00
Course Review and Final Exam.....	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Hazardous Materials First Responder Operational Level (1994)	FSTEP
Hours:	24	
Designed For:	Fire department personnel who may respond to releases or potential releases of hazardous materials as part of the initial response to the site for the purpose of protecting nearby persons, property, or the environment from the effects of the release.	
Description:	Defensive tactics to contain the release from a safe distance, keep it from spreading, and prevent exposures without trying to stop the release. Meets and exceeds the requirements of CFR 29 1910.120 and CCR Title 8.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1994	CSTI
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪ Instructor Guide		1994	CSTI
▪ Student Manual		1994	CSTI
VENDORS			
CSTI	California Specialized Training Institute (800-549-3535)		CSTIinfo@oes.ca.gov

HAZARDOUS MATERIALS FIRST RESPONDER OPERATIONAL LEVEL COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on recognition of hazardous materials incidents, safety precautions, making proper notifications, and legal aspects.
- Information on scene management and the utilization of IDHA and action plans.
- Methods and procedures on the proper use of hazardous materials protective equipment, containment, protective actions, decon, disposal and documentation.
- Information on preplanning for hazardous materials incidents.
- An exercise that uses the information, methods, and procedures contained in this course.

Course Content.....	24:00
Course Orientation and Administration	1:30
Introduction to Hazardous Materials at the Operational Level.....	1:00
Hazardous Materials Recognition and Safety	1:00
Safety, Isolation, and Notifications.....	1:00
Command/Introduction to Scene Management	1:00
IDHA and Action Plans	2:00
Protective Equipment and First Responder Limits.....	1:00
Containment and Protective Actions	2:00
Decon Disposal and Documentation	1:00
Agency Coordination	1:00
Pre-Event and Event-Specific Planning	1:00
Toxicology	1:00
The Safe and Competent Hazardous Materials Process	1:00
First Responder Operational Exercise.....	4:00
Hazardous Materials Legal Aspects and the Media.....	1:00
Putting It All Together.....	1:00
Course Review and Final Exam.....	2:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Hazardous Materials First Responder Operational, Decontamination (1993)	FSTEP
Hours:	8	
Designed For:	Hazardous material emergency response personnel	
Description:	This course will provide the haz mat emergency responder with the processes used in decontamination and methods to limit the spread of hazardous materials contamination in a safe and competent manner.	
Prerequisites:	OSFM recognized/approved Hazardous Materials First Responder Operational Level	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1993	CSTI
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪ Instructor Guide		1993	CSTI
▪ Student Manual		1993	CSTI
VENDORS			
CSTI	California Specialized Training Institute (800-549-3535)		CSTIinfo@oes.ca.gov

HAZARDOUS MATERIALS FIRST RESPONDER OPERATIONAL, DECONTAMINATION COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the processes used in decontamination.
- Skills to safely limit the spread of contamination.

Course Content.....	8:00
Course Overview	0:15
Introduction to Decontamination.....	0:45
Decontamination Leader	0:30
Contamination Reduction Corridor.....	0:30
Special Decontamination Procedures	0:30
Personal Protective Equipment	0:45
Medical Monitoring of the Decon Team	0:15
EMS Transportation of Decontaminated Patients	0:30
Medical Monitoring Exercise	0:30
Level B Exercise	0:45
Contamination Reduction Corridor Exercise	0:45
Level a Decontamination Exercise	0:30
Decontamination of Contaminated Victims Exercise	0:15
Decontamination of the Decon Team Exercise	0:15
Course Review and Final Exam.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

ICS COURSES

Course:	I-200: Basic ICS (2006)	FSTEP
Hours:	12-16	
Designed For:	First line supervisors, single resource bosses, lead dispatchers, field supervisors, company officers, and entry level positions (trainees) on incident management teams	
Description:	This course introduces students to the principles of the Incident Command System (ICS) associated with incident-related performance. Topics include leadership and management, delegation of authority and management by objectives, functional areas and positions, briefings, organizational flexibility, transitions and transfers.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	I-300: Intermediate ICS (2007)	FSTEP
Hours:	18-24	
Designed For:	Type 3 Incident Management Team (IMT) candidates, incident middle management (Unit Leaders, Division/Group Supervisors, and Strike Team Leaders), elected officials, line officers, lead dispatchers, Multi-agency Coordination (MAC) members, director heads (public works director, fire chief, sheriff), emergency managers, agency representatives	
Description:	This course provides description and detail of the Incident Command System (ICS) organization and operations in supervisory roles on expanding or Type 3 incidents. Topics include: ICS fundamentals review, incident/event assessment and agency guidance in establishing incident objectives, Unified Command, incident resource management, planning process, demobilization, transfer of command, and close out.	
Prerequisites:	I-200	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	I-400: Advanced ICS (2006)	FSTEP
Hours:	16	
Designed For:	Senior personnel expected to perform in a management capacity in an area command/complex incident environment	
Description:	This course directs the student towards an operational understanding of large single-agency and complex multi-agency/multi-jurisdictional incident responses. Topics include fundamentals review for command and general staff, major and/or complex incident/event management, area command, and multi-agency coordination.	
Prerequisites:	I-300	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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COURSE INFORMATION AND REQUIRED MATERIALS

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Course:	S-130: Fire Fighter Training (2003)	FSTEP
Hours:	30-35½	
Designed For:	Entry-level firefighters.	
Description:	This course is designed to provide entry-level fire fighters skills. Many of the units are set up so they can be taught in either the classroom or the field; field time is encouraged. A version of L-180, Human Factors on the Fireline, has been included as part of this course.	
Prerequisites:	S-190	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-131: Fire Fighter Type 1 Training (2004)	FSTEP
Hours:	8	
Designed For:	Fire Fighter Type 1 (FFT1)	
Description:	This course meets the training needs of the Fire Fighter Type 1 (FFT1) and is interactive in nature. Topics include fireline reference materials, communications, and tactical decision-making.	
Prerequisites:	Qualified as a Fire Fighter Type 2 (FFT2)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-190: Introduction to Wildland Fire Behavior (2006)	FSTEP
Hours:	6-8	
Designed For:	Entry-level fire fighters	
Description:	This course provides instruction in the primary factors affecting the start and spread of wildfire and recognition of potentially hazardous situations. S-190 is typically taught in conjunction with or prior to Basic Fire Fighter Training, S-130. It is designed to meet the fire behavior training needs of a Fire Fighter Type 2 (FFT2) on an incident as outlined in the PMS 310-1, Wildland Fire Qualification System Guide and the position task book developed for the position.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-200: Initial Attack Incident Commander (2007)	FSTEP
Hours:	16	
Designed For:	Personnel desiring to be qualified as an (ICT4)	
Description:	This course is designed to meet the training needs of the Incident Commander Type 4. The six units cover: foundation skills, intelligence gathering and documentation, size-up, developing a plan of action, post-fire activities, evaluating incident objectives, and managing the incident. Evaluation of the student is by unit tests and performance based evaluations.	
Prerequisites:	Qualified as a Single Resource Boss	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-203: Introduction to Incident Information (2008)	FSTEP
Hours:	30	
Designed For:	Personnel desiring to be qualified as Public Information Officer (PIOF)	
Description:	Receive the skills and knowledge needed to serve as a public information officer. Topics include establishing/maintaining an incident information operation, communicating with internal/external audiences, working with the media, handling special situations, and long-term planning/strategy.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-212: Wildland Fire Chainsaws (2004)	FSTEP
Hours:	24-36	
Designed For:	Individuals desiring to be qualified as Fire Fighter Type 1 (FFT1), Incident Commander Type 5 (ICT5) or Felling Boss (FELB)	
Description:	This course introduces the function, maintenance and use of internal combustion engine powered chain saws, and their tactical wildland fire application. Field exercises support entry-level training for fire fighters with little or no previous experience in operating a chain saw, providing hands-on cutting experience in surroundings similar to fireline situations.	
Prerequisites:	Qualified as a Fire Fighter Type 2 (FFT2)	
Certification:	None	
Class Size:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	

Course:	S-215: Fire Operations in the Wildland/Urban Interface (2003)	FSTEP
Hours:	28-32	
Designed For:	Wildland Fire Agencies: Required for Initial Attack Incident Commander Type 4 (ICT4) and Strike Team Leader (tractor/plow, dozer, engine, or crew). Structural Fire Departments: Engine operators, chief officers, and company officers responsible for structure protection in suburban/urban interface areas that may be threatened by wildland fire.	
Description:	Designed to assist structure and wildland fire fighters who will be making tactical decisions when confronting wildland fire that threatens life, property, and improvements, in the wildland/urban interface. Topics include: interface awareness, size-up, initial strategy and incident action plan, structure triage, structure protection tactics, incident action plan assessment and update, follow-up and public relations, and fire fighter safety in the interface. If the optional exercises at the end of the tactics unit are used or a field exercise is included additional course time is needed. Instructors are encouraged to extend the course to 32 hours and add a field exercise covering size-up, structure triage, tactics, and any other local area training as appropriate.	
Prerequisites:	Wildland Fire Agencies: Qualified as a Fire Fighter Type 1 (FFT1) Structural Fire Departments: I-100, L-180, S-130, S-131, S-190	
Certification:	None	
Class Size:	40	
Restrictions:	None	

Course:	S-230: Crew Boss – Single Resource (2004)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as an Engine Boss (ENGB)	
Description:	Training for the single resource boss position from initial dispatch through demobilization to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization, and post incident responsibilities.	
Prerequisites:	S-290 and qualified as a Fire Fighter Type 1 (FFT1)	
Certification:	None	
Class Size:	40	
Restrictions:	None	

Course:	S-231: Engine Boss (2004)	FSTEP
Hours:	12-16	
Designed For:	Personnel desiring to be qualified as an Engine Boss (ENGB)	
Description:	Designed to produce student proficiency in the performance of the duties associated with ENGB. Topics include engine and crew capabilities and limitations, information sources, fire size-up considerations, tactics, and wildland/urban interface.	
Prerequisites:	S-230 and qualified as a Fire Fighter Type 1 (FFT1)	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-234 Ignition Operations (2009)	FSTEP
Hours:	16	
Designed For:	Personnel desiring to be qualified as Firing Boss (FIRB)	
Description:	This course introduces the roles and responsibilities of a Firing Boss (FIRB), common firing devices, and general firing operations and techniques. Although comprehensive in nature, the coursework is not a substitute for the dynamic fire environment. The course provides students with important information concerning general tasks required to be successful. Any opportunity to show students a small-prescribed burn or demonstrate how devices operate in the field will promote transferring these new skills to the job. Due to the wide variety and capabilities of sponsors presenting this course, the field exercise portion of the class is not defined. Therefore, the cadre and sponsoring unit are responsible for planning field exercises and demonstrations in accordance with their capabilities.	
Prerequisites:	S-290	
Certification:	None	
Class Size:	Ratio: 10:1 (Skills Proficiency)	
Restrictions:	This course requires a site with adequate materials and equipment to deliver the training according to the course outline.	
Course:	S-244: Field Observer (2007)	FSTEP
Hours:	20	
Designed For:	Personnel desiring to be qualified as a Field Observer (FOBS) and/or Fire Effects Monitor (FEMO)	
Description:	This course provides the student with the skills necessary to perform as a field observer (FOBS) and/or a fire effects monitor (FEMO). Topics include roles and responsibilities of the FOBS and FEMO; how to make observations and document those observations; how to produce hand drawn and GPS field maps; and how to navigate using a compass and GPS. The navigation unit has 4½ hours of field exercises and the final field exercise is 8 hours.	
Prerequisites:	Successful completion of the precourse work Ability to use a GPS receiver S-290 FOBS: Qualified as a Single Resource Boss FEMO: Qualified as a Fire Fighter Type 2 (FFT2)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-245: Display Processor (2007)	FSTEP
Hours:	8	
Designed For:	Personnel desiring to be qualified as a Display Processor (DPRO)	
Description:	This course provides students with the skills necessary to perform as a Display Processor (DPRO). Topics include general roles and responsibilities and how to assist the situation unit leader with producing incident maps, inputs for the Incident Status Summary (ICS-209) and other incident products. The final exam is 3 hours.	
Prerequisites:	Successful completion of the precourse work	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-270: Basic Air Operations (2003)	FSTEP
Hours:	16	
Designed For:	Single Resource Boss, Incident Commander Type 4 (ICT4), and Support Dispatcher (EDSD)	
Description:	This course covers aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas. Note: the regulations, procedures, and policies addressed in this course are primarily those governing federal agency and ICS operations. State, county, or other political subdivisions using this course will need to consult their agency having jurisdiction with respect to regulations, procedures, and policies.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-290: Intermediate Wildland Fire Behavior (2007)	FSTEP
Hours:	32	
Designed For:	Personnel desiring to be qualified as any Single Resource Boss or Fire Effects Monitor (FEMO)	
Description:	This is a classroom-based skills course designed to prepare the prospective fireline supervisor to undertake safe and effective fire management operations. It is the second course in a series that collectively serves to develop fire behavior prediction knowledge and skills. Fire environment differences are discussed as necessary; instructor should stress local conditions.	
Prerequisites:	S-190	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-300: Extended Attack Incident Commander (2008)	FSTEP
Hours:	16	
Designed For:	Personnel desiring to be qualified as an Incident Commander Type 3 (ICT3)	
Description:	The focus is on leadership and command as they relate to the ICT3 position and presented in participative lecture format with multiple tactical decision games for students to practice new knowledge. The seven instructional units cover: foundation skills, situational awareness, command and control, managing the incident, transitional activities, post-fire activities, and final simulation. There is also an optional staff ride activity (Unit 8) if instructors choose to include it.	
Prerequisites:	Successful completion of the precourse work Qualified as an Incident Commander Type 4 (ICT4) and Task Force Leader (TFLD) or Qualified as an Incident Commander Type 4 (ICT4), Strike Team Leader (TFLD), and any two Single Resource Boss positions – one must be Crew (CRWB) or Engine (ENGB)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-330: Task Force/Strike Team Leader (2005)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as a Task Force Leader (TFLD) or any Strike Team Leader (STPL, STDZ, STEN, or STCR)	
Description:	Designed to meet the training requirements outlined in the Wildland Fire Qualification System Guide and the Position Task Books (PTB) developed for the positions of Task Force Leader and Strike Team Leader and specific to wildland fire suppression. If students are expected to perform in some other risk area, exercises and examples appropriate to the expected risk should be added.	
Prerequisites:	Successful completion of the precourse work Qualified as any Single Resource Boss	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-336: Tactical Decision Making in Wildland Fire (2004)	FSTEP
Hours:	24-32	
Designed For:	Experienced Single Resource Bosses and Initial Attack Incident Commanders	
Description:	Designed to meet training requirements in the Operations Section of the ICS and is specific to wildland fire suppression. This course prepares experienced Single Resource Bosses and Initial Attack Incident Commanders in the tactics necessary at the Strike Team/Task Force Leader level. It is also valuable for Operations Supervisors qualified at higher management levels who have not received training in wildfire suppression tactics.	
Prerequisites:	Qualified as a Single Resource Boss or Initial Attack Incident Commander Type 4 (ICT4)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-339: Division/Group Supervisor (2006)	FSTEP
Hours:	20	
Designed For:	Personnel desiring to be qualified as a Division/Group Supervisor (DIVS)	
Description:	Prepares students to perform in the role of Division/Group Supervisor and provides instruction in support of the specific tasks of the DIVS. Topics include division/group management, organizational interaction, division operations, all-hazard operations, and tactical decision games (optional). There is a final examination in this course.	
Prerequisites:	I-200, I-300 Qualified as a Task Force Leader (TFLD) or Incident Commander Type 3 (ICT3) or Incident Commander Type 4 (ICT4) and in any two Strike Team Leader positions – one must be STCR or STEN	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-346: Situation Unit Leader (2008)	FSTEP
Hours:	18-24	
Designed For:	Personnel desiring to be qualified as Situation Unit Leader (SITL).	
Description:	The course starts with how to activate, setup, organize, manage, and demobilize a situation unit. It then addresses the products (maps, ICS-209, and other reports) the unit produces, as well as the technology needed to produce the products.	
Prerequisites:	Successful completion of the precourse work Qualified as any Strike Team Leader or Incident Commander Type 4 (ICT4)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-349: Resources Unit Leader/Demobilization Unit Leader (2008)	FSTEP
Hours:	28-32	
Designed For:	Personnel desiring to be qualified as a Resources Unit Leader (RESL) and/or Demobilization Unit Leader (DMOB)	
Description:	Training begins with a discussion on unit activation and management. Topics include RESL responsibilities related to resource status systems, planning process, and resource products/outputs and DMOB responsibilities for developing and implementing the demobilization plan	
Prerequisites:	Successful completion of the precourse work and test Basic knowledge of current automated resource status system, such as I-Suite Qualified as a Status/Check-in Recorder (SCKN)	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-355: Ground Support Unit Leader (2000)	FSTEP
Hours:	16	
Designed For:	Personnel desiring to be qualified as a Ground Support Unit Leader (GSUL)	
Description:	Managing the transportation plan, maintenance, and related services at an incident. Topics include gathering assignment information; organizing, staffing, and laying out the unit; field inspection of equipment; operation and coordination with other units, and demobilization.	
Prerequisites:	Qualified as an Equipment Manager (EQPM)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-356: Supply Unit Leader (2001)	FSTEP
Hours:	16	
Designed For:	Personnel desiring to be qualified as a Supply Unit Leader (SPUL)	
Description:	Training on the duties of a Supply Unit Leader and managing the incident supply unit.	
Prerequisites:	Qualified as an Ordering Manager (ORDM) Qualified as a Receiving/Distribution Manager (RCDM)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-358: Communications Unit Leader (2008)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as a Communications Unit Leader (COML)	
Description:	This course is designed to provide skills and knowledge needed to perform in the role of Communications Unit Leader. Topics include mobilization, establishing the communications unit, communications system design and ordering, communications system installation and maintenance, communications equipment assignment and accountability, incident communications center, internal and external coordination, demobilization, and current communications issues and technology.	
Prerequisites:	Qualified as an Incident Communications Technician (COMT) Qualified as an Incident Communications Center Manager (INCM)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-359: Medical Unit Leader (2000)	FSTEP
Hours:	20	
Designed For:	Personnel desiring to be qualified as a Medical Unit Leader (MEDL)	
Description:	This course is designed to provide the skills and knowledge needed to perform in the role of Medical Unit Leader. Topics include gathering information, organizing the medical unit, supervising the unit, evaluation, documentation, and demobilization.	
Prerequisites:	Prior or current certification as an Emergency Medical Technician or equivalent	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-360: Finance/Administration Unit Leader (2001)	FSTEP
Hours:	32	
Designed For:	Personnel desiring to be qualified as a Procurement (PROC), Cost (COST), Time (TIME), and/or Compensation/Claims (COMP) Unit Leader	
Description:	Designed to provide the prerequisite knowledge and skills necessary to perform the tasks of Finance/Administration Unit Leader.	
Prerequisites:	Qualified as Personnel Time Recorder (PTRC) for Time Unit Leader (TIME) Qualified as Equipment Time Recorder (EQTR) and meet agency procurement authority requirements for procurement unit leader (PROC) Qualified as Compensation-For-Injury Specialist (INJR) and Claims Specialist (CLMS) for Compensation/Claims Unit Leader (COMP) Have agency related cost estimation and analysis experience for Cost Unit Leader (COST)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-390: Introduction to Wildland Fire Behavior Calculations (2006)	FSTEP
Hours:	32	
Designed For:	Personnel desiring to become qualified as Division/Group Supervisor (DIVS), Prescribed Fire Burn Boss Type 2 (RXB2), Incident Commander Type 3 (ICT3), or in a position requiring this knowledge	
Description:	Designed to introduce fire behavior calculations by manual methods, using nomograms and the Fire Behavior Handbook Appendix B. the student gains an understanding of the determinants of fire behavior though studying inputs (weather, slope, fuels, and fuel moisture). The student also learns how to interpret fire behavior outputs, documentation processes, and fire behavior briefing components.	
Prerequisites:	S-290 and qualified as a Single Resource Boss	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-400: Incident Commander (2002)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as an Incident Commander Type 2 (ICT2)	
Description:	Topics include team administration, communication, information/intelligence processing, agency administrator and IC responsibilities, transfer of command, and demobilization. The course provides exercises to assist the student in acquiring the knowledge to learn these skills. An optional "lessons learned" unit allows the addition of geographic area specific information, but the course time frame must be increased accordingly.	
Prerequisites:	Qualified as an Incident Commander Type 3 (ICT3) Qualified as one of the General Staff Section Chiefs at the Type 2 level	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-403: Information Officer (2001)	FSTEP
Hours:	28-32	
Designed For:	Personnel desiring to be qualified as Public Information Officer Type 2 (PIO2)	
Description:	This course meets the training requirements for a Public Information Officer Type 2. Topics include information organization and assignment, developing a communications strategy, information operations, creating a safe environment, effective media relations, incident within an incident, community relations analysis, documentation, demobilization, and transitioning. Students must pass a final exam.	
Prerequisites:	S-190	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-404: Safety Officer (2002)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as a Safety Officer	
Description:	Designed to meet the training needs of the Safety Officer position in the incident command system. Topics include safety officer effectiveness, analysis techniques, safety messages, briefings and reports, and high hazard operations.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-420: Command and General Staff (2002)	FSTEP
Hours:	36	
Designed For:	Personnel desiring to be qualified as an Incident Commander Type 2 (ICT2) or Command Or General Staff positions	
Description:	Designed to prepare the student to function effectively in the position of a Type 2 Incident Commander, Command, or General Staff. The focus is on the application of previously acquired knowledge and skills. Students will participate in two types of groups (teams and similar position) during exercises that include a simulation of the mobilization, management, and demobilization phases of a rapidly accelerating Type 2 wildfire that has potential to become a Type 1 incident.	
Prerequisites:	None required Suggested completion of all prerequisite experience and course work to be qualified as an Incident Commander Type 2 (ICT2) or any Command/General Staff position	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-430: Operations Section Chief (2006)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as an Operations Section Chief Type 2 (OSC2)	
Description:	Designed to meet the training needs of the Operations Section Chief Type 2. This course is interactive in nature and contains several exercises designed to facilitate group and classroom discussion.	
Prerequisites:	Qualified as a Division/Group Supervisor (DIVS)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-440: Planning Section Chief (2001)	FSTEP
Hours:	20	
Designed For:	Personnel desiring to be qualified as a Planning Section Chief Type 2 (PSC2)	
Description:	Designed to meet a portion of the training needs of the Planning Section Chief Type 2. Topics include information gathering, strategies, meetings and briefings, incident action plans (IAP), interactions, forms, documents, supplies, demobilization, and an optional technology section. In the final exercise, the students observe a simulated planning meeting and use the information derived to find errors in an IAP. Students must pass the unit tests and the final exercise to successfully complete the course.	
Prerequisites:	Successful completion of the precourse work Qualified as a Situation Unit Leader (SITL) Qualified as a Resources Unit Leader (RESL)	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-445: Incident Training Specialist (2009)	FSTEP
Hours:	14-18	
Designed For:	Personnel desiring to be qualified as Training Specialist (TNSP) and should be based on technical competence in the ICS, availability to participate on incidents, and displayed interest in improving training	
Description:	Designated to train personnel to perform the duties of a Training Specialist. Duties include coordinating incident training opportunities and activities, ensuring the quality of training assignments, and completing documentation of the incident training.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-450: Logistics Section Chief (2002)	FSTEP
Hours:	16	
Designed For:	Personnel desiring to be qualified as a Logistics Section Chief Type 2 (LSC2)	
Description:	Designed to meet the national core needs of the Logistics Section Chief Type 2. Topics include arriving properly an incident, gathering information to access the assignment, beginning initial planning activities, determining that facilities, services, and materials are provided for the incident, planning, staffing, and managing the Logistics Section, coordinating with other sections, and implementing the demobilization plan.	
Prerequisites:	Qualified as a Facilities Unit Leader (FACL) Qualified as a Ground Support Unit Leader (GSUL) or Qualified as a Facilities Unit Leader (FACL) Qualified as a Supply Unit Leader (SUPL)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-460: Finance/Administration Section Chief (2001)	FSTEP
Hours:	24	
Designed For:	Personnel desiring to be qualified as a Finance/Administration Section Chief Type 2 (FSC2)	
Description:	Designed to meet a portion of the training needs in the finance section organization. Topics include predispatch and response, organization and operation of the finance function, and demobilization.	
Prerequisites:	Qualified as a Time Unit Leader (TIME) Qualified as a Procurement Unit Leader (PROC) or Cost Unit Leader (COST)	
Certification:	None	
Class Size:	40	
Restrictions:	None	
Course:	S-490: Advanced Wildland Fire Behavior Calculations (2008)	FSTEP
Hours:	40	
Designed For:	Personnel desiring to be qualified as a Fire Behavior Analyst (FBAN) or Long Term Fire Analyst (LTAN)	
Description:	This course is the fourth in a series designed to develop fire behavior and prediction knowledge and skills and prepares the student for S-590, Advanced Fire Behavior Interpretation. Examples and exercises are divided between wildfire and prescribed fire applications. The student learns to project fire perimeter growth based on weather predictions and knowledge of fuels and topography, using a variety of scenarios.	
Prerequisites:	S-390 and proficiency using nonautomated fire behavior processors and the latest computerized fire modeling system	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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Course:	S-491: Intermediate National Fire Danger Rating System (2003)	FSTEP
Hours:	32	
Designed For:	Dispatchers and others charged with editing and inputting weather information into WIMS used for NFDRS calculations, fire management staff who apply NFDRS outputs to decision making, and Fire Behavior Specialists who incorporate NFDRS products into assessments and projections	
Description:	The course develops the knowledge and skill to operate, maintain, and manage the NFDRS at the local unit. Course lecture and exercises support practical and technical application of the intellectually complex subject matter. The course requires a computer classroom with internet access to present.	
Prerequisites:	S-290 Successful completion of the prequalifying course work Intermediate skills with the current Windows™ operating system Possess a valid Weather Information Management System (WIMS) logon identification	
Certification:	None	
Class Size:	40	
Restrictions:	None	

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ICS-ALL RISK COURSES

Course: S-330: Task Force/Strike Team Leader All Risk (2002) FSTEP
Hours: 28
Designed For: Individuals qualifying within the ICS as a Task Force or Strike Team Leader
Description: This course contains generic curriculum regarding tactics and strategy as it relates to the management of a strike team or task force and meets the S-330 training requirements of the California Incident Command Certification System (CICCS) for the position of Strike Team/Task Force Leader-All Risk.
Prerequisites: I-300, S-290
Certification: N/A
Class Size: 40
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Fireline Handbook (NFES 0065)		Current	NWCG
▪ ICS 420-1 Field Operations Guide (Pocket)		Current	FIRESCOPE
▪ Student Manual		2002	FIRESCOPE or SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Fireline Handbook (NFES 0065)		Current	NWCG
▪ ICS 420-1 Field Operations Guide (Pocket)		Current	FIRESCOPE
▪ Instructor Guide		2002	FIRESCOPE or SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2002	SFT
▪ Student Manual		2002	FIRESCOPE or SFT
VENDORS			
FIRESCOPE	Firefighting Resources of California Organized for Potential Emergencies		www.firescope.org
NWCG	National Wildlife Coordinating Group (208-387-5119)		www.nwcg.gov
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

S-330 ALL RISK COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on Strike Team/Task Forces of various resources.
- Information on implementing Strike Team/Task Force Leader responsibilities prior to and during mobilization and demobilization.
- Information on implementing Strike Team/Task Force Leader responsibilities during incident activities.
- Information on identifying the hazards and risks throughout Strike Team/Task Forces deployment and describe how to mitigate them.
- Information on recognizing, planning for, and describing how to implement appropriate tactics in various all risk incident situations with various resources organized into strike teams or task forces.

Course Content: 32:00

Unit 1: Course Introduction

Course Introduction..... 1:30

Unit 2: Predeployment Responsibilities

Concept of Strike Team/Task Force Leader..... 1:00

Resource Typing Standards..... 1:30

ICS Resource Designation System..... 1:30

Pre-Dispatch Preparation 0:30

Unit 3: Incident Responsibilities

Administration..... 1:00

Supervision 1:15

Coordination With Other ICS Functional Areas..... 0:45

Strike Team/Task Force Response 2:00

Assignment/Status..... 2:00

Demobilization 0:45

Unit 4: Tactics and Safety

Risk Management..... 2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

S-330 ALL RISK COURSE OUTLINE

Entrapment Avoidance	2:30
Tactical Considerations – Wildland/Urban Interface	2:30
Tactical Considerations – Urban Search and Rescue	1:00
Tactical Considerations – Swiftwater/Flood	0:30
Tactical Considerations – Multi-casualty	0:30
Independent Action vs. Freelancing	0:30
Precourse Assignment Review	0:45
Written Quizzes	1:30
Local/Agency Specific Issues and Material	3:30
Final Written Exam	1:00
Final Scenario	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	S-339: Division/Group Supervisor All Risk (2000)	FSTEF
Hours:	24	
Designed For:	Individuals qualifying within the ICS as a Division/Group Supervisor	
Description:	This course teaches the student the management skills necessary to fill the position of Division/Group Supervisor within the framework of ICS. It does not teach tactics or strategy and refers to these only to enhance the particular management technique associated with them.	
Prerequisites:	I-300, S-330	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Aids to Determining Fuel Models for Estimating Fire Behavior (NFES 1574)			NWCG
▪ Fireline Handbook (NFES 0065)			NWCG
▪ Hazardous Materials Operational System Description (ICS-HM-120-1)			FIREScope
▪ ICS 420-1 Field Operations Guide (Pocket)			FIREScope
▪ ICS for Fire Department Structure Fire Operations			FIREScope
▪ Incident Response Pocket Guide (NFES 1077)			NWCG
▪ Student Manual	1999		FIREScope or SFT
▪ Urban Search and Rescue – Operational System Description (ICS-US&R-120-1)			FIREScope
REQUIRED INSTRUCTOR MATERIALS			
▪ Aids to Determining Fuel Models for Estimating Fire Behavior (NFES 1574)			NWCG
▪ Fireline Handbook (NFES 0065)			NWCG
▪ Hazardous Materials Operational System Description (ICS-HM-120-1)			FIREScope
▪ ICS 420-1 Field Operations Guide (Pocket)			FIREScope
▪ ICS for Fire Department Structure Fire Operations			FIREScope
▪ Incident Response Pocket Guide (NFES 1077)			NWCG
▪ Instructor Guide	1999		FIREScope or SFT
▪ Student Manual	1999		FIREScope or SFT
▪ Urban Search and Rescue – Operational System Description (ICS-US&R-120-1)			FIREScope
VENDORS			
FIREScope	Firefighting Resources of California Organized for Potential Emergencies	www.firescope.org	
NWCG	National Wildlife Coordinating Group (208-387-5119)	www.nwcg.gov	
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

S-339 ALL RISK COURSE OUTLINE

Course Objectives: To provide the student with...

- The concepts of a division and group as it relates to the position of Division/Group Supervisor.
- The opportunity to apply Division/Group fundamentals to ALL RISK incidents.
- The opportunity to prepare for and participate in planning meetings to develop and implement division/group objectives.
- The opportunity to participate in information gathering practices.
- The opportunity to participate in an operational period briefing and a division/group briefing.
- Information on managing and adjusting the operations organization.
- An understanding of why and when tactics may need to be adjusted.
- Information on the role of the Division/Group Supervisor in risk assessment and safety management.
- The opportunity to demonstrate how to successfully coordinate internal and external relations.

Course Content: 24:00

Unit 1: Course Introduction

Course Introduction 0:30

Concept of Division/Group 1:30

Pre-course Work Assignment 5:00

Unit 2: Planning

Information Gathering 2:00

Briefing 2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

S-339 ALL RISK COURSE OUTLINE

Unit 3: Supervision

 Personnel Management 1:00

 Risk Management..... 4:00

Unit 4: Coordination

 Internal/External Coordination 5:00

Written Testing 1:00

Scenario Testing 2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	S-430: Operations Section Chief All Risk (2000)	FSTEP
Hours:	32	
Designed For:	Individuals qualifying within the ICS as an Operations Section Chief	
Description:	This course presents the command, management, and supervision concepts necessary to function as an Operations Section Chief. Topics include command principles, organization of the operations section, briefings, developing the operations portion of the incident action plan, and supervising operations.	
Prerequisites:	I-400, S-330, S-339	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ ICS 420-1 Field Operations Guide (Pocket)			FIREScope
▪ Student Manual		1999	FIREScope or SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ ICS 420-1 Field Operations Guide (Pocket)			FIREScope
▪ Instructor Guide		1999	FIREScope or SFT
▪ Student Manual		1999	FIREScope or SFT
VENDORS			
FIREScope	Firefighting Resources of California Organized for Potential Emergencies		www.firescope.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

S-430 ALL RISK COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on assessing incident assignments and determining immediate needs and actions.
- Information to prepare for strategy meetings and planning meetings to develop the Incident Action Plan.
- Information to assist in the development, approval, and implementation of the Demobilization Plan.
- The opportunity to participate in an Operational Period Briefing.
- Information to manage and adjust the operations organization.
- An understanding of why and when tactics may need to be adjusted.
- Information on the role of the OSC in risk assessment and safety management.
- The opportunity to demonstrate how to successfully coordinate internal and external relations.

Course Content:.....	32:00
Unit 1: Course Introduction	
Course Introduction.....	1:00
Operations Section Chief Role & Responsibilities	2:00
Unit 2: Planning	
Management Cycle	2:00
Information Gathering	1:00
Strategy and Planning.....	2:00
Structure Protection Planning	2:00
Demobilization Planning.....	0:30
Unit 3: Supervision	
Supervision and Communication.....	2:00
Managing and Adjusting the Operations	2:00
Risk Assessment and Safety Management.....	1:00
Unit 4: Coordination	
Personnel Interaction.....	7:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

INSTRUCTOR COURSES

Course:	Ethical Leadership in the Classroom (2007)	FSTEP
Hours:	8	
Designed For:	State Fire Training Instructors	
Description:	This one-day course is designed to provide you with concepts and theories of the ethical decision-making process, help you recognize the signs of an ethical dilemma, identify advantages and disadvantages of ethical behavior, and an opportunity to review examples of classroom situations in which instructors used their leadership role to either encourage or discourage ethical behavior. Participants in this class will examine ethics, values, principles, and morality. State Fire Training's Instructor Code of Ethics/Conduct will also be presented.	
Prerequisites:	None	
Certification:	None	
Class Size:	30	
Restrictions:	This course may require a State Fire Training representative in addition to the Primary Instructor.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Code of Ethics/Conduct (double-sided) (2 per student)		2006	SFT
▪ Ethics Awareness Inventory		Fifth	TWI
▪ Value Cards		2007	Instructor
REQUIRED INSTRUCTOR MATERIALS			
▪ Facilitator's Guide (includes value cards for printing)		2007	SFT
▪ PowerPoint Slides		2007	SFT
▪ The Emperor's Club DVD		2002	Various
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	
TWI	The Williams Institute, (480-517-1891)	www.ethics-TWI.org	

ETHICAL LEADERSHIP IN THE CLASSROOM COURSE OUTLINE

Course Objectives: To provide the student with...

- A fundamental awareness of ethical values within fire service instructors by exploring examples of ethical behavior in the classroom environment.
- The basic concepts, terms, and theories of ethical decision-making processes.
- An instructor code of ethics.
- Concepts in ethical leadership.
- Ethics awareness and a method for assessing personal values.
- A process for analyzing the role of the fire service instructor in maintaining the value system through video case studies and classroom ethical situations.

Course Content.....	8:00
Introduction and Overview	0:30
Instructor Code of Ethics/Conduct.....	1:00
Ethics Awareness Inventory	1:30
Ethics, Principles, and Values	2:00
Assessing Personal Core Values	1:00
Recognizing Ethical Dilemmas	1:00
Ethical Choices.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Instructor 2A: Techniques of Evaluation (1991)	CFSTES
Hours:	40	
Designed For:	Instructors and supervisors who are responsible for evaluating performance	
Description:	This course provides the instructor/supervisor with the techniques of evaluation. Course includes: Construction of written and performance tests, as well as test planning, test analysis, test security, and evaluation of test results to determine instructor and student effectiveness. Essential course for writing valid, objective tests.	
Prerequisites:	Fire Instructor 1A, Fire Instructor 1B <i>or</i> Training Instructor 1A, Training Instructor 1B, Training Instructor 1C	
Certification:	Fire Instructor II	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Supplement		1994	SFT
▪ Fire Service Instructor		Fifth	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1991	SFT
▪ Instructor Guide		1994	SFT
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INSTRUCTOR 2A COURSE OUTLINE

Course Objectives: To provide the student with...

- The methods and techniques for constructing and using tests.
- Information to recognize and avoid poor questions and tests.
- The opportunity to apply the principles of test construction through practice test construction exercises.
- Information to plan tests and to perform test and item analysis.
- A variety of methods for managing the evaluation process.

Course Content.....	40:00
Introduction	0:30
Purposes of Testing	0:30
Principles of Testing	0:45
Uses of Oral Tests	0:30
Test Planning.....	1:00
True/False Test Construction.....	0:30
Multiple Choice Test Construction.....	1:00
Uses of Subjective Tests	0:30
Theory of Manipulative Performance Testing.....	0:45
Constructing and Administering Manipulative Performance Tests	0:45
Test and Item Analysis.....	0:45
Matching Test Construction	0:30
Short Answer Test Construction	0:30
Completion Test Construction	0:30
Periodic Personnel Evaluations	0:45
Managing the Evaluation Process.....	0:45
Administering Tests to Meet Minimum Standards	0:30
Using Assessment Centers as a Training Rescue.....	0:30
Group Assignments	23:30
Quizzes and Review	4:30
Course Review and Certification Exam	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Fire Instructor 2B: Group Dynamics and Problem Solving (1990) CFSTES
Hours: 40
Designed For: Instructors, Training Officers, and management personnel who must lead discussions or staff meetings
Description: This course is designed to develop leadership skills. Group dynamics, problem-solving techniques, and interpersonal relations are utilized in staff meetings, brainstorming sessions, and conference meetings. Skills are developed for conducting formal public meetings, panel discussions, and forums.
Prerequisites: Fire Instructor 1A, Fire Instructor 1B
or
 Training Instructor 1A, Training Instructor 1B, Training Instructor 1C
Certification: Fire Instructor II
 Plans Examiner
Class Size: 30
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		Second	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1990	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INSTRUCTOR 2B COURSE OUTLINE

Course Content.....	40:00
Concepts of Group Dynamics	
Nonverbal Codes	
Evaluating Interpersonal Relations	
Rating Errors	
Discussion Groups	
Group Interaction	
Conference Leading	
Conference Chart Work	
Suggestions For Discussion Leaders	
Decision Making	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Instructor 2C: Employing Audiovisual Aids (1989)	CFSTES
Hours:	40	
Designed For:	Personnel involved in the design and delivery of instructional programs	
Description:	This course covers the principles and selection of media in the instructional process, employment of basic and advanced forms of instructional media, use of computers in the instructional process, and individualized instruction programs. Teaching demonstrations are required of all participants.	
Prerequisites:	Fire Instructor 1A, Fire Instructor 1B <i>or</i> Training Instructor 1A, Training Instructor 1B, Training Instructor 1C	
Certification:	Fire Instructor II	
Class Size:	30	
Restrictions:	A course outline must be submitted and approved by State Fire Training.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1989	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov
FIRE INSTRUCTOR 2C COURSE OUTLINE			
▪ None (see "Restrictions" above)			



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Instructor 3: Master Instructor Competency Evaluation (2010)	CFSTES
Hours:	36	
Designed For:	Future instructors for Training Instructor 1A, 1B, and 1C courses	
Description:	This course provides information necessary to deliver the Training Instructor 1A, 1B, and 1C courses and gives additional instruction in classroom communications. Successful completion of the class requires each student to adapt a current Training Instruction cognitive lesson plan and deliver a 30-minute teaching demonstrations. This course is mandatory for a person who desires to teach Training Instructor 1A, 1B, or 1C.	
Prerequisites:	One of the following four Level 1 options (valid through 6/30/2011) 1) Fire Instructor 1A and Fire Instructor 1B 2) Fire Instructor 1A, Training Instructor 1A, and Training Instructor 1C 3) Fire Instructor 1B, Training Instructor 1B, and Training Instructor 1C 4) Training Instructor 1A, Training Instructor 1B, and Training Instructor 1C and Fire Instructor 2A, 2B, 2C	
Certification:	Fire Instructor III	
Class Size:	Maximum: 25 Classes larger than 16 students require either another Senior Master Instructor or Senior Master Instructor Trainee to assist with evaluating the student instructor teaching demonstrations	
Restrictions:	The Primary Instructor for this course must be a registered Senior Master Instructor.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Fire Instructor 3 Student Supplement		2011	SFT
▪ Training Instructor 1A Instructor Guide and Student Supplement*		2010	SFT
▪ Training Instructor 1B Instructor Guide and Student Supplement *		2010	SFT
▪ Training Instructor 1C Instructor Guide and Student Supplement*		2010	SFT
*Purchased separately by the student, not included in the course registration fee			
REQUIRED INSTRUCTOR MATERIALS			
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Fire Instructor 3 Instructor Guide		2011	SFT
▪ Fire Instructor 3 PowerPoint Slides on CD-ROM		2011	SFT
▪ Fire Instructor 3 Student Supplement		2010	SFT
▪ Training Instructor 1A Instructor Guide and Student Supplement*		2010	SFT
▪ Training Instructor 1B Instructor Guide and Student Supplement *		2010	SFT
▪ Training Instructor 1C Instructor Guide and Student Supplement*		2010	SFT
▪ Video Recording Equipment for Teaching Demonstrations (Optional)			
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INSTRUCTOR 3 COURSE OUTLINE

Course Objectives: To provide the student with...

- Information to select, develop, organize, and utilize teaching methods and concepts that may be utilized in an interior or exterior learning environment
- Instructional techniques, tools, and materials while utilizing the Training Instructor curricula
- Techniques to develop and deliver an illustrated teaching presentation selecting from a variety of methods and techniques
- Constructive and positive feedback from peers to improve their personal teaching skills

Course Content	36:00
Introduction and Course Overview	1:00
Master Instructor Registration.....	2:00
Mastering Lesson Plan Development.....	2:00
Mastering Teaching Demonstrations	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE INSTRUCTOR 3 COURSE OUTLINE

Evaluation Process For Teaching Demonstrations	1:00
Testing and Evaluation	1:00
Mastering the Current Training Instructor Curricula	6:00
Training Instructor Tips and Techniques	2:00
Student Teaching Demonstrations Including Critique and Feedback	19:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Instructional Techniques for Company Officers FSTEP
Hours: 16
Designed For: Company Officers and fire fighters responsible for in-service instruction and training
Description: This NFA hand-off course covers basic instructional concepts and techniques, effective communication, teaching from lesson plans, and methods of instruction with an emphasis on skills training and adult learning.
Prerequisites: None
Certification: None
Class Size: 25
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			NTIS
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			NTIS
VENDORS			
NTIS	National Technical Information Service (800-553-6847)		www.ntis.gov

INSTRUCTIONAL TECHNIQUES FOR COMPANY OFFICERS COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Regional Instructor Orientation CFSTES
Hours: 7
Designed For: Personnel interested in teaching any State Fire Training courses
Description: This course is designed to provide instructors who will deliver SFT training programs with an overview of State Fire Training, CFSTES and FSTEP, instructor registration requirements, instructor responsibilities and accountability, how to schedule and return courses, and the SFT Procedures Manual.
Prerequisites: None
Certification: None
Class Size: 30
Restrictions: This course is scheduled and taught by State Fire Training staff only.

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ Student Supplement	Current	N/A
▪ SFT Procedures Manual	Current	Online
REQUIRED INSTRUCTOR MATERIALS		
▪ Instructor Guide	Current	N/A

REGIONAL INSTRUCTOR ORIENTATION COURSE OUTLINE

Course Objectives: To provide the student with...

- A working knowledge of the State Fire Training procedures for instructor registration, responsibilities, accountability, and maintenance.
- A working knowledge of the State Fire Training procedures for course administration.
- Tools to navigate the State Fire Training system successfully.

Course Content:.....	7:00
Administration and SFT Overview	2:00
Instructor Qualifications and Registration	1:30
Instructor Responsibilities and Accountability	0:30
State Fire Training Procedures Manual	2:30
Instructor Application Review Assistance	0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Training Instructor 1A: Cognitive Lesson Delivery (2010)	CFSTES
Hours:	40	
Designed For:	Personnel preparing for a Company Officer, SFT Registered Instructor, or Training Officer position	
Description:	This is the first of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all.	
Prerequisites:	None	
Certification:	Fire Officer Training Instructor	
Class Size:	Maximum: 25 Classes larger than 16 students require either another Master Instructor or a qualified skills evaluator to assist with evaluating the student instructor teaching demonstrations	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Training Instructor 1A Student Supplement		2010	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Instructor-developed Summative Test		Current	Instructor
▪ PowerPoint Slides on CD-ROM (Optional)		2010	SFT
▪ Training Instructor 1A Guide		2010	SFT
▪ Training Instructor 1A Student Supplement		2010	SFT

VENDORS		
CFCA	California Fire Chief's Association Bookstore (800-733-2314)	www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)	www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

TRAINING INSTRUCTOR 1A: COGNITIVE LESSON DELIVERY

Course Objectives: To provide the student with...

- A variety of methods and techniques for training in accordance with the latest concepts in career education.
- Information to select, adapt, organize, and utilize instructional materials appropriate for teaching cognitive lessons.
- Criteria and methods to evaluate teaching and learning efficiency.
- An opportunity to apply major principles of learning through teaching demonstrations.

Course Content: 40:00

Unit 1: Introduction

Orientation and Administration 1:00

Unit 2: Instructional Methodology, Adaptation, and Delivery

Fire and Emergency Services Instruction As It Relates To Cognitive Training 1:00

Principles of Learning 1:30

Defining Levels of Instruction 0:30

Components of Learning Objectives 0:30

Employing the Four-step Method of Instruction As It Relates To Cognitive Training 1:00

Assembling and Reviewing Instructional Materials As They Relate To Cognitive Training 1:00

Adapting Cognitive Lesson Materials 1:30

Legal and Ethical Considerations As They Relate To Cognitive Training 1:30

Methods of Instructional Delivery 1:00

Presentation Techniques For Cognitive Training 2:00

Managing the Learning Environment for Cognitive Training 1:00

Selecting and Using Audiovisual Training Aids 1:30

Effective Interpersonal Communications 1:00

Student Attitudes and Behaviors 1:00

Procedure Used For Evaluating Student Instructor Teaching Demonstrations 1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

TRAINING INSTRUCTOR 1A: COGNITIVE LESSON DELIVERY

Unit 3: Testing

Introduction To and Administration of Oral and Written Tests	1:00
Student Progress and Testing Feedback.....	0:30
Student Instructor Teaching Demonstrations	16:30
Formative Tests.....	3:00
Instructor-developed Summative Test.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Training Instructor 1B: Psychomotor Lesson Delivery (2010)	CFSTES
Hours:	40	
Designed For:	Personnel preparing for a Company Officer, SFT Registered Instructor, or Training Officer position	
Description:	This is the second of a three-course series. Topics include methods/techniques for training with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all.	
Prerequisites:	Training Instructor 1A	
Certification:	Fire Officer Training Instructor	
Class Size:	Maximum: 25 Classes larger than 16 students require either another Master Instructor or a qualified skills evaluator to assist with evaluating the student instructor teaching demonstrations	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Training Instructor 1B Student Supplement		2010	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Instructor-developed Summative Test		Current	Instructor
▪ PowerPoint Slides on CD-ROM (Optional)		2010	SFT
▪ Training Instructor 1B Instructor Guide		2010	SFT
▪ Training Instructor 1B Student Supplement		2010	SFT

VENDORS		
CFCA	California Fire Chief's Association Bookstore (800-733-2314)	www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)	www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

TRAINING INSTRUCTOR 1B: PSYCHOMOTOR LESSON DELIVERY

Course Objectives: To provide the student with...

- A variety of methods and techniques for training in accordance with the latest concepts in career education.
- Information to select, adapt, and use instructional materials appropriate for teaching psychomotor lessons.
- Criteria and methods to evaluate teaching and learning efficiency.
- An opportunity to apply major principles of learning through teaching demonstrations.

Course Content: 40:00

Unit 1: Introduction

Orientation and Administration 1:00

Unit 2: Instructional Methodology, Adaptation, and Delivery

Fire and Emergency Services Instruction As It Relates To Psychomotor Training..... 1:00

Employing the Four-step Method of Instruction As It Relates To Psychomotor Training 1:00

Presenting Psychomotor Instruction 1:00

Safety Considerations For Psychomotor Instruction 1:00

Managing the Learning Environment For Psychomotor Training..... 1:00

Key Components of A Psychomotor Lesson 0:30

Adapting Psychomotor Lesson Materials 1:30

Selecting and Using Training Aids 1:00

Procedure Used For Evaluating Student Instructor Teaching Demonstrations..... 1:00

Legal and Ethical Considerations As They Relate To Psychomotor Training..... 1:30

Unit 3: Testing

Introduction To and Administration of Performance Tests 1:30

Student Progress and Testing Feedback..... 1:00

Reviewing and Assembling Instructional Materials 2:00

Student Instructor Teaching Demonstrations 20:00

Formative Tests..... 3:00

Instructor-developed Summative Test 1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Training Instructor 1C: Instructional Development Techniques (2010)	CFSTES
Hours:	40	
Designed For:	Personnel preparing for SFT Registered Instructor or Training Officer position	
Description:	This is the third of a three-course series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. The course offers the opportunity to develop, receive feedback, and finalize instructional materials and deliver a teaching demonstration. Two (2) student instructor teaching demonstrations are required of all.	
Prerequisites:	Training Instructor 1A, Training Instructor 1B	
Certification:	Training Instructor	
Class Size:	Maximum: 25 Classes larger than 16 students require either another Master Instructor or a qualified skills evaluator to assist with evaluating the student instructor teaching demonstrations	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Training Instructor 1C Student Supplement		2010	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Fire and Emergency Services Instructor		Seventh	CFCA/FPP
▪ Instructor-developed Summative Test		Current	Instructor
▪ PowerPoint Slides on CD-ROM (Optional)		2010	SFT
▪ Training Instructor 1C Instructor Guide		2010	SFT
▪ Training Instructor 1C Student Supplement		2010	SFT
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

TRAINING INSTRUCTOR 1C: INSTRUCTIONAL DEVELOPMENT TECHNIQUES

Course Objectives: To provide the student with...

- A variety of methods and techniques for developing lesson plans and tests in accordance with the latest concepts in career education.
- Information to develop cognitive and psychomotor lesson plans and related supplemental materials.
- Various testing instruments to evaluate teaching and learning efficiency.
- An opportunity to develop, receive feedback, and finalize instructional materials and deliver a teaching demonstration.

Course Content: 40:00

Unit 1: Introduction

Orientation and Administration 1:00

Unit 2: Methodology

Reasons For Lesson Plan Development..... 0:30

Sources of References and Materials 0:30

Determining Levels of Instruction 0:30

Employing the Four-step Method of Instruction 0:30

Teaching English Learners and Students With Special Needs 0:30

Unit 3: Instructional Preparation and Delivery

Elements of A Course Outline..... 0:30

Components of Cognitive and Psychomotor Lesson Plans..... 1:00

Developing Student Behavioral Objectives..... 1:00

Developing A Cognitive Lesson Plan (SFT Format) 2:00

Developing A Psychomotor Lesson Plan (SFT Format)..... 1:30

Developing and Employing Ancillary Components..... 1:00

Selecting and Employing Audiovisual Training Aids..... 1:30

Transition Techniques Within and Between Audiovisual Training Aid Devices 1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

TRAINING INSTRUCTOR 1C: INSTRUCTIONAL DEVELOPMENT TECHNIQUES

Cleaning and Field Level Maintenance For Audiovisual Training Aid Devices.....	0:30
Developing Audiovisual Training Aids.....	1:30
Procedures For Evaluating Student Instructor Teaching Demonstrations	0:30
Unit 4: Testing	
Purpose, Selection Criteria, and Elements of Test Instruments	1:00
Creating Oral, Written, and Performance Tests	2:00
Methods of Administering and Grading Test Instruments (Oral and Written)	1:00
Student Instructor Teaching Demonstrations	17:30
Formative Tests.....	2:00
Instructor-developed Summative Test.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

INVESTIGATION COURSES

Course: Explosives Recognition and Reconnaissance FSTEP
Hours: 40
Designed For: Fire investigators and law enforcement personnel
Description: Designed to instruct on the identification, description, and evaluation of explosives and fireworks, and to cover applicable laws and regulations. Stresses legal preplanning for EOD incidents, bomb threat incident response blast mitigation, scene safety and security, evacuation protocols and scene search techniques. Does not involve handling of any explosives.
Prerequisites: Employment with a public safety agency or response to EOD incidents
Certification: None
Class Size: 40
Restrictions: This course is scheduled and taught by SFM Arson and Bomb Investigators only.

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ None		
REQUIRED INSTRUCTOR MATERIALS		
▪ None		

EXPLOSIVES RECOGNITION AND RECONNAISSANCE COURSE OUTLINE
▪ None



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Fire/Arson Detection FSTEP
Hours: 16
Designed For: Fire fighters and fire investigators involved in fire investigation
Description: This NFA hand-off course covers determining the point of origin and probable cause, recognizing indications of possible arson, preserving the fire scene and evidence for investigative purposes, and basic procedures relative to conducting a fire investigation.
Prerequisites: None
Certification: None
Class Size: 40
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			NTIS
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			NTIS
VENDORS			
NTIS	National Technical Information Service (800-553-6847)		www.ntis.gov

FIRE/ARSON DETECTION COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Investigation 1A: Fire Origin and Cause Determination (1996)	CFSTES
Hours:	40	
Designed For:	Fire fighters, fire investigators, and law enforcement officers assigned to fire investigation	
Description:	This course provides the participants with an introduction and basic overview of fire scene investigation. The focus of the course is to provide information on fire scene indicators and to determine the fire's origin.	
Prerequisites:	None	
Certification:	Fire Officer Fire Investigator I	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1996	SFT
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪ Certification Exam		1996	SFT
▪ Instructor Guide		1996	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INVESTIGATION 1A COURSE OUTLINE

Course Objectives: To provide the student with...

- To provide students with an overview of fire investigative practices and responsibilities associated with fire origin and cause.
- To provide students with technical information enabling them to determine the area of fire origin.
- To provide students with background information that will lead them to develop an opinion of the fire causes.
- To provide students with technical information on the State's arson laws and legal aspects of fire scene investigation.

Course Content.....	40:00
Orientation and Administration	1:00
Introduction to Fire Investigation	1:00
Fire Behavior.....	4:00
Legal Aspects of Fire Investigation	3:00
Arson Law	1:00
Fire Scene Documentation	1:00
Point of Origin Determination	4:00
Accidental Ignition Sources	3:00
Electrical Ignition Sources.....	2:30
Arson Fire Indicators	4:00
Incendiary Devices.....	1:00
Structure Fire Investigation	4:30
Vehicle Fire Investigation	2:00
Wildland Fire Investigation.....	4:00
Explosions.....	2:00
Course Review and Certification Exam	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Investigation 1B: Techniques of Fire Investigation (2000)	CFSTES
Hours:	40	
Designed For:	Fire fighters and fire investigation personnel	
Description:	This course provides a deeper understanding of fire investigation and builds on Fire Investigation 1A. Topics include the juvenile fire setter, report writing, evidence preservation and collection, interview techniques, motives, and fire fatalities.	
Prerequisites:	Fire Investigation 1A	
Certification:	Fire Investigator I	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		2000	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		2000	SFT
▪ Instructor Guide		2000	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2000	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INVESTIGATION 1B COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on scene safety for the investigator including post blast investigation.
- Information on evidence recognition, documentation, and preservation including scene photography and trace evidence.
- Information on witness and suspect interviewing and interrogation, including juvenile law.
- Information on fire fatalities and injuries including scene investigation and mechanism of injury
- Information documentation of findings including case reports, insurance information, and other resources available to the investigator.

Course Content.....	40:00
Introduction to Investigation 1B.....	2:00
Motives	4:00
Scene Safety for the Investigator	1:00
Post Blast Investigation	1:00
Scene Photography.....	2:00
Evidence Recognition, Documentation, and Preservation	4:00
Trace Evidence	5:00
Introduction to Interviewing	2:00
Techniques of Interviewing	7:00
Introduction to Juvenile Law.....	1:00
Scene Investigation.....	2:00
Mechanism of Injury	2:00
Introduction to Case Reports	1:00
Insurance Information for the Fire Investigator	2:00
Resources.....	1:00
Building Construction Drawings and Terminology.....	2:00
Course Review and Certification Exam	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Investigation 2A: Criminal and Legal Procedures (2003)	CFSTES
Hours:	40	
Designed For:	Fire investigation personnel	
Description:	This course provides information on conducting an explosive investigation and a surveillance operation, preparing a search warrant, testifying as an expert witness, assembling a curriculum vitae, and properly documenting a criminally caused fire. In addition, each student will be assigned to an investigative team to conduct an investigation of their own criminally caused fire. During this practical exercise, each team will be required to conduct the scene investigation, properly collect and document supportive evidence, prepare their written case report, and present their finding to a district attorney and a judge to review.	
Prerequisites:	Fire Investigation 1A, Fire Investigation 1B	
Certification:	Fire Investigator II	
Class Size:	30 (24 optimum)	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Supplement		1989	SFT
▪ Search Warrants		2003	CDAA
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1990	SFT
▪ Instructor Guide		1989	SFT
VENDORS			
CDAA	California District Attorney's Association		www.cdaa.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INVESTIGATION 2A COURSE OUTLINE

Course Objectives: To provide the student with...

- Information to differentiate between the three effects of an explosion.
- Information and techniques to establish an arson corpus after examining a practical fire scene.
- A fire scene to examine and determine the appropriate evidence to support a fire cause.
- Information to appraise an explosion scene to determine if a criminal act has occurred.
- Techniques to organize their case investigation utilizing proper case reports, court exhibits, and testimony.
- The four different methods of heat transfer in order to compare their effects during a practical situation.
- Information to differentiate between the U.S. Supreme Court's findings and California State Supreme Court requirements in preparing a search warrant and apply the rules appropriately to a practical situation.
- Applicable California Arson Law section (s) pertaining to a practical situation.
- Information to recognize the elements necessary for the ignition and the sustained combustion of fuel and heat in a practical situation.
- Common scene indicators of arson and their applicability to a practical situation.
- The methodology and procedures required for a proper surveillance operation.

Course Content.....	40:00
Orientation and Administration	1:00
Explosion Investigation	3:00
Surveillance Investigations.....	3:00
Resume Reviews	1:00
Fourth Amendment Review Inspection and Search Warrants	4:00
Search Warrants	4:00
Live Fire Demonstration and Structure Burn Examination	4:00
Fire Scene Investigations	4:00
Report Writing and Documentation on Fire Scene Investigations	4:00
Court Room Demeanor	2:00
Case Preparation	6:00
Moot Court	2:00
Course Review and Certification Exam	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Investigation 2B: Field Case Studies	CFSTES
Hours:	40	
Designed For:	Fire and law enforcement officers responsible for fire investigation and courtroom appearances	
Description:	This course provides advanced instruction in fire scene investigation, case preparation, and courtroom presentation. Topics include review of fire scene photography, sketching, evidence collection, interviewing and interrogation, and extensive use of simulations for developing and presenting an arson case.	
Prerequisites:	Fire Investigation 1A, Fire Investigation 1B, Fire Investigation 2A	
Certification:	Fire Investigator II	
Class Size:	30 (24 optimum)	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		Second	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		Second	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE INVESTIGATION 2B COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

MANAGEMENT COURSES

Course:	Fire Management 1: Management/Supervision for Company Officers (2000)	CFSTES
Hours:	40	
Designed For:	Company Officers or fire fighters preparing for the position of Company Officer	
Description:	This course prepares or enhances the first line supervisor's ability to supervise subordinates. It introduces key management concepts and practices utilized and includes discussions about decision making, time management, leadership styles, personnel evaluations, and counseling guidelines.	
Prerequisites:	None	
Certification:	Fire Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Fire and Emergency Services Company Officer		Fourth	FPP
▪ Student Supplement		2000	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		2010	SFT
▪ Fire and Emergency Services Company Officer		Fourth	FPP
▪ Instructor Guide		2000	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2000	SFT
▪ Student Supplement		2000	SFT
VENDORS			
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE MANAGEMENT 1 COURSE OUTLINE

Course Objectives: To provide the student with...

- Information for the transition from fire fighter to fire officer by presenting the skills and responsibilities required of first level supervisors.
- A summary of how internal and external influences affect the fire officer and how to effectively deal with these influences.
- An overview of supervision, management, and leadership concepts, practices, and theories.
- A summary of the advantages, disadvantages, and effects of various recognized styles of leadership and leadership profiles.
- A summary of common emotional and behavioral characteristics of an individual or working group as it applies to the responsibility of subordinates and supervisors.
- An overview of basic supervisory, managerial, and leadership skills required in decision making, delegating, personnel motivation, communicating, time management, resource management, record keeping, team building, disciplinary functions, and dealing with change and stress.
- Examples of the following techniques used by supervisors in managing personnel: conducting interviews, counseling, controlling work activities, goal setting, evaluating, promoting affirmative action, and managing the work place environment.
- A summary of the effects, interpretation, implementation, and development of policies and procedures and the necessity for accuracy, clarity, and impartiality.

Course Content.....	40:00
Unit 1 - Introduction	
Orientation and Administration	1:00
Introduction to Management and Supervision.....	1:30
Unit 2 - Supervision	
Principles of Organizations and Organizational Structure	1:00
Motivation	2:00
Delegation	1:00
Problem Solving/Decision Making.....	1:30
Verbal Communication	2:00
Written Communication	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE MANAGEMENT 1 COURSE OUTLINE

Group Dynamics	2:00
Managing Conflict	1:00
Performance Evaluations	1:30
Coaching, Counseling, and Progressive Discipline.....	1:30
Due Process	1:00
Grievance Handling	1:00
Unit 3 – Management	
Internal and External Influences	2:00
Elements of Management	2:00
Managing Change	1:00
Time Management	1:30
Unit 4 – Leadership	
Basic Views of Leadership	1:00
Situational Leadership	1:00
Leadership Qualities and Traits.....	1:00
Unit 5 – Human Relations	
Managing the Workplace Environment.....	2:00
Affirmative Action, Equal Employment Opportunity, and ADA	1:30
Unit 6 – Safety and Wellness Programs	
Safety Management	1:30
Stress Management and Wellness	1:00
NFPA 1500 Standard.....	1:00
Unit 7 – Laws, Standards, and Liability	
Liability of the Company Officer.....	1:00
Quizzes	2:00
Course Review and Certification Exam.....	1:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Management 2A: Organizational Development and Human Relations (2009)	CFSTES
Hours:	40	
Designed For:	Chief Officers, Company Officers, Staff Officers, Training Officers and other Fire Service Managers	
Description:	This course provides information on the foundations of 1) individual behavior, personality and emotions, motivational concepts, individual decision making; 2) group behavior, work teams, group dynamics, group communication, conflict and negotiations, power and politics, leadership and creating trust; and 3) organizational structure, human resources policies and practices, organizational culture, and organizational change and development.	
Prerequisites:	Fire Management 1	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
▪ Chief Fire Officer's Desk Reference (Optional)	2006	JB
▪ Organizational Behavior, Stephen P. Robbins and Tim A. Judge	13 th	PH
▪ The Fire Chief's Handbook	Sixth	PW

REQUIRED INSTRUCTOR MATERIALS	EDITION	VENDORS
▪ Chief Fire Officer's Desk Reference (Optional)	2006	JB
▪ Instructor-developed Summative Test	Current	Instructor
▪ Myers-Briggs Forms or Kiersey Sort Forms	---	CPP
▪ Organizational Behavior, Stephen Robbins	12 th	PH
▪ The Fire Chief's Handbook	Sixth	PW
▪ The Fire Chief's Handbook Study Guide (Optional)	Sixth	PW

VENDORS		
CPP	Consulting Psychologist Press (800-624-1765)	www.cpp.com/company/contact.asp
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com
PH	Pearson/Prentice Hall	vig.prenhall.com
PW	PennWell Books/Fire Engineering (800-752-9764)	www.pennwellbooks.com/fire.html

FIRE MANAGEMENT 2A COURSE OUTLINE

Course Objectives: To provide the student with...

- Techniques to make the transition from supervisor to manager.
- Information regarding the impact of internal and external influences on the organization and the impact of culture.
- Information on personality traits inherent in individuals and their effect on the organization.
- Information on group dynamics and its impact on the organization.
- Information conflict resolution and negotiations.
- Methods and styles of leadership and techniques for creating trust within the organization.
- Information on the nature of power and politics within the organization.

Course Content 40:00

Unit 1: Introduction

What Is Organizational Behavior?

Unit 2: the Individual

Foundations of Individual Behavior

Values, Attitudes, and Job Satisfaction

Personality and Emotion

Perception and Individual Decision Making

Basic Motivation Concepts

Motivation: From Concepts to Applications

Unit 3: the Group

Foundations of Group Behavior

Understanding Work Teams

Communication

Basic Approaches to Leadership

Contemporary Issues in Leadership



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE MANAGEMENT 2A COURSE OUTLINE

Power and Politics

Conflict and Negotiation

Unit 4: the Organization System

Foundations of Organization Structure.

Organizational Culture.

Human Resource Policies and Practices.

Unit 5: Organizational Dynamics

Organizational Change and Stress Management.

Unit 6: Contemporary Issues Regarding Organizational Development and Human Relations

Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Management 2B: Fire Service Financial Management (2009)	CFSTES
Hours:	40	
Designed For:	Chief Officers, Company Officers, Staff Officers, and other Fire Service Managers	
Description:	This course is designed to provide insight into the cyclical nature of budgeting and financial management. As a management course, the student will become familiar with essential elements of the financial planning, budget preparation, budget justification, and budget controls.	
Prerequisites:	Fire Management 1	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Management Policies in Local Government Finance		Fifth	ICMA
▪ Managing Fire and Rescue Services (Optional)		2002	ICMA
▪ The Fire Chief's Handbook		Sixth	PW
REQUIRED INSTRUCTOR MATERIALS			
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Instructor-developed Summative Test		Current	Instructor
▪ Management Policies in Local Government Finance		Fifth	ICMA
▪ Managing Fire and Rescue Services (Optional)		2002	ICMA
▪ The Fire Chief's Handbook		Sixth	PW
▪ The Fire Chief's Handbook Study Guide (Optional)		Sixth	PW
VENDORS			
ICMA	International City/County Management Association (202-289-4262)	www.icma.org/press/	
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com	
PW	PennWell Books/Fire Engineering (800-752-9764)	www.pennwellbooks.com/fire.html	

FIRE MANAGEMENT 2B COURSE OUTLINE

Course Objectives: To provide the student with...

- Techniques to make the transition from supervisor to manager.
- Information on developing new revenue sources.
- Information on designing a budget process that includes performance reporting.
- Information on conducting strategic economic development.
- Information on debt management and bond sales.
- Techniques for using modern information systems to improve financial decisions.
- Methods for meeting the day-to-day challenges of financial management, from procurement to labor negotiations.

Course Content40:00

Unit 1: the Local Government Setting

- The Finance Function in Local Government
- Fiscal Structure in the Federal System
- Public School Finance
- Local Government Expenditures and Revenues

Unit 2: Management Tools

- Forecasting Local Revenues and Expenditures
- Cost-benefit Analysis and the Capital Budget
- Budgeting
- Financial Accounting, Reporting, and Auditing
- Enterprise Resource Planning Systems

Unit 3: Revenue Sources

- The Property Tax
- General Sales, Income, and Other Nonproperty Taxes
- User Charges and Special Districts

Unit 4: Financial Management

- Economic Development



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE MANAGEMENT 2B COURSE OUTLINE

Debt Management

Procurement

Cash and Investment Management

Risk Management

Public Employee Pension Funds

Unions and Collective Bargaining

Unit 5: Contemporary Issues Relating to Fire Service Financial Management

Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Management 2C: Personnel and Labor Relations (2009)	CFSTES
Hours:	40	
Designed For:	Chief Officers, Company Officers, Staff Officers, and other Fire Service Managers	
Description:	This course is designed to provide a fire manager with knowledge and insight of personnel, human resource, diversity management, legal mandates, labor relations, and related areas. Topics include areas of organizational development, productivity, recruitment and selection, performance systems, discipline, and collective bargaining. Methodology will include, but not be limited to, presentations, case studies, group exercises, focused discussions, and written assignments.	
Prerequisites:	Fire Management 1	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Managing Human Resources: Productivity, Quality of Work Life, Profits		Seventh	MH
▪ The Fire Chief's Handbook		Sixth	PW
REQUIRED INSTRUCTOR MATERIALS			
▪ Applications in Human Resource Management (Optional)		2007	SWC
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Instructor-developed Summative Test		Current	Instructor
▪ Managing Human Resources: Productivity, Quality of Work Life, Profits		Seventh	MH
▪ The Fire Chief's Handbook		Sixth	PW
▪ The Fire Chief's Handbook Study Guide (Optional)		Sixth	PW
VENDORS			
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com	
MH	McGraw Hill Higher Education	http://catalogs.mhhe.com/mhhe/home.do	
PW	PennWell Books/Fire Engineering (800-752-9764)	www.pennwellbooks.com/fire.html	
SWC	South Western College Pub		

FIRE MANAGEMENT 2C COURSE OUTLINE

Course Objectives: To provide the student with...

- Techniques to make the transition from supervisor to manager.
- Information on the significant, competitive, legal and social issues that affect productivity, quality of life, and organizational success.
- Information on major legislation that impacts personnel, such as the Civil Rights Act, Equal Pay Act, Occupational Safety and Health Act.
- Information on employment tools needed to manage human resources effectively, including job analysis and design, human resource planning, and employee development.
- Information on current compensation and motivation practices used by organizations to improve employee performance and productivity.

Course Content 40:00

Unit 1: Environment

Human Resources in a Globally Competitive Business Environment
 The Financial Impact of Human Resource Management Activities
 The Legal Context of Employment Decisions
 Diversity at Work

Unit 2: Employment

Analyzing Work and Planning for People
 Recruiting
 Staffing

Unit 3: Development

Workplace Training
 Performance Management
 Managing Careers



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE MANAGEMENT 2C COURSE OUTLINE

Unit 4: Compensation

- Pay and Incentive Systems

- Indirect Compensation: Employee Benefit Plans

Unit 5: Labor-management Accommodation

- Union Representation and Collective Bargaining

- Procedural Justice and Ethics in Employee Relations

Unit 6: Support and International Implications

- Safety, Health, and Employee Assistance Programs

- International Dimensions of Human Resource Management

Unit 7: Contemporary Issues Relating to Personnel and Labor Relations

Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Management 2D: Strategic Planning (2009)	CFSTES
Hours:	40	
Designed For:	Chief Officers, Company Officers, Fire Service Managers, and City Managers/County Administrative Officers and Planners	
Description:	Designed to educate Chief Officers on the strategic planning process and why each of the steps is critical for success. Although the process may be thought of as extremely complicated, this course will provide advice and tools to assist in the strategic planning process. This course is intended to be consistent with critical elements of the accreditation process and its associated self-assessment manual.	
Prerequisites:	Fire Management 1	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Fire Department Strategic Planning: Creating Future Excellence		Second	PW
▪ The Fire Chief's Handbook		Sixth	PW
REQUIRED INSTRUCTOR MATERIALS			
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Fire Department Strategic Planning: Creating Future Excellence		Second	PW
▪ Instructor-developed Summative Test		Current	Instructor
▪ The Fire Chief's Handbook		Sixth	PW
▪ The Fire Chief's Handbook Study Guide (Optional)		Sixth	PW

VENDORS		
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com
PW	PennWell Books/Fire Engineering (800-752-9764)	www.pennwellbooks.com/fire.html

FIRE MANAGEMENT 2D COURSE OUTLINE

Course Objectives: To provide the student with...

- Techniques to make the transition from supervisor to manager.
- Concepts that form the foundation of strategic planning.
- Information on escaping from the typical operational thinking, to begin strategic thinking, and ultimately to manage organizations strategically
- The strategic planning process and why each step is critical if the plan is to succeed.
- Methods to simplify the strategic planning process.

Course Content 40:00

Unit 1: Strategic Planning

Introduction/Overview of Strategic Planning
 Revisiting Your Existing Strategic Plan
 Speed Planning for the Time Challenged Proactive Futurist
 Strategic Planning and the Commission on Fire Accreditation International
 Planning To Plan Strategically
 Understanding and Applying the Values of the Department
 The Value of Vision to Organizational Change
 Identifying the Department's Mandates
 Developing the Mission of the Department
 Understanding and Defining the Philosophy of Operations
 Assessing the Challenges and Opportunities of the External Environment
 Assessing the Weaknesses and Strengths of the Internal Environment
 Identifying the Strategic Issues of the Department
 Creating Strategies for Strategic Issues
 Creating the Department's Ideal Future Through Proactive Futuring
 Operational Planning from a Strategic Perspective
 Strategic Management and Master Planning
 Cyclic Planning

Unit 2: Contemporary Issues Relating to Strategic Planning

Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Management 2E: Ethics and the Challenge of Leadership (2009)	CFSTES
Hours:	40	
Designed For:	Chief Officers, Company Officers, Staff Officers, and other Fire Service Managers	
Description:	In this course, the participant will correlate personal core values and characteristics to ethical decisions and behaviors. In addition, the participant will explore ethical and principle-centered leadership, including ethical systems, ethical dilemmas, and ethical decision-making models. The participant will also examine challenges and develop strategies for leading in public safety organizations serving diverse and dynamic communities. The participant will use a variety of learning modalities including case studies, video analyses, and critical thinking scenarios to explore ethics and the challenges of leadership.	
Prerequisites:	None	
Certification:	Chief Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
Leadership Development Studies		Fourth	PTK
Making Ethical Decisions		2002	JIE
▪ The Fire Chief's Handbook		Sixth	PW
▪ The Leader of the Future 2: Visions, Strategies, and Practices for the New Era		2006	J-B
REQUIRED INSTRUCTOR MATERIALS			
▪ Chief Fire Officer's Desk Reference (Optional)		2006	JB
▪ Instructor-developed Summative Test		Current	Instructor
Leadership Development Studies		Fourth	PTK
Making Ethical Decisions		2002	JIE
▪ The Fire Chief's Handbook		Sixth	PW
▪ The Fire Chief's Handbook Study Guide (Optional)		Sixth	PW
▪ The Leader of the Future 2: Visions, Strategies, and Practices for the New Era		2006	J-B
VENDORS			
JB	Jones and Bartlett Publishers (800-832-0034 x2)	www.jbpub.com	
J-B	Jossey-Bass	www.josseybass.com	
JIE	Josephson Institute of Ethics	www.josephsoninstitute.org	
PTK	Phi Theta Kappa	http://leadership.ptk.org/	
PW	PennWell Books/Fire Engineering (800-752-9764)	www.pennwellbooks.com/fire.html	

FIRE MANAGEMENT 2E COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on correlating personal core values and characteristics to ethical decisions and behaviors.
- Ethical dilemmas and appropriate models for making effective ethical decisions.
- Information to define and discuss principle-centered leadership.
- Information to recognize the risks and rewards of ethical and principle-centered decision-making.
- Information to justify the importance of service as a foundational aspect of leadership.
- Information to recognize the challenges of leading in a dynamic and diverse community.
- Strategies for leading in a challenging environment.
- Information on how leaders contribute to the establishment of a high trust organizational culture.
- A personal leadership development plan.
- A method to evaluate leadership responsibility as it relates to ethics, values, and challenges within the public safety environment.

Course Content 40:00

Unit 1: Course Introduction/Reflection

- Overview of Course, Description and Course Objectives
- Introductions (Facilitated Activity)
- Course Components
- Reflections on Previous Course Work and Journal Work



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE MANAGEMENT 2E COURSE OUTLINE

Unit 2: Ethics

- What are Ethics, Morality, Leadership and More?
- Personal Values/Ethical Behavior
- Why Be Ethical and the Advantages/Disadvantages?
- Why Study Ethics?
- Video Case Study: *Cider House Rules*

Unit 3: Ethical Systems

- Thinking Ethically: A Framework for Moral Decision Making
- Ethics Awareness Inventory
- Video Case Study: *Miss Ever's Boys* – Part One

Unit 4: Ethics and Decision Making

- Evolution of Ethical Decision-making: Kohlberg's Stages of Morality
- Ethical Choices: Kohlberg - Case Studies
- A Model for Making Moral Decisions – Scott Rae
- Video Case Study: *Miss Ever's Boys* – Part Two
- Ethical Models
- Public Safety Scenarios
- Video Case Study: *Miss Ever's Boys* – Part Three

Unit 5: Ethics and Principled Leadership

- Defining Leadership
- Leadership Principles: Colin Powell's Rules
- Principle Centered Leadership
- Video Clip: *FBI Academy: the Public Trust*
- Code of Ethics
- Video Case Study: *Crimson Tide*

Unit 6: Servant Leadership

- Understanding Servant Leadership
- Video Presentation: *Gandhi or Radio*
- Role Models and Servant Leadership

Unit 7: the Challenges of Leadership

- Whom to Choose
- Video Presentation: *Billy Budd*
- The Ethical Test
- Developing Strategies for Leading in the Future

Unit 8: Course Conclusion

- Personal Leadership Assessment Peer Review
- Leadership Shadow Presentations
- Community Leadership Involvement Presentations
- Leadership Program Self Assessment
- Leadership Development Plan Submission

Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Service Supervision: Increasing Personal Effectiveness	FSTEP
Hours:	16	
Designed For:	Company Officers or other individuals responsible for supervising personnel or managing programs and projects	
Description:	This NFA hand-off course reviews basic skills and techniques that will assist the individual to improve personal effectiveness. Topics include managerial style and personal performance, time management, and personal professional development planning.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			NTIS
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			NTIS
VENDORS			
NTIS	National Technical Information Service (800-553-6847)		www.ntis.gov

FIRE SERVICE SUPERVISION: INCREASING PERSONAL EFFECTIVENESS COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Fire Service Supervision: Increasing Team Effectiveness FSTEP
Hours: 16
Designed For: Company Officers or other individuals responsible for supervising personnel
Description: This NFA hand-off course is designed to meet the needs of fire service supervisors and program managers by focusing on improving the manager's skills in relating with others. Topics include motivating others, interpersonal communications, counseling, group dynamics, and conflict resolution.
Prerequisites: None
Certification: None
Class Size: 40
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			NTIS
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			NTIS
VENDORS			
NTIS	National Technical Information Service (800-553-6847)		www.ntis.gov

FIRE SERVICE SUPERVISION: INCREASING TEAM EFFECTIVENESS COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Volunteer Fire Service Management FSTEP
Hours: 16
Designed For: Company Officers or other individuals responsible for supervising personnel or managing programs and projects
Description: This NFA hand-off course provides participants with an overview and introduction to managing within a volunteer service environment. Discussion includes topics of management principles and techniques, planning, organizing, controlling, problem solving, motivating, and much more.
Prerequisites: None
Certification: None
Class Size: 40
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			NTIS
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			NTIS
VENDORS			
NTIS	National Technical Information Service (800-553-6847)		www.ntis.gov

VOLUNTEER FIRE SERVICE MANAGEMENT COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

MECHANIC COURSES

Course: Fire Mechanic 1: Fire Pumps and Accessories (2004) CFSTES
Hours: 36
Designed For: Entry-level fire apparatus mechanics
Description: This course provides the fire apparatus mechanic with the skills necessary to maintain, overhaul, test, and troubleshoot fire pumps and accessories.
Prerequisites: None
Certification: Fire Mechanic I
Class Size: 40
Restrictions: This course is scheduled and taught by Fire Mechanic Academy staff only.

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			CFMA
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			CFMA
VENDORS			
CFMA	California Fire Mechanics Association (916-727-7019)		www.cafiremech.com

FIRE MECHANIC 1 COURSE OUTLINE

Course Objectives: To provide the student with...

- The principles and theories associated with the maintenance and operational pump testing required for fire apparatus and equipment.
- An opportunity to troubleshoot.
- An opportunity to receive specialized and on-the-job training.

Course Content.....	36:00
Pump Identification	8:00
Theory	8:00
Demonstration and Lab	12:00
Troubleshooting	6:00
Testing	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Mechanic 2A: Fire Apparatus Electrical Systems (2004)	CFSTES
Hours:	36	
Designed For:	Advanced-level fire apparatus mechanics	
Description:	This course includes topics on the theory, operation, and maintenance of electrical systems currently being used in fire apparatus.	
Prerequisites:	Fire Mechanic 1	
Certification:	Fire Mechanic II	
Class Size:	40	
Restrictions:	This course is scheduled and taught by Fire Mechanic Academy staff only.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			CFMA
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			CFMA
VENDORS			
CFMA	California Fire Mechanics Association (916-727-7019)		www.cafiremech.com

FIRE MECHANIC 2A COURSE OUTLINE	
Course Objectives: To provide the student with...	
▪ Theory, operation, and maintenance information on electrical systems currently being used in ambulance and fire apparatus.	
▪ The principles and theories associated with maintenance required for ambulance and fire apparatus and equipment.	
▪ An opportunity to receive specialized and on-the-job training.	
Course Content.....	36:00
Theory of Electron Flow, Principles of Current, Voltage, Resistance, Ohm's Law; Series, Parallel, Series/Parallel Circuits, Principles of Diodes and Transistors	12:00
Design and Construction, Ratings, Charging, Evaluation/Selection and Testing of Batteries	4:00
Design and Construction, Voltmeter, Ammeter, Ohmmeter, Application, Reading and Ratings of Meters	4:00
Design and Operation, Heavy Duty Ratings, Pulley and Belt Loop, Load Requirements And Diagnosis of Alternators.....	4:00
Design and Operation, Switches and Solenoids, Mounting, Heavy Duty Applications, And Diagnosis of Cranking Motors.....	4:00
Load Analysis, CCA Wiring, Fusing, Looming, Installation, and Repair Techniques Of Electrical Systems.....	4:00
Failure Analysis, Diagnostic Approaches, Computer Learn and Resets, Computer Wake-Up Memory and Instrumentation of Component Systems	2:00
Testing	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Mechanic 2B: Allison Transmissions (2004)	CFSTES
Hours:	36	
Designed For:	Advanced-level fire apparatus mechanics	
Description:	This course covers introduction, general construction, and application of Allison Transmission. Hands-on activities include complete tear down, subassembly tear down, hydraulics, power flows, and complete transmission rebuild. Troubleshooting and maintenance is covered also.	
Prerequisites:	Fire Mechanic 1	
Certification:	Fire Mechanic II	
Class Size:	40	
Restrictions:	This course is scheduled and taught by Fire Mechanic Academy staff only.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			CFMA
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			CFMA
VENDORS			
CFMA	California Fire Mechanics Association (916-727-7019)		www.cafiremech.com

FIRE MECHANIC 2B COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the application and general construction of the Allison transmission.
- Hands-on training in complete transmission teardown and rebuild, subassembly tear down, hydraulics, power flows, troubleshooting, parts, and maintenance procedures.
- The principles and theories associated with maintenance required for fire apparatus and equipment.
- An opportunity to receive specialized and on-the-job training...

Course Content.....	36:00
Introduction and Application.....	2:00
General Construction	2:00
Transmission Teardown.....	2:00
Torque Converter	4:00
Subassembly Teardown.....	4:00
Subassembly Transmission	4:00
Power Flows	4:00
Valve Body Teardown and Rebuild	4:00
Hydraulics.....	6:00
Complete Transmission Rebuild	2:00
Maintenance, Troubleshooting, Parts, and Review	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Mechanic 3A: Ambulance Service and Maintenance (2004)	CFSTES
Hours:	36	
Designed For:	Advanced-level mechanics	
Description:	This course covers service and maintenance techniques used to maintain engines, drive train, steering suspension, brakes, chassis, oxygen system, suction system, and the air conditioning and heating systems of an ambulance.	
Prerequisites:	Fire Mechanic 1	
Certification:	Fire Mechanic III	
Class Size:	40	
Restrictions:	This course is scheduled and taught by Fire Mechanic Academy staff only.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			CFMA
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide			CFMA
VENDORS			
CFMA	California Fire Mechanics Association (916-727-7019)		www.cafiremech.com

FIRE MECHANIC 3A COURSE OUTLINE	
Course Objectives: To provide the student with...	
<ul style="list-style-type: none"> Information on the service and maintenance requirements for ambulances. The principles and theories of maintenance requirements for ambulances. An opportunity for on-the-job specialized and maintenance training. 	
Course Content.....	36:00
Engine/Drive Train	8:00
Steering/Suspension	4:00
Chassis.....	4:00
Brakes/Secondary Braking	8:00
Heating/Air Conditioning	3:00
Oxygen	2:00
Suction.....	1:00
Ventilation	2:00
Decontamination/Biohazards.....	2:00
Testing	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Fire Mechanic 3B: Aerial Apparatus (2004)	CFSTES
Hours:	36	
Designed For:	Advanced-level fire apparatus mechanics	
Description:	This course covers physical principles of construction, testing, and preventative maintenance of aerial devices commonly found in the fire service.	
Prerequisites:	Fire Mechanic 1	
Certification:	Fire Mechanic III	
Class Size:	40	
Restrictions:	This course is scheduled and taught by Fire Mechanic Academy staff only.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual			CFMA
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪ Instructor Guide			CFMA
VENDORS			
CFMA	California Fire Mechanics Association (916-727-7019)		www.cafiremech.com

FIRE MECHANIC 3B COURSE OUTLINE	
Course Objectives: To provide the student with...	
▪ The physical principles of construction, testing, and preventative maintenance of aerial devices commonly found in the fire service.	
▪ The principles and theories associated with maintenance testing required for fire apparatus and equipment.	
▪ An opportunity for on-the-job specialized and maintenance training.	
Course Content.....	36:00
Interlock Systems.....	4:00
Nondestructive/Annual Testing.....	8:00
Hydraulic Theory	8:00
Design and Maintenance.....	8:00
Chassis Inspection	6:00
Testing	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

PREVENTION COURSES

Course:	Fire Prevention 1A: Introduction to the California Fire Code Bridge (2009)	CFSTES
Hours:	40	
Designed For:	Fire prevention, suppression, public education, and fire investigation personnel	
Description:	This course provides a broad, technical overview of fire prevention codes and ordinances, inspection practices, and key hazards.	
Prerequisites:	None	
Certification:	Fire Officer Fire Prevention Officer Public Education Officer I	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ California Fire Code		2007	ICC
▪ Fire Inspection and Code Enforcement		Sixth	CFCA or FPP
▪ Student Supplement		2008	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ California Fire Code		2007	ICC
▪ Certification Exam		2008	SFT
▪ Fire Inspection and Code Enforcement		Sixth	CFCA or FPP
▪ Instructor Guide		2008	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2008	SFT
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
ICC	International Code Council (800-284-4406)		www.iccsafe.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE PREVENTION 1A COURSE OUTLINE

Course Objectives: To provide the student with...

- The responsibility and authority for fire prevention inspections and related activities.
- The principles and procedures used to correct fire hazards.
- Information on occupancy classifications and types of construction.
- The basic means of egress requirements.
- The operational readiness of fire rated assemblies.
- General fire safety provisions.
- Information on public relations as it relates to fire prevention inspections.

Course Content..... 40:00

Unit 1: Responsibility and Authority

Orientation and Administration	2:00
Terminology Relating To Responsibility and Authority	0:30
Legally Established Responsibilities and Empowerment	1:30
Legal Responsibilities of the Inspector	2:00
Understanding, Reading, and Using the CFC	2:00
Historical Incidents and Their Affect On the Fire Code	1:00

Unit 2: Occupancy Classification and Building Construction

Terminology Relating To Occupancy Classification and Construction	2:00
Relationship of Fire Protection To Building Construction and Occupancy	1:00
Classification of Occupancies	3:00

Unit 3: Egress Requirements

Terminology Relating To Egress Requirements	0:30
Determining Adequate Means of Egress	3:00
Means of Egress Requirements	3:00
Maintaining the Egress System	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE PREVENTION 1A COURSE OUTLINE

Unit 4: Fire-Resistive Assemblies	
Terminology Relating To Fire-Resistive Assemblies	0:30
Types of Classes and Roof Coverings	1:00
Purpose and Location of Fire-Resistance-Rated Building Construction and Components.....	1:30
Fire Doors and Windows.....	0:30
Unit 5: General Fire Safety Provisions	
General Fire Safety	1:15
Fire Safety Requirements For Decorative Materials and Furnishings	1:00
Fire Drills and Emergency Evacuation Plans.....	0:30
High-piled Storage Requirements	1:00
Electrical Fire Hazards and Safety Devices.....	0:45
Unit 6: Principles and Procedures for Fire Inspections	
Factors Relating To Life Safety	2:00
Conducting A Life Safety Assessment.....	1:30
General Fire Inspection Practices.....	1:15
Procedures For Correcting Fire Hazards and Modifications of Requirements	1:15
Handling Fire Prevention Complaints	0:30
Unit Tests	2:00
Certification Exam.....	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Fire Prevention 1B: Inspection of Fire Protection Systems/Special Hazards Bridge (2009) CFSTES
Hours: 40
Designed For: Fire prevention, suppression, public education, and fire investigation personnel
Description: This course will provide fire prevention professionals with the base level of knowledge necessary to inspect fire protection systems and special hazards.
Prerequisites: Fire Prevention 1A
Certification: Fire Officer
 Fire Prevention Officer
 Public Education Officer I
Class Size: 40
Restrictions: None

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ California Fire Code		2007	ICC
▪ Fire Inspection and Code Enforcement		Sixth	CFCA or FPP
▪ Student Supplement		2009	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ California Fire Code		2007	ICC
▪ Certification Exam		2009	SFT
▪ Fire Inspection and Code Enforcement		Sixth	CFCA or FPP
▪ Instructor Guide		2009	SFT
▪ PowerPoint Slides on CD-ROM (Optional)		2009	SFT
VENDORS			
CFCA	California Fire Chief's Association Bookstore (800-733-2314)		www.calchiefs.org
ICC	International Code Council (800-284-4406)		www.iccsafe.org
FPP	Fire Protection Publications (800-654-4055)		www.ifsta.org
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

FIRE PREVENTION 1B COURSE OUTLINE

Course Objectives: To provide the student with...

- Information to identify the classification, properties, labeling, incidental storage, handling, and use of flammable and combustible liquids and gases.
- Information to identify the classification, properties, labeling, incidental storage, handling, and use of hazardous materials, other than flammable and combustible liquids and gases.
- The principles and operational readiness of portable fire extinguishers.
- The principles and operational readiness of special fixed fire suppression systems.
- The principles and operational readiness of detection and alarm systems.
- The principles and operational readiness of sprinkler systems and fire pumps.
- The principles and operational readiness of standpipe systems.

Course Content..... 40:00

Unit 1: Introduction to Fire Prevention 1B

Orientation and Administration 2:30

Unit 2: Flammable and Combustible Liquids and Gases

Flammable and Combustible Liquids Terms and Characteristics..... 1:00

Acceptable Containers for Flammable and Combustible Liquids 0:30

Introduction to Material Safety Data Sheets..... 0:30

Inside Storage of Flammable and Combustible Liquids 1:00

Outside Storage of Flammable and Combustible Liquids 1:00

Dispensing, Using, Mixing, and Handling Flammable and Combustible Liquids 1:30

Properties of Compressed, Cryogenic, and Liquefied Gases 1:00

Fire Hazards of Compressed and Liquefied Gases..... 1:00

Procedures for Inspecting Motor Vehicle Dispensing Stations 0:30

Procedures for Inspecting LPG Occupancies..... 0:30

Procedures for Inspecting Flammable Finish Application Occupancies 1:00

Methods for Controlling Ignition Sources and Explosive Atmospheres..... 1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE PREVENTION 1B COURSE OUTLINE

Unit 3: Hazardous Materials and Explosives	
Hazardous Materials Terms and Characteristics	1:00
Sources of Technical Information on Hazardous Materials	0:30
Regulating Hazardous Materials	0:30
Introduction to Hazardous Materials Management Plan (HMMP)	0:15
Storage and Transfer Practices of Compressed and Liquefied Gases	1:00
Hazards of Explosives and Fireworks	1:00
Storage of Hazardous Materials	1:00
NFPA 704 Identification Systems	0:15
Classification By Hazard	0:30
Inspection of the Incidental Use, Handling, and Storage of Hazardous Materials	1:00
Unit 4: Portable Fire Extinguishers	
Portable Fire Extinguisher Classifications	1:00
Portable Fire Extinguisher Placement	0:30
Procedures for Inspecting Portable Fire Extinguishers	0:30
Unit 5: Special Fixed Fire Suppression Systems	
Fixed Fire Protection Systems	1:00
Procedures for Inspecting Fixed Fire Protection Systems	1:00
Procedures for Inspecting Commercial Cooking Equipment	0:30
Unit 6: Detection and Alarm Systems	
Detection and Alarm Systems Terms and Characteristics	0:30
Fire Alarm System Components	0:45
Fire Alarm Signaling System Classifications	0:30
Procedures for Inspecting Fire Alarm Systems	0:30
CFC Requirements for Fire Alarm Systems	0:15
Unit 7: Water-Based Fire Protection Systems	
Water-Based Fire Protection Systems Terms and Characteristics	1:00
Water Supply Systems	0:30
Sprinkler Systems Benefits, Limitations, and Design	0:30
Types of Sprinkler Systems	1:00
Sprinkler System Components	1:00
Procedures for Inspecting Sprinkler Systems	1:00
Procedures for Conducting Tests on Wet-Pipe Sprinkler Systems	0:30
Procedures for Conducting Tests on Dry-Pipe Sprinkler Systems	0:30
Characteristics of Standpipe Systems	1:00
Procedures for Inspecting Standpipe Systems	1:00
Unit Tests	3:00
Certification Exam	2:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Interim List for Fire Prevention Courses

Course:	Fire Prevention 1C: Flammable Liquids and Gases (1987)	CFSTES
Hours:	40	
Designed For:	Fire prevention, suppression, public education, and fire investigation personnel	
Description:	This course focuses the participants on the special hazards associated with flammable and combustible liquids and gases. Some topics of discussion include bulk storage and handling, transportation of flammable gases and liquids, and more.	
Prerequisites:	Fire Prevention 1A, Fire Prevention 1B	
Certification:	Fire Prevention Officer	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1987*	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		Current*	Instructor
▪ Instructor-developed Summative Test		Current*	Instructor

**Instructor must update or develop until new documents are available*

VENDORS		
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

FIRE PREVENTION 1C COURSE OUTLINE

Course Objectives: To provide the student with...

- To identify the physical properties of flammable liquids and gases, combustible liquids, and compressed gases.
- To provide information relative to the storage and handling of flammable liquids and gases.
- To provide information regarding the installation of storage tanks and containers for flammable liquids and gases.
- To identify the techniques for fire extinguishment of flammable liquids and gases.
- To provide information relative to the DOT labeling and placarding for flammable liquids and gases.
- To identify those regulations governing the transportation of flammable liquids and gases.
- To identify procedures for controlling compressed and liquefied gas leaks.
- To identify procedures relative to the transfer of compressed liquefied gases.

Course Content.....	40:00
Introduction	1:00
Properties of Flammable and Combustible Liquids.....	1:30
Classes of Flammable and Combustible Liquids.....	1:00
Toxic and Reactive Liquids.....	1:00
Fire Hazards of Flammable and Combustible Liquids	1:00
Regulations and Hazards Associated with the Transfer for Flammable and Combustible Liquids.....	2:00
Acceptable Containers for Flammable and Combustible Liquids	1:00
Hazards and Regulations Associated with Finishing Processes Involving Flammable and Combustible Liquids	1:30
Control of Ignition Sources and Explosive Atmospheres.....	1:00
Installation Practices for Underground Storage Tanks.....	2:00
Installation Practices for Piping and Valves of Underground Storage Tanks	1:30
Venting Procedures and Devices Installed on Underground Storage Tanks for Flammable and Combustible Liquids	1:30
Installation Practices for Aboveground Storage Tanks.....	2:00
Installation Practices for Piping and Valves of Aboveground Storage Tanks	1:30
Venting Procedures for Aboveground Storage Tanks for Flammable and Combustible Liquids	1:00
Installation Practices for Inside Storage Tanks	1:30
Venting Procedures for Inside Storage Tanks for Flammable and Combustible Liquids	1:00
Regulations Associated with Outside Container Storage of Flammable and Combustible Liquids.....	1:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

FIRE PREVENTION 1C COURSE OUTLINE

Recommended Practices and Procedures for Inside Storage of Flammable and Combustible Liquids.....	1:30
Requirements for Inside Storage of Flammable and Combustible Liquids	1:30
Techniques of Flammable and Combustible Liquid Fire Extinguishment	1:00
Requirements for Portable Fire Extinguishers in Areas Containing Flammable and Combustible Liquids	1:00
Labeling and Placarding Systems for Flammable and Combustible Liquids.....	1:00
Regulations Governing the Transportation of Flammable and Combustible Liquids.....	1:30
Properties of Compressed and Liquefied Gases.....	1:30
Fire Hazards of Compressed and Liquefied Gases.....	1:00
Storage and Transfer Practices for Compressed and Liquefied Gases	1:00
Fire Extinguishment Practices for Compressed and Liquefied Gases	1:00
Requirements for Portable Fire Extinguishers in Areas Containing Compressed and Liquefied Gases	1:00
Instructor-developed Summative Test	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Interim List for Fire Prevention Courses

Course:	Fire Prevention 2A: Fire Protection Systems and Building Components (1993)	CFSTES
Hours:	40	
Designed For:	Fire prevention officials and allied safety professionals	
Description:	This course provides the information on laws and regulations pertaining to systems, description, installations, and problems relating to fire protection systems. Topics of discussion include smoke and fire detectors, fire alarm equipment, building components, assemblies and devices, fire doors, and basic hydraulic calculations for sprinkler systems.	
Prerequisites:	Fire Prevention 1A, Fire Prevention 1B	
Certification:	Fire Protection Specialist	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1994*	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		Current*	Instructor
▪ Instructor-developed Summative Test		Current*	Instructor

**Instructor must update or develop until new documents are available*

VENDORS		
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

FIRE PREVENTION 2A COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on the laws and regulations pertaining to fire protection and detection systems.
- Information on the types, installation, and problems relating to these systems.

To identify Course Content 40:00

Fire Flow Demands
 Water Systems
 Hydrant Construction
 Sprinkler Systems Capabilities
 Portable Fire Extinguisher Maintenance
 Fixed Fire Extinguishing Systems
 Heat, Smoke and Flame Detection Devices
 Alarm Systems and Components
 Fire Doors
 Procedures For Correcting Fire Hazards
 Special Fire-Related Building Components
 Fire and Fire Spread
 Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Interim List for Fire Prevention Courses

Course:	Fire Prevention 2B: Interpreting the UBC and CCR (1992)	CFSTES
Hours:	40	
Designed For:	Fire prevention personnel and allied fire safety professionals	
Description:	This course provides the participants with extensive, in-depth information about the fire and life safety standards of buildings as they relate to Titles 19 and 24. Topics for discussion include types of construction, construction methods and materials, interior finishes, roof coverings, occupancy, and more.	
Prerequisites:	Fire Prevention 1A, Fire Prevention 1B	
Certification:	Fire Protection Specialist	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ California Building Code		2007	ICC
▪ Introduction to the Uniform Building Code		2007	ICC
▪ Student Supplement		1993*	SFT
▪ Title 19		Current	WG
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		Current*	Instructor
▪ Instructor-developed Summative Test		Current*	Instructor

**Instructor must update or develop until new documents are available*

VENDORS		
ICC	International Code Council (800-284-4406)	www.iccsafe.org
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov
WG	West Group (800-888-3600)	www.barclaysccr.com

FIRE PREVENTION 2B COURSE OUTLINE

Course Objectives: To provide the student with...

- Extensive and in-depth information about the fire and life safety standards of buildings as they relate to the UBC and Title 19 and 24
- Information on types of construction, occupancy classifications, egress, and interior finishes.

To identify Course Content 40:00

Classifications of Buildings
Types of Construction
Exterior Fire Exposures
Building Restrictions
Fire Resistive Standards
Extinguishing Systems
General Exit Requirements
Specific Occupancy Classification Requirements
A.E.C.B.H.I. R-1 and M1
Atriums and Malls
Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Interim List for Fire Prevention Courses

Course:	Fire Prevention 2C: Special Hazard Occupancies (1994)	CFSTES
Hours:	40	
Designed For:	Fire prevention officials and allied safety professionals	
Description:	This course introduces the participants to more unique or unusual prevention challenges. Topics include industrial ovens, cleaning and finishing processes, welding, refrigeration systems, medical gases, fireworks, and much more.	
Prerequisites:	Fire Prevention 1A, Fire Prevention 1B, Fire Prevention 1C	
Certification:	Fire Protection Specialist	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪	Fireworks Laws and Regulations	1992	OSFM/FE
▪	Student Supplement	1994*	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪	Instructor Guide	Current*	Instructor
▪	Instructor-developed Summative Test	Current*	Instructor

**Instructor must update or develop until new documents are available*

VENDORS		
OSFM/FE	OSFM/Fire Engineering (916-445-8373)	osfm.fire.ca.gov/fireworks.html
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

FIRE PREVENTION 2C COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on special fire prevention challenges: industrial ovens, cleaning and finishing processes, welding, refrigeration systems, and medical gases.

To identify Course Content 40:00

Basic Fire Hazard Identification
 Hazardous Materials Storage, Handling and Use
 Laboratory Occupancies
 Finishing and Cleaning Processes
 Chemical Processing Equipment
 Solvent Extraction and Recovery
 Oil Quenching and Salt Baths
 Pesticides
 Flammable Gas Hazards
 Heat Processing Hazards and Protection
 Combustible Dusts Hazards
 Multiple Hazard Occupancies
 Explosives and Firearms
 Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Interim List for Fire Prevention Courses

Course:	Fire Prevention 3A: Hydraulic Sprinkler Calculations (1995)	CFSTES
Hours:	40	
Designed For:	Fire prevention officials and plan checkers	
Description:	This course offers an explanation and analysis of the functions and capabilities of a hydraulically calculated sprinkler system. Participants will learn and practice with the various methods used to perform hydraulic calculations.	
Prerequisites:	Fire Prevention 1A, Fire Prevention 1B High School Algebra or College Math	
Certification:	Plans Examiner	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪	Student Manual	Current*	Instructor
REQUIRED INSTRUCTOR MATERIALS			
▪	Instructor Guide	Current*	Instructor
▪	Instructor-developed Summative Test	Current*	Instructor

**Instructor must develop until documents are available*

VENDORS		
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

FIRE PREVENTION 3A COURSE OUTLINE

Course Objectives: To provide the student with...

- Information and analysis of the functions and capabilities of a hydraulically calculated sprinkler system.

To identify Course Content 40:00

Concepts of Hydraulics In Fire Protection Systems

Glossary of Terms and Definitions

System Piping and Fittings

Water Supply

Classification of Occupancies

Allowable Head Coverage

Most Remote Area

K Factor

Minimum and Head Pressure and Flow

Friction Loss

Hydraulic Calculation

Trees, Loops and Grids

Advanced Concepts

Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Interim List for Fire Prevention Courses

Course:	Fire Prevention 3B: Plan Review (1994)	CFSTES
Hours:	40	
Designed For:	Fire prevention officials and allied professionals responsible for plan review	
Description:	This course provides hands-on training. Topics include codes, standards and local amendments, site-plan review, building construction and characteristics, fire protection equipment, multi-family occupancies, commercial buildings, care facilities, drinking/dining facilities, shopping malls, and high-rise buildings.	
Prerequisites:	Fire Prevention 2B	
Certification:	Plans Examiner	
Class Size:	40	
Restrictions:	None	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪	Student Manual	Current*	Instructor
REQUIRED INSTRUCTOR MATERIALS			
▪	Instructor Guide	Current*	Instructor
▪	Instructor-developed Summative Test	Current*	Instructor

**Instructor must develop until new documents are available*

VENDORS		
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov

FIRE PREVENTION 3B COURSE OUTLINE

Course Objectives: To provide the student with...

- Hands-on training for Plan Reviewers.
- Information on codes, standards, and local amendments.
- Information on site plan review, building construction, and fire protection equipment.
- Information on plan review for various occupancy classifications.

To identify Course Content 40:00

Introduction To Plans and Plans Review
 Use of Check Sheets, Plans, Rules, Other Tools and Equipment
 Components of A Plan
 Site Plan Review
 Location of Buildings
 Accessibility
 Water Supply
 Terrain
 Plan Check Guides
 Plan Review of Group B Occupancy
 Plan Review of Group I Occupancy
 Full Plan Check of Day Care Center
 Plan Correction Techniques
 Instructor-developed Summative Test



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course: Fireworks Enforcement/Special Effects

FSTEP

Hours:

Designed For:

Description:

Prerequisites: None

Certification: None

Class Size: 40

Restrictions: This course is scheduled and taught by SFM Fire Engineering staff only.

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ None			
REQUIRED INSTRUCTOR MATERIALS		EDITION	VENDORS
▪ None			
CONTACT			
OSFM/FE	OSFM/Fire Engineering (916-445-8373)	osfm.fire.ca.gov/fireworks.html	

FIREWORKS ENFORCEMENT/SPECIAL EFFECTS COURSE OUTLINE	
▪ None	



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Motion Picture/Television Fire Safety Officer	FSTEP
Hours:	24	
Designed For:	Fire personnel, special effects technicians, film production safety and stunt coordinators, line producers, location managers, and film commissioners	
Description:	This course provides a basic knowledge of film production safety. Topics include: Filming and fire code permits, licensing, the role of the safety officer, fire safety hazards associated with lighting generators, electrical cabling, set construction, studio vs. warehouse filming, pyrotechnic special effects law and regulations, and stunt safety. This course incorporates pyrotechnic special effects and stunt demonstrations. Guest speakers are also a part of the program.	
Prerequisites:	None	
Certification:	None	
Class Size:	40	
Restrictions:	This course is scheduled and taught by OSFM Fire Engineering staff only.	

REQUIRED STUDENT MATERIALS	EDITION	VENDORS
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- None

REQUIRED INSTRUCTOR MATERIALS		
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- None

CONTACT		
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OSFM/FE	OSFM/Fire Engineering (916-445-8373)	osfm.fire.ca.gov/fireworks.html
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MOTION PICTURE/TELEVISION FIRE SAFETY OFFICER COURSE OUTLINE
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- None



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

PUBLIC EDUCATION COURSES

Course:	Public Education 1: Systematic Planning and Communication Skills (1989)	CFSTES
Hours:	40	
Designed For:	Designed for personnel involved with preparing and delivering public education and information programs	
Description:	Key topics include: Systematic planning process for public education, use of CFIRS to analyze local fire problems, communication skills, program evaluation, working with the media, integrating programs into schools, gaining community support, fire safety for children, interviewing and counseling juvenile fire setters, creating and using audio/visual resources, and idea and resource sharing.	
Prerequisites:	None	
Certification:	Public Education Officer I	
Class Size:	40	
Restrictions:	Instructor-designed course may be substituted. A course outline and a copy of the student materials you will be using must be submitted and approved by State Fire Training.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		1989	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Certification Exam		1989	SFT
▪ Instructor Guide		1989	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

PUBLIC EDUCATION 1 COURSE OUTLINE

Course Objectives: To provide the student with...

- The five step systematic planning process.
- An opportunity to improve communication skills through practice and oral presentations.
- Information to effectively use the available media in their geographic areas.
- Information to select, develop, organize, and use appropriate materials for fire prevention education.
- Information relative to individual value system development and interpersonal relationships.

Course Content.....	40:00
Introduction	1:30
The Need for Public Education	1:00
Introduction to Communication.....	0:30
Oral Communication	1:30
An Overview of Audio/Visual Materials.....	0:30
Written Communication	0:30
Student Presentations	23:00
Public Education Planning – a Five Step Process.....	3:00
Fire Behavior.....	1:30
Fire Extinguishers	1:00
Residential Fire Sprinklers	0:45
Smoke Detectors	0:45
Human Behavior in Fire	3:30
Course Review and Certification Exam	1:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

TECHNICAL RESCUE COURSES

Course:	Confined Space Rescue Technician (2008)	FSTEP
Hours:	40	
Designed For:	All emergency personnel with confined spaces within their jurisdiction	
Description:	This course is an intensive hands-on training program that will prepare you to respond to confined space emergencies. This course of instruction prepare the student in identifying confined spaces and permit-required confined spaces, the hazards associated with permit required confined spaces, target industries and hazards, state and federal regulations, components of a rescue operation, and the roles and responsibilities of the rescue team.	
Prerequisites:	Confined Space Rescue Awareness	
Certification:	None	
Class Size:	Student/instructor ratio: 12:1 36 student maximum: Three-squad site with 3 Primary Instructors and 1 Senior Instructor 24 student maximum: Two-squad site with 2 Primary Instructors and 1 Senior Instructor* 12 student maximum: One-squad site with 1 Primary Instructors and 1 Senior Instructor* *For one- or two-squad sites, the Senior Instructor may also function as a Primary Instructor	
Restrictions:	This course can only be delivered at an accredited SFT Rescue Training site.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		2007	CMC
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Guide		2008	SFT
▪ Student Manual		2007	CMC
VENDORS			
CMC	CMC Rescue (800-235-5741)	www.cmcrescue.com	
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

CONFINED SPACE RESCUE TECHNICIAN COURSE OUTLINE

Course Objectives: To provide the student with...

- Information on regulations and standards for entry into confined spaces
- Information to identify confined spaces and permit-required confined spaces
- Information to identify the hazards associated with confined spaces
- Techniques to perform confined space rescue on incidents involving terrorism or weapons of mass destruction
- Information and techniques to select and use atmospheric monitoring equipment and the equipment necessary to control hazards in confined spaces
- Information and techniques to identify, select, and use personal protective equipment
- Information and techniques to use various types of victim removal and packaging systems
- Information and techniques to construct rope rescue systems for confined space rescue
- The information necessary to plan, organize, operate, and command at confined space rescue incidents
- The opportunity to apply the principles of confined space rescue through directed rescue scenarios

Course Content..... 40:00

Orientation Module

Course Introduction.....	0:15
Confined Space Identification.....	1:30
CAL-OSHA Regulations.....	1:00
Federal Regulation-CFR 1910. 146	0:00
Confined Space Hazards	1:30
Atmospheric Monitoring.....	1:00
Hazard Control	1:00
Personal Protective Equipment	0:45
Phases of Confined Space Rescue	0:30
Rescue Rope and Related Equipment.....	1:00
High Point Anchor Systems	0:30
Communications	0:30
Permitting Confined Spaces.....	0:30



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

CONFINED SPACE RESCUE TECHNICIAN COURSE OUTLINE

Skills Module

Knots.....	1:30
Anchor Systems.....	0:50
RPM.....	1:15
Belay Systems.....	0:30
Raising Systems.....	1:15
Rescuer and Victim Packaging.....	2:00
Respiratory Protection	1:00
Communication Systems	1:00
Hazard Control	1:10
Atmospheric Monitoring.....	1:00
High Point Anchor Systems	2:30
Scenarios.....	16:00



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

CONFINED SPACE RESCUE TECHNICIAN ACCREDITED TRAINING SITE REQUIREMENTS

An accredited Confined Space Rescue Technician (CSRT) Training Site has facilities, structures, work areas, materials, props, tools, and equipment of adequate size, type, and quantity to fully and safely support the cognitive and psychomotor training required to deliver the CSRT curriculum.

SITE CAPACITY

A CSRT Training Site is evaluated on its ability to deliver the required training to a maximum of 36 students. Each capacity level represents the maximum number of students or squads that may be taught on the site at any given time. This maximum number will be determined based on the suitability of the site to safely train between 12 and 36 students.

One-squad Site

- Supports the instruction for teaching the maximum of one (1) squad or twelve (12) students
- One (1) CSRT Primary Instructor is required for a student instructor ratio of 12:1
- One (1) CSRT Senior Instructor is required
 - For one-squad sites, the Senior Instructor may also function as the Primary Instructor

Two-squad Site

- Supports the instruction for teaching the maximum of two (2) squads or twenty-four (24) students.
- One (1) CSRT Primary Instructor
- One (1) CSRT Senior Instructor are required for a student instructor ratio of 12:1
 - For two-squad sites, the Senior Instructor may also function as a Primary Instructor

Three-squad Site

- Supports the instruction for teaching the maximum of three (3) squads or thirty-six (36) students.
- Three (3) CSRT Primary Instructors are required for a student instructor ratio of 12:1.
- One (1) CSRT Senior Instructor is required.

MINIMUM SITE REQUIREMENTS

The accredited CSRT Training Site assumes all responsibility, liability, and maintenance for the engineering design, strength, stability, and adequacy of all props, including anchor points and tie offs. The requesting agency further assumes all responsibility, liability, and maintenance for all tools, equipment, and supplies used at the site for the delivery of a CSRT class. This includes, but is not limited to, ladders, ropes, rescue hardware and software.

Facilities

- Classroom of adequate size and capability (including audiovisual equipment) to support classroom cognitive training.
- Wash areas.
- Bathrooms.
- Rehabilitation area.
- Safe and adequate parking.

Training Props

Aboveground Tank

- Aboveground tank (minimum 8 feet high) with a vertical (top) entry through a portal of 18" to 30" and a horizontal (side) entry through a portal of 18" to 30".

Underground Vault

- While belowground vaults are preferred, it will be acceptable to place vaults at ground level and provide platforms to simulate ground level for placing tripods or other equipment on.
- Vertical drop from the entry point must be greater than 5 feet.

Tapered Cross Section

- An internal configuration of inwardly converging walls or a floor that slopes downward and tapers to a smaller cross section.
- Entry may be vertical or horizontal, but must be above the section that tapers downward.

Horizontal Pipe

- Below grade or aboveground pipes between 18" and 36" in diameter.
- A minimum of 25 feet of continuous pipe shall be provided with at least one 45-degree or 90-degree bend.

Lock-out/Tag-out

- One or more of the above listed spaces shall include a lock-out/tag-out prop as part of the evolution.



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Permit-required Confined Spaces

- Minimum training prop requirements can be fulfilled by using actual permit-required confined spaces or representative spaces.

Opening Size

- One portal of entry on any of the above props shall be less than 24".
- Opening size is determined by measuring the shorter side of the opening.

EQUIPMENT STANDARDS

The following is the minimum equipment required to deliver a CSRT course. As the class size increases, the amount of equipment must increase. Refer to ENDNOTES for additional information.

Confined Space Rescue Technician Equipment Standards	Up to 12 Students One scenario at a time	Each additional scenario run concurrently
Generator with fuel can	1	See Endnote A
Extension cord	1	See Endnote B
Atmospheric monitor	1 - See Endnote C	1 - See Endnote C
Ventilation fan with duct	1	1
Saddle vent with 90 degree elbow	1	N/A
SCBA	2	See Endnote D
Supplied air manifold	1	See Endnote E
Airline	200' - See Endnote F	See Endnote F
Supplied air respirator with escape cylinder	2	See Endnote G
Victim respirator	1 - See Endnote H	N/A
Breathing air	See Endnote I	See Endnote I
Hardline communication system	1 - See Endnote J	N/A
Portable radio	2	N/A
Commercially available tripod	1 - See Endnote K	See Endnote L
Commercially available cable winch	1	See Endnote M
Commercially available 4:1 pre-rig	1	N/A
SKED stretcher or equivalent	1	N/A
Backboard	1	N/A
LSP half-back or equivalent	1	N/A
Spreader bar	1	N/A
Basket stretcher	1	N/A
Wristlets	1 set	N/A
Class III harness	2	2
Entrant light source	2	2
Personal alert device	2	N/A
Edge protection	1 - See Endnote N	See Endnote N
Pulley (one or more must be prusik-minding)	6	2
Double sheave pulley	2	N/A
Friction device (i.e., brake bar rack, figure eight descender)	1	N/A
½" static kernmantle rope with rope bag, 150 feet (min.)	3 - See Endnote O	3 - See Endnote O
8mm prusik loop, short, 57"	5	5
8mm prusik loop, long, 70"	5	5
1" tubular webbing, 5' – green	10	10
1" tubular webbing, 12' – blue	10	10
1" tubular webbing, 15' – yellow	10	10
1" tubular webbing, 20' – orange	10	10
Carabiners, large steel locking	20	20
Fire service ground ladder	2	N/A
Mask cleaning materials	See Endnote P	N/A
Clipboard	1	1
Sample entry permit forms for each scenario	1	1
Lock-out/Tag-out kit	1	N/A



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

ENDNOTES

- A. One (1) generator is required for each scenario. If there is a readily available power supply, an additional generator would not be needed.
- B. As needed to supply power to necessary equipment.
- C. A minimum of one (1) atmospheric monitor is required for each scenario. Four (4) gas monitors are recommended, but separate monitors that detect O₂ levels, flammable gases, and toxic gases that would be expected in the spaces to be entered would suffice. One (1) monitor should have a pump and extension hose for pre-entry assessment. A second monitor can be a diffusion type for the entry team.
- D. Students can be required to supply their own.
- E. Two scenario course - One (1) supplied air manifold and two (2) SCBAs.
Three scenario course - Two (2) supplied air manifolds and two (2) SCBAs.
- F. 200 feet is the minimum. Additional airlines of sufficient length for the entry team and back-up team may be required for additional scenarios.
- G. None needed if SCBAs are used for the second or third scenario.
- H. This can be a supplied air system, emergency escape breathing apparatus (EEBA) or an SCBA.
- I. Enough Grade "D" Breathing Air must be available to run the required scenarios. This can be supplied by a compressor with back-up cylinders or by having enough air cylinders and/or a refill capability.
- J. The hardline communication system should accommodate the attendant and entrants.
- K. The tripod shall have a minimum breaking strength of 5,000 pounds to meet OSHA requirements. To better prepare the students for what they may encounter in the field, as many different high point anchors as possible should be available.
- L. If the second scenario is a vertical entry, a second high point anchor is required. A ladder system, a second tripod or davit, or other anchor point will work. If the second scenario is a horizontal entry, nothing is required.
- M. A rope retrieval system can be used for a second vertical entry.
- N. More may be required as situations warrant.
- O. Other lengths may be required by the scenarios. Low stretch kernmantle is also acceptable in place of static kernmantle.
- P. Mask cleaning materials must comply with Cal-OSHA GISO Section 5144.

SITE ACCREDITATION PROCESS

CSRT Training Sites will be inspected for compliance with the CSRT Training Site Minimum Site Requirements and Equipment Standards. A CSRT Training Site representative submits to the Chief of State Fire Training a written request for accreditation as a Conditional or Permanent CSRT Training Site. This request shall include:

- A detailed description of the site that lists the facilities, structures, work areas, materials, props, tools, and equipment available and ready for delivering a CSRT course.
- A CSRT Site Evaluation Form completed by a registered CSRT Senior Instructor.

State Fire Training staff, authorized representative, and/or a registered CSRT Senior Instructor who is not affiliated with the site will conduct an inspection of the CSRT Training Site while operating under the direction of the Chief of State Fire Training.

Any discrepancies or deficiencies will be documented and discussed with the site representative at the time of the inspection. Once all discrepancies and deficiencies (if any) have been completed, validated, and verified by State Fire Training staff or authorized representative, the Chief of State Fire Training will notify the CSRT representative of their status as either an approved conditional or permanent site.



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Rescue Systems 1: Basic Rescue Skills (2009)	CFSTES
Hours:	40	
Designed For:	All emergency response personnel	
Description:	Key topics include: Team organization, rescue, and environmental considerations, use of ropes, knots rigging and pulley systems, descending, rappelling, and belaying tools and techniques, subsurface rescue techniques, use of cribbing, wedges, cutting/prying and hydraulic tools, use of fire service ladders in specialized rescue situations, and day and night simulated rescue exercises.	
Prerequisites:	Fire Fighter I or equivalent training, Low Angle Rope Rescue Operational	
Certification:	Under development	
Class Size:	Student/instructor ratio: 12:1 48 student maximum: Four-module site with 4 Primary Instructors and 1 Senior Instructor 36 student maximum: Three-module site with 3 Primary Instructors and 1 Senior Instructor 24 student maximum: Two-module site with 2 Primary Instructors 12 student maximum: One-module site with 1 Primary Instructor	
Restrictions:	This course can only be delivered at an accredited SFT Rescue Training site.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		2009	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Materials on disk (PowerPoint Slides included)		2009	SFT
▪ Student Manual		2009	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)	http://sft.fire.ca.gov	

RESCUE SYSTEMS 1 COURSE SYLLABUS

Course Objectives: To provide the student with...

- Techniques to operate safely when working around the structural collapse of light frame buildings
- Information on the potential hazards associated with rescue operations
- An opportunity to build on skills acquired in Low Angle Rope Rescue Operational training
- Information and techniques for lifting and moving heavy objects
- Information and techniques to break or breach building components to access a victim(s)
- Information and techniques to shore and stabilize building components

Course Content..... 40:00

Topic 1-1: Introduction To the California Urban Search and Rescue System 1:00

Terminal Learning Objective (TLO): The student will be familiar with the requirements for the California Urban Search and Rescue (US&R) Basic and Light Operational Levels. The manipulative portion of the course concentrates on techniques to operate safely and effectively at structural collapse incidents involving the collapse or failure of light frame construction and basic rope rescue situations. The course uses the most innovative and progressive procedures being employed today, while maximizing rescue operation efficiency with minimal equipment and personnel. The Urban Search and Rescue Operational System Description includes; four different levels of operational capability, training, and equipment. Additional urban search and rescue multidisciplinary resources are also identified. The document uses the Incident Command System (ICS) to apply common terminology and resource management practices to provide supervision and control of essential functions at incidents that involve technically demanding rescue operations.

Enabling Learning Objectives (ELO):

1. Describe the history and objectives of the Rescue Systems 1 course.
2. Describe the California Urban Search and Rescue System.
3. Describe the relevant components of the ICS-US&R 120-1 Operational System.
4. Identify the five general construction categories.

Topic 1-2: Rescue Operations 1:00

Terminal Learning Objective (TLO): The student will be familiar with a structural collapse incident that presents the rescuer with a multitude of hazards and problems and uses the four phases of structural collapse rescue. Hazards can come from the structure itself, the surrounding area, and unsafe procedures used by the rescue team. Rescuer safety must be a priority stressed before, during, and after the incident by all personnel at the incident.



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

RESCUE SYSTEMS 1 COURSE SYLLABUS

Enabling Learning Objectives (ELO):

1. Describe the four phases of structural collapse rescue.
2. Describe the checklist for the management of a structural collapse incident.
3. Describe US&R search.
4. Describe the search marking system.

Topic 1-3: US&R Safety and Medical Care for Victims..... 1:00

Terminal Learning Objective (TLO): The student will be familiar with a structural collapse incident that can cause multiple victim injuries in a variety of ways and locations. Using some basic medical care and safety procedures during the rescue operations will greatly assist in providing the most victims with best possible chance for recovery.

Enabling Learning Objectives (ELO):

1. Describe the general hazards of a structural collapse.
2. Describe four general types of building construction hazards.
3. Describe four types of collapse patterns.
4. Describe the necessary personal protective equipment to use during an incident.
5. Identify the safety and medical considerations to take during an incident.
6. Describe the injuries associated with a structural collapse.
7. Describe basic infectious disease precautions to take during an incident.

Topic 1-4: US&R Planning and Preparation..... 1:00

Terminal Learning Objective (TLO): The student will be familiar with structural collapse incident organization and management. If an effective system to direct and control the large volume of personnel, equipment, and arriving resources is not in place, the person in charge will be overwhelmed. The order in which specific functions and tasks are performed will be vital to the effectiveness of mitigating the search and rescue structural collapse incident. Planning is probably the single most important function for an effective response to structural collapse incidents. Proper planning will identify the legal authority and responsibility for specific actions, develop a vulnerability and hazard assessment, and identify resources, response coordination, training, and budgetary needs.

Enabling Learning Objectives (ELO):

1. Describe the legal authority and responsibility for US&R.
2. Describe the development of a vulnerability and hazard assessment.
3. Identify resources for a US&R incident.
4. Describe effective response coordination.
5. Describe the training needed for local resources.
6. Describe budgetary needs during a US&R incident.
7. Describe the ICS, SEMS, and NIMS as they relate to a US&R incident.
8. Describe the communications necessary for a US&R incident.
9. Describe scene control.
10. Describe federal and state resources.

Topic 2-1: Rescue Knots and Hitches 0:45

Terminal Learning Objective: The student will be able to identify and properly tie all rescue knots and hitches.

Enabling Learning Objectives:

1. Demonstrate learned knowledge, skills, and abilities from prerequisite Low Angle Rope Rescue Operational (LARRO) course.
2. Demonstrate how to tie the six required knots.
3. Demonstrate how to tie the four Rescue Systems 1 required knots.

Topic 2-2: Anchor Systems..... 0:45

Terminal Learning Objective (TLO): The student will be aware of anchor selection and anchor system construction required for Rescue Systems 1 skills.

Enabling Learning Objectives (ELO):

1. Describe considerations when selecting anchors.
2. Describe the types of anchors.
3. Demonstrate how to form a single loop, double loop, locking girth hitch (Lark's foot).
4. Demonstrate how to form a single and double loop basket sling (three bight).
5. Demonstrate how to form a single and multi-loop anchor sling.
6. Demonstrate how to form a wrap three pull two anchor sling.
7. Demonstrate sling anchor attachments: pretied.
8. Demonstrate single sling anchor attachments: open.



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RESCUE SYSTEMS 1 COURSE SYLLABUS

Topic 2-3: Rescuer and Ambulatory Victim Packaging.....	0:30
Terminal Learning Objective (TLO): The student will be aware of how to properly package rescuers and victims to safely and effectively complete a rope rescue operation.	
Enabling Learning Objectives (ELO):	
1. Describe rescue harnesses and rescuer packaging.	
2. Demonstrate how to don a Class III harness.	
3. Demonstrate how to package a victim in a commercial victim harness.	
4. Demonstrate how to package a victim in a hasty pelvic harness.	
Topic 2-4: System Attachments and Fall Restraint.....	0:30
Terminal Learning Objective (TLO): The student will be aware of several methods of system attachments for rescuers and victims.	
Enabling Learning Objectives (ELO):	
1. Describe system attachments.	
2. Demonstrate how to attach a rescuer to a rope rescue system.	
3. Demonstrate how to attach an ambulatory victim to a rope rescue system.	
4. Demonstrate how to attach a rescue litter vertically to a rope rescue system.	
5. Demonstrate how to attach a rescue litter horizontally to a rope rescue system.	
6. Demonstrate how to tend a rescue litter.	
7. Demonstrate how to attach a rescuer to a fall restraint system.	
Topic 2-5: Belay/Safety Line Systems.....	0:30
Terminal Learning Objective (TLO): The student will be aware of the importance of using a backup line to catch the load in the event of a failure of the main line.	
Enabling Learning Objectives (ELO):	
1. Define key points regarding the operation of a belay/safety line system.	
2. Demonstrate belay/safety line configurations.	
3. Demonstrate lowering operations—basic configuration.	
4. Demonstrate retrieval operations—basic configuration.	
5. Describe system variations.	
Topic 2-6: Rappelling / Descending	0:30
Terminal Learning Objective (TLO): The student will be able construct and operate rope rescue descending systems.	
Enabling Learning Objectives (ELO):	
1. Describe descending techniques.	
2. Demonstrate how to construct a fixed line for a rappelling	
3. Demonstrate how to reeve a figure eight descender and brake bar rack.	
4. Demonstrate a rappel and lock-off using a figure eight descender and brake bar rack.	
5. Demonstrate a rappel using a figure eight descender and brake bar rack with a high and low anchor point.	
Topic 2-7: Lower and Raise Main Line Systems	0:30
Terminal Learning Objective (TLO): The student will be able to demonstrate how to raise and lower Main Line Systems	
Enabling Learning Objectives (ELO):	
1. Describe rope rescue lowering and raising systems.	
2. Demonstrate how to operate a lowering system.	
3. Demonstrate how to convert a lowering system to a raising system with a 3:1 and a 5:1 inline— RPM.	
4. Demonstrate how to convert a lowering system to a raising system with a 3:1 or 5:1 inline with directional pulley.	
5. Demonstrate how to construct a 3:1 and 5:1 mechanical advantage (MA) system.	
6. Demonstrate how to construct a 3:1 and 5:1 pig rig.	
7. Demonstrate how to convert a lowering system to a raising system with a 3:1 and 5:1 pig rig.	
Topic 3-1: Introduction to Lifting and Moving Heavy Objects	4:00
Terminal Learning Objective (TLO): The student will be familiar with the unit objectives in order to develop the proper size-up, techniques, and safety considerations when attempting to lift, roll, or move heavy objects. Heavy objects are unforgiving and cause severe, permanent injuries or death when performed incorrectly.	
Enabling Learning Objectives (ELO):	
1. Describe tool types, capabilities, and safety considerations when lifting heavy objects.	
2. Describe three different types of jacks, their operating principles, and safety precautions.	
3. Describe the appropriate personal protective equipment, safety, and medical precautions.	
4. Describe rescue team positions.	



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5. Describe determining the weight of structural components.
6. Describe moving heavy objects.
7. Demonstrate raising, stabilizing, rotating, and lowering a single heavy object.
8. Demonstrate raising, stabilizing, moving, and lowering multiple heavy objects.
9. Demonstrate raising, stabilizing, moving, and lowering multiple heavy objects while safely managing and extricating a victim from under the objects.

Topic 4-1: Introduction to Breaking and Breaching..... 4:00

Terminal Learning Objective (TLO): The student will be familiar with a structural collapse incident that requires breaking and breaching operations to gain access, remove debris, or release an entrapped victim. Breaking and breaching operations discussed in this course will focus on light-frame construction materials, such as wood and light-gauge metals, unreinforced masonry such as brick veneer, and reinforced masonry such as a cinder block wall.

Enabling Learning Objectives (ELO):

1. Describe tool types, capabilities, and safety considerations when breaking and breaching.
2. Describe light-frame structure design and construction materials.
3. Describe the appropriate personal protective equipment, safety medical precautions.
4. Describe breaking and breaching operations including shape and size of breaching openings.
5. Describe breaking and breaching operations in other general construction categories.

Topic 5-1: Ladder Rescue Systems 8:00

Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques to move patients from a low place to a high place, a high place to a low place, or across uneven terrain. Rescuers will use fire service ladders and rope rescue equipment to build systems to accomplish this transport quickly and safely.

Enabling Learning Objectives (ELO):

1. Describe the components and operational functions of the seven ladder systems.
 - Moving ladder slide
 - Ladder slide
 - Exterior leaning ladder
 - Interior leaning ladder
 - Cantilever ladder
 - Ladder gin
 - Ladder "A" frame
2. Describe the components and operational functions of the mechanical advantage system used in a ladder rescue system.

Topic 6-1: Introduction to Structure Shoring Systems..... 2:00

Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques to stabilize compromised light-frame structures and safely operate around them.

Enabling Learning Objectives (ELO):

1. Describe the techniques to mitigate structure collapse hazards.
2. Describe the steps involved during shoring size-up.
3. Describe different shoring size-up considerations.
4. Describe the proper placement of shoring components.
5. Describe the positions, roles, and responsibilities of the Shoring Team.
6. Describe the different types of shoring systems.

Topic 6-2: Introduction to Basic Tools and Equipment for Emergency Shoring Operations..... 1:00

Terminal Learning Objective (TLO): The student will be familiar with basic tools and equipment needed to construct emergency shores.

Enabling Learning Objectives (ELO):

1. Describe the tools and equipment for emergency shoring operations, including design, use, limitations, and applications.
2. Describe the safety considerations related to shoring tools and equipment.

Topic 6-3: Introduction to the Timber Spot Shore (Class I) 2:00

Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques required to construct timber spot shores.

Enabling Learning Objectives (ELO):

1. Describe the uses for timber spot shores.
2. Describe the components of timber spot shores.



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3. Describe the assembly procedures for timber spot shores.
 4. Describe the proper placement of shoring components.
 5. Describe the evaluation and safety check process for timber spot shores.
- Topic 6-4: Introduction to the Two-post Vertical Shore (Class II)..... 2:00
- Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques required to construct a two-post vertical shore.
- Enabling Learning Objectives (ELO):
1. Describe the uses for a two-post vertical shore.
 2. Describe the components of a two-post vertical shore.
 3. Describe the assembly procedures for a two-post vertical shore.
 4. Describe the proper placement of shoring components.
 5. Describe the evaluation and safety check process for a two-post vertical shore.
- Topic 6-5: Introduction to the Horizontal Shore 2:00
- Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques required to construct horizontal shores.
- Enabling Learning Objectives (ELO):
1. Describe the uses for horizontal shores.
 2. Describe the components of horizontal shores.
 3. Describe the assembly procedures for horizontal shores.
 4. Describe the proper placement of shoring components.
 5. Describe the evaluation and safety check process for horizontal shores.
- Topic 6-6: Introduction to the Pre-constructed Window and Door Shore..... 2:00
- Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques required to construct window and door shores.
- Enabling Learning Objectives (ELO):
1. Describe the uses for window and door shores.
 2. Describe the components of window and door shores.
 3. Describe the assembly procedures for window and door shores.
 4. Describe the proper placement of shoring components.
 5. Describe the evaluation and safety check process for window and door shores.
- Topic 6-7: Introduction to the Sloped Surface Shore with Cribbing..... 2:00
- Terminal Learning Objective (TLO): The student will be familiar with the skills and techniques for using cribbing in combination with a shoring system.
- Enabling Learning Objectives (ELO):
1. Describe the need for shoring a sloped surface with cribbing.
 2. Describe the components of a sloped surface shore with cribbing.
 3. Describe the assembly procedures for cribbing a sloped surface.
 4. Describe the evaluation and safety check process.
- Topic 6-8: Introduction to the Split Sole Raker Shore System..... 2:00
- Terminal Learning Objective (TLO): The student will be able to construct a split shore.
- Enabling Learning Objectives (ELO):
1. Describe the uses for the split sole raker shore.
 2. Describe the components of a raker shore system.
 3. Describe the assembly procedure for a raker shore system.
 4. Describe the proper placement of shoring components.
 5. Describe the evaluation and safety check process for a raker shore system.
- Topic 6-9: Introduction to the Cutting Station..... 1:00
- Terminal Learning Objective (TLO): The student will be able to construct and safely operate a cutting station.
- Enabling Learning Objectives (ELO):
1. Describe the uses for the cutting station.
 2. Describe the design and components of the cutting station.
 3. Describe the different applications for the cutting station.



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RESCUE SYSTEMS 1 ACCREDITED TRAINING SITE REQUIREMENTS

An accredited Rescue Systems 1 (RS1) Training Site has facilities, structures, work areas, materials, props, tools, and equipment of adequate size, type, and quantity to fully and safely support the cognitive and psychomotor training required to deliver the RS1 curriculum.

SITE CAPACITY

A RS1 Training Site is evaluated on its ability to deliver the required training to a maximum of 48 students. Each capacity level represents the maximum number of modules that can be taught on the site at any given time. This maximum number will be determined based on the suitability of the site to safely train between 12 students in each of the individual modules. A site may be capable of delivering from one to four modules simultaneously.

Four Modules

- Rope Rescue
- Heavy Objects/Breaking and Breaching
- Ladder Rescue Systems
- Emergency Building Shores

One-module Site

- Supports the instruction for teaching the maximum of one (1) module at a time for twelve (12) students
- One (1) RS1 Primary Instructor is required for a student instructor ratio of 12:1

Two-module Site

- Supports the instruction for teaching the maximum of two (2) modules for twenty-four (24) students
- One (2) RS1 Primary Instructors are required for a student instructor ratio of 12:1

Three-module site

- Supports the instruction for teaching the maximum of three (3) modules for thirty-six (36) students
- Three (3) RS1 Primary Instructors are required for a student instructor ratio of 12:1
- One (1) RS1 Senior Instructor is required

Four-module site

- Supports the instruction for teaching the maximum of four (4) modules for forty-eight (48) students
- Four (4) RS1 Primary Instructors are required for a student instructor ratio of 12:1
- One (1) RS1 Senior Instructor is required

MINIMUM SITE REQUIREMENTS

The accredited RS1 Rescue Training Site assumes all responsibility, liability, and maintenance for the engineering design, strength, stability, and adequacy of all props, including anchor points and tie offs. The requesting agency further assumes all responsibility, liability, and maintenance for all tools, equipment, and supplies used at the site for the delivery of a RS1 class. This includes, but is not limited to, ladders, ropes, rescue hardware, shoring, and cribbing materials. The facilities and props for each module should be in close proximity to each other to facilitate timeframes.

Facilities

- Classroom of adequate size and capability (including audiovisual equipment) to support cognitive training
- Wash areas
- Bathrooms
- Rehabilitation area
- Safe and adequate parking

Rope Rescue Module

- Structure, 30' minimum height with working roof that is of sound and safe engineering design
- High and low anchor points to perform rope evolutions
- Area to demonstrate and practice skills learned in Low Angle Rope Rescue (rescue knots, rescue/victim packaging, and rope systems)
- Area to demonstrate and practice anchor systems

Heavy Objects/Breaking and Breaching Module

Heavy Objects

- Three (3) 20'x20' concrete or asphalt pads with a 10' diameter buffer area at grade level (may be contiguous)
- Four (4) 3'x3'x3' concrete cubes
- Four (4) 5'x8'x12" concrete reinforced slabs (6,000 pounds each)

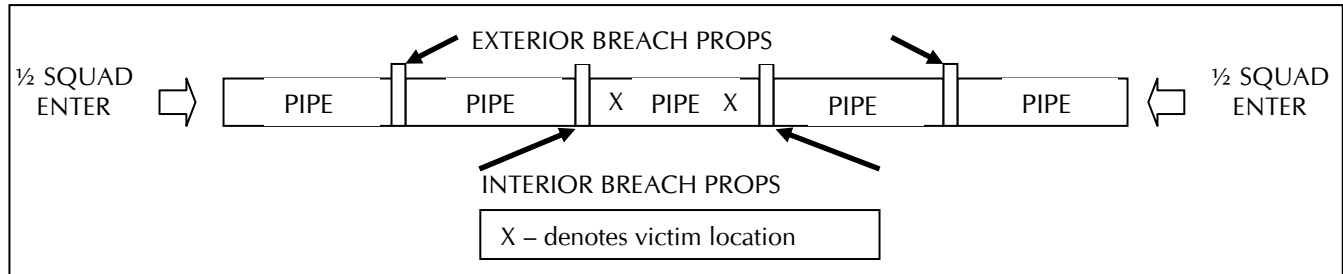


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Breaking and Breaching

- Working area at grade level, 20' long x 20' wide
 - Concrete, asphalt, or unimproved ground
 - Length of work area is dependent on the length of the pipe-shaped props
- Five (5) pipe-shaped props placed end to end allowing for breaching props to be placed between them
 - Concrete, metal, or wood
 - 36"-48" diameter x 6'-10' long



- Two (2) exterior wall breaching props
 - One side with 4'x4'x $\frac{1}{2}$ " Wonder board over 4'x4' stucco lathing over 4'x4'x $\frac{3}{4}$ " plywood nailed with 8d nails 6" on center to a 2"x4" frame with wood studs 16" on center nailed with 16d nails
 - The other side sheeted with 4'x4'x $\frac{1}{2}$ " drywall
 - Each prop shall include a span of electrical wire / conduit to simulate an obstacle
- Two (2) interior wall breaching props
 - One (1) with 4'x4'x $\frac{1}{2}$ " drywall fastened with 1 $\frac{1}{4}$ " drywall screws 6" on center to a 2"x4" frame with metal studs 16" on center
 - The other side sheeted with another 4'x4'x $\frac{1}{2}$ " drywall
 - Prop shall include a span of electrical wire / conduit to simulate an obstacle
 - One (1) with 4'x4'x $\frac{1}{2}$ " drywall fastened with 1 $\frac{1}{4}$ " drywall screws 6" on center to a 2"x4" frame with 2"x4" wood studs 16" on center nailed with 16d nails
 - The other side sheeted with another 4'x4'x $\frac{1}{2}$ " drywall
 - Prop shall include a span of electrical wire / conduit to simulate an obstacle.

Ladder Rescue Systems Module

- 20' structure adequate for simultaneous operations of ladder systems that is of sound and safe engineering design
- Side openings to accommodate simultaneous operations of ladder systems
- High and low anchor points appropriately placed for use with each operation
- Open field area to accommodate simultaneous operations, ladder "A" frame, ladder gin, and pickets
- Area to lower a student one story through an opening using an interior leaning ladder
 - An 8' minimum height is required

Emergency Building Shores Module

- Structure(s) adequate for simultaneous operations of interior and exterior shoring systems that is of sound and safe engineering design
 - Area large enough to accommodate lumber supply (near cutting station)

Interior Shores

- Working area: 16'x16' minimum with 8' ceiling
- Timber spot shores
 - Area with simulated or actual joist(s) to set two (2) timber spot shores
- Two post vertical shore
 - Area with simulated or actual joist(s) to set one (1) two (2) post vertical shore
- Two post horizontal shore
 - An opening 3' to 8' wide and 8' minimum in height
- Window and door shores
 - Window opening: 2'x2' minimum to 4'x4' maximum
 - Door opening: 2'6"x6'8" minimum to 4'x7' maximum



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Sloped Surface Shore (Cribbing)

- 8'x8' working area minimum
- Configured so that the crib bed of a sloped floor shore is no greater than 3' in height when constructed
- 3' elevation within a 10' distance maximum slope (30 percent / 15 degree slope)

Raker Shores

- One (1) wall/area 14' high x 12' wide
- Working area: 16' away from building and 12' wide

Cutting Station

- Minimum of 6" off the ground
- 16'x16' working area

EQUIPMENT STANDARDS

Student safety is of paramount importance when conducting the type of high-risk training associated with the RS1 course. The equipment listed below is the minimum for each accredited RS1 Training Site. The equipment is in compliance with or exceeds the standards listed in NFPA 1983, Standard on Fire Service Life Safety Rope, Harness, and Hardware. Student safety is of paramount importance when conducting the type of high-risk training associated with the RS1 course. All PPE shall be the responsibility of the student and shall meet agency and site requirements. Lumber list does not include lumber required to construct props.

Rescue Systems 1 Equipment Standards	Description	Ropes	Ladders	Heavy Objects	Breaking & Breaching	Shoring	Total 4 Modules
CONSUMABLES							
Common nails	8d				5 lbs.	5 lbs.	10 lbs.
Common nails	16d				5 lbs.	5 lbs.	10 lbs.
Drywall	4'x8'x½"				3		12
Duplex nails	8d				5 lbs.	20 lbs.	25 lbs.
Duplex nails	16d				5 lbs.	40 lbs.	45 lbs.
Gasoline and bar oil						1	1
Metal Studs	2"x4"x8'				2		8
Plywood	4'x8'x¾"				1		4
Stucco K-Lath / wire mesh	4'x4'				2		8
Wonder Board	3'x5'x½"				2		8
NONCONSUMABLES							
Anchor plate		3	1				4
Brake bar rack		3	1				4
Carabiner (General Use)		25	25				25
Commercial Class III harness	Small	1	1				2
Commercial Class III harness	Medium	1	1				2
Commercial Class III harness	Large	1	1				2
Commercial Class III harness	Extra large	1	1				2
Commercial Victim Pelvic Harness		1	1				2
Commercial Victim Chest Harness		1	1				2
Cribbing	4"x4"x24"					24	24
Cribbing	4"x4"x18"			100			100
Cribbing	4"x4"x9"			25			25
Cribbing	2"x4"x9"			25			25
Cribbing/Cleat	2"x4"x24"					12	12
Cribbing/cleat	2"x4"x18"			50			50
Edge protector		1	1				2
Edge roller		2	1				3
Figure eight descender		3	1				4
Gibbs ascender		1	2				3
Gusset plate	12"x12"x¾"					44	44
Gusset plate	6"x12"x¾"					12	12
Ladder	14'		1				1
Ladder	24'		1				1
Load Releasing Strap		4	1				5
Lifeline (Low stretch or static)	½"x150'	3	3				6
Lumber	4"x4"x8'					16	16
Lumber	4"x4"x10'					2	2
Lumber	4"x4"x12'					3	3
Lumber	4"x4"x14'					2	2



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Rescue Systems 1 Equipment Standards	Description	Ropes	Ladders	Heavy Objects	Breaking & Breaching	Shoring	Total 4 Modules
Lumber	4"x4"x16'					2	2
Lumber	2"x4"x8'					18	18
Lumber	2"x4"x12'					2	2
Lumber	2"x6"x8'					7	7
Lumber	2"x4"x10'					2	2
Lumber	1"x6"x8'					4	4
Lumber	2"x6"x10'					6	6
Lumber	2"x6"x12'					9	9
Picket, steel	1"x4'		10		2	12	24
Plywood	4'x8'x3/4"					1	1
Prusik loop	Short	3	3				6
Prusik loop	Long	4	4				8
Prusik minding pulley		3	3				6
Pulley (round or PMP)	2" or 4"	3	3				6
Rescue litter		1	1				2
Rescue litter pre-rig with prusiks		1	1				2
Tie rope	10'	12					12
Webbing, blue tubular	1"x15'	15	10				25
Webbing, green tubular	1"x5'	15	10				25
Webbing, orange tubular	1"x20'	15	10				25
Webbing, yellow tubular	1"x12'	15	10				25
Wedge pairs	2"x4"x12"					12	12
Wedge pairs	4"x4"x18"			10		6	16
TOOLS							
Axe, flat head					2		2
Axe, pick head					1		1
Bolt cutter					2		2
Carpenter pencils						12	12
Cold chisel	1"x7-7/8"				2		2
Chain saw					2	2	2
Crow bar	3'			4	1	8	13
Framing hammer					1	12	13
Framing square with tables						2	2
Hacksaw, heavy duty					2		2
Hand saw, crosscut					2	2	4
Hydraulic jack	5 ton (min.)			1			1
Lumber marker					2	12	14
Measuring tape					2	12	14
Pinch point pry bar	60"			6	1		7
Pipe	2"x4'			8			8
Shovel, round point			1		1		2
Shovel, square point					1		1
Single jack hammer	3 – 4 lb.				2	4	6
Sledge hammer	8 – 10 lb.		1		1		2
Speed square						12	12
Tool pouch						12	12
Circular saw kit - 10 1/4" (OPTIONAL)	40 tooth spare carbide tip – blade replacement wrench					1	1

SITE DEVIATION

In the event that a training site has a facility, structure, or prop that does not comply with the RS1 minimum site requirements and equipment standards, the site has the opportunity to apply for a site deviation. A RS1 Senior Instructor or designee submits to the Chief of State Fire Training a formal letter requesting site deviation. This letter must describe the site deviation in detail by listing:

- The need and parameters of the deviation.
- New or revised lesson plans linked to the deviation that ensures consistency with the standards and behavioral objectives of the approved RS1 curriculum.
- Demonstration, either live or through visual aids, of any deviated technique or procedure.



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The Chief of State Fire Training will review the request for site deviation. Any deficiencies will be appropriately documented and discussed with the RS1 Senior Instructor or designee requesting the site deviation. If site deviation is denied, a provisional accreditation may be granted at this time. If a site is not approved, they have three (3) months to comply with the site requirements identified as deficient in the inspection report.

SITE ACCREDITATION PROCESS

Rescue Systems 1 Training Sites will be inspected for compliance with the RS1 minimum site requirements and equipment standards. Sites may be accredited as one of the following:

- Full Accreditation
 - A permanent-use site that fully meets the RS1 minimum site requirements and equipment standards.
- Temporary Accreditation
 - A short-term use site that meets the RS1 minimum site requirements and equipment standards.
 - Typically, these sites are in areas where permanent sites are not practical or available.
 - Accreditation is granted for the purpose of delivering a set number of courses.
 - Once the training is complete, the temporary accreditation is rescinded.

Full Accreditation

A RS1 Training Site representative submits to the Chief of State Fire Training a formal letter requesting full accreditation for a permanent site. This letter must describe the site in detail by listing the facilities, structures, work areas, materials, props, tools, and equipment available and ready for delivering a RS1 course. State Fire Training staff and/or a registered RS1 Senior Instructor, operating under the direction of the Chief of State Fire Training, will conduct an inspection of the RS1 Training Site. Any discrepancies or deficiencies will be appropriately documented and discussed with the site representative at the time of the inspection. Copies of all inspection documents and notes will be kept on file. The Chief of State Fire Training will notify the RS1 Training Site of their status after the inspection.

Temporary Accreditation

A registered RS1 Senior Instructor or designee submits to the Chief of State Fire Training a formal letter requesting temporary accreditation for delivering a RS1 course. This letter must describe the site in detail by listing the facilities, structures, work areas, materials, props, tools, and equipment available and ready for delivering a RS1 course. Photographs of each required structure, work area, and prop must be included in the application package. A completed "Request for Rescue Systems Course Scheduling" providing the dates of the upcoming course and all instructors must be included in the application package. Temporary accreditation must be requested at least ninety (90) days before the beginning date of the course.

Appeals

Step 1

The RS1 Training Site representative must submit in writing to the Chief of State Fire Training all evidence to support reversing SFT's denial of site accreditation. After review of all submitted materials, the Chief of State Fire Training will notify the site representative in writing of the decision to uphold, modify, or withdraw the denial of accreditation.

Step 2

If the denial of accreditation is upheld, the site representative may appeal the findings to the Assistant State Fire Marshal. The RS1 Training Site representative must submit in writing all evidence to support reversing the decision of the Chief of Education and Training. After review of all submitted materials, the Assistant State Fire Marshal will notify the site representative in writing of the decision to uphold, modify, or withdraw the denial of accreditation.

The decision of the Assistant State Fire Marshal is final.



COURSE INFORMATION AND REQUIRED MATERIALS

PO Box 944246, Sacramento CA 94244-2460

Course:	Rescue Systems 2: Advanced Rescue Skills (2009)	CFSTES
Hours:	40	
Designed For:	All fire service and allied emergency response personnel	
Description:	Provides advanced heavy rescue system techniques. Key topics include: Structural building types, wood and mechanical shores, crib capacities, floor weight calculations, building search, confined space considerations, damaged structure hazard assessment, use of power tools, air bags, and USAR ICS.	
Prerequisites:	I-200, Rescue Systems 1	
Certification:	Under development	
Class Size:	Student/instructor ratio: 12:1 48 student maximum: Four-module site with 4 Primary Instructors and 1 Senior Instructor 36 student maximum: Three-module site with 3 Primary Instructors and 1 Senior Instructor 24 student maximum: Two-module site with 2 Primary Instructors 12 student maximum: One-module site with 1 Primary Instructor	
Restrictions:	This course can only be delivered at an accredited SFT Rescue Training site.	

REQUIRED STUDENT MATERIALS		EDITION	VENDORS
▪ Student Manual		2009	SFT
REQUIRED INSTRUCTOR MATERIALS			
▪ Instructor Materials on disk (PowerPoint Slides included)		2009	SFT
▪ Student Manual		2009	SFT
VENDORS			
SFT	State Fire Training Bookstore (916-445-8158)		http://sft.fire.ca.gov

RESCUE SYSTEMS 2 COURSE SYLLABUS

Course Objectives: To provide the student with...

- Information to incorporate safety practices in all phases of the planning and implementation of a rescue operation
- Information to identify and mitigate potential hazards associated with rescue operations
- An opportunity to build on skills acquired in Rescue Systems 1 training
- Reconnaissance strategies and techniques for locating victims in a collapsed building
- Information on structural triage and collapse patterns of building structures
- Information and techniques to shore and stabilize building components
- Information and techniques to break or breach building components to access a victim(s)
- Techniques of metal burning systems
- Information and techniques for lifting and moving heavy objects

Course Hours..... 40:00

Topic 1-1 Introduction and Introduction..... 1:00

Terminal Learning Objective (TLO): The student will be familiar with course administration and operational requirements for successful completion.

Enabling Learning Objectives (ELO):

1. Describe starting times and attendance requirements for successful completion of the course.
3. Describe the necessary paperwork to complete all administrative processes required for successful completion.
4. Describe the criteria for successful completion of the course.
5. Describe the student manual and its contents.

Topic 1-2 Safety..... 1:00

Terminal Learning Objective (TLO): The student will be familiar with the importance of including sound safety practices in all phases of the planning and rescue operations.

Enabling Learning Objectives (ELO):

1. Describe the importance of safety during all phases of a mission.
2. Describe the importance of recognizing and mitigating safety hazards.
3. Describe the importance of incorporating safety into rescue planning and briefing.
4. Describe and employ the concept of "LCES" (Lookouts, Communications, Escape routes, and Safe zones).
5. Perform a risk hazard analysis for a specific event and suggest actions to minimize risks and/or eliminate hazards.
6. Describe the issues related to personal and team security zones, as a planning tool.
7. Describe the importance of safety risk and hazard identification



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Topic 1-3 Survival.....	1:00
Terminal Learning Objective (TLO): The student will be familiar with the basic survival strategies during a large disaster if they should be isolated or separated from their support system.	
Enabling Learning Objectives (ELO):	
1. Describe the psychological importance of keeping a positive attitude.	
2. Identify suitable and safe shelter.	
3. Describe the importance of protective clothing and outerwear in disaster areas during inclement weather.	
4. Identify potable water sources and how to construct a fire.	
5. Describe when travel is necessary, how to orientate yourself to the environment, and how to build a signaling system.	
Topic 1-4 Search Capabilities.....	1:00
Terminal Learning Objective (TLO): The student will be familiar with the reconnaissance strategies that should be employed to produce the best results for finding the most victims.	
Enabling Learning Objectives (ELO):	
1. Establish search priorities and apply search strategies.	
2. Identify reconnaissance team assignments and positions.	
3. Describe the importance of incorporating safety into rescue planning and briefing.	
4. Apply a range of search tools from simple voice call-outs to the use of more sophisticated electronic equipment and canines.	
Topic 1-5 Structure Triage.....	4:00
Terminal Learning Objective (TLO): The student will be familiar with the most appropriate strategies to be used to effect rescues in various types of structures by learning how to triage structures and identify trapped victim(s).	
Enabling Learning Objectives (ELO):	
1. Identify the phases of a disaster	
2. Apply tools used in structural triage and perform structural/hazard assessment.	
3. Describe the variety of task assignments for the reconnaissance team.	
4. Apply appropriate structural hazard markings to buildings.	
5. Apply search and rescue assessment markings.	
6. Perform a basic building search and rescue plan.	
Topic 2-1: Collapse Patterns Structural Engineering.....	4:00
Terminal Learning Objective (TLO): The student will be familiar with how building structures can be separated into specific types that exhibit unique collapse patterns when subjected to extreme forces due to earthquake, wind, and explosions.	
Enabling Learning Objectives (ELO):	
1. Describe how earthquakes, wind, and explosions produce unique effects on different types of structures.	
2. Describe how each of these produce unique and recognizable collapse patterns.	
3. Describe how this knowledge will allow us to recognize the difference between survivable and less-survivable voids.	
Topic 2-2: Structural Hazard Identification.....	4:00
Terminal Learning Objective (TLO): The student will be familiar with the most common signs of distress exhibited by damaged structures, as well as understand the most common hazards found in damaged structures, and methods that have been used to used to mitigate them.	
Enabling Learning Objectives (ELO):	
1. Identify how concrete and masonry crack	
2. Describe how these cracks can be "read" to predict future performance of these structures.	
3. Identify the most common hazardous conditions that will occur in the four building types.	
Topic 3-1: Basic Shoring.....	4:00
Terminal Learning Objective (TLO): The student will be familiar with the function and capacity limitations of the shoring used in US&R to support damaged structures and why and how shores are constructed.	
Enabling Learning Objectives (ELO):	
1. Determine weights to be supported.	
2. Determine the appropriate shore to be constructed.	
3. Describe the sequence of construction to minimize risk.	
4. Demonstrate how to inspect constructed shores.	



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Topic 3-2: Shoring Construction.....	4:00
Terminal Learning Objective (TLO): The student will be familiar with how to maintain the integrity of all structurally unstable elements and how to properly transmit or redirect the collapse loads to stable ground.	
Enabling Learning Objectives (ELO):	
1. Demonstrate a proper shoring size-up.	
2. Identify locations for proper shoring placement.	
3. Describe shoring team concepts and identify positions and purpose.	
4. Describe the different types of shoring components and equipment.	
Topic 4-1 Breaking and Breaching	3:00
Terminal Learning Objective (TLO): The student will be able to properly breach, break, cut, and burn to gain access through concrete, steel, or other structural components during rescue operations in heavy floor, heavy wall, steel, and concrete structures.	
Enabling Learning Objectives (ELO):	
1. Identify types of concrete and their components.	
2. Identify concrete components and their importance to systems design.	
3. Describe their importance during collapse rescue operations.	
4. Identify concrete construction types.	
5. Describe the properties, strengths, and weaknesses of concrete and its components.	
6. Select tools or tool packages for rescue operations.	
7. Identify functional parts of an exothermic torch.	
8. Identify functional parts of an oxy-acetylene torch.	
9. Troubleshoot each tool as needed.	
Topic 4-2: Tool Applications and Assessment.....	1:00
Terminal Learning Objective (TLO): The student will be able to inspect, operate, maintain, and safely use the power tools used in Rescue Systems 2.	
Enabling Learning Objectives (ELO):	
1. Describe the operator's influence on tool performance.	
2. Describe electrical power sources, electrical loads, and tool safety.	
3. Describe the tool assessment criteria.	
4. Demonstrate a pre-use inspection of all gas, fuel, pneumatic, hydraulic, and electric power tool systems.	
Topic 4-3 Metal Burning	4:00
Terminal Learning Objective (TLO): The student will be familiar with the technology, capabilities, and characteristics of each different metal burning system, the different types of metals and their characteristics, which metal burning system is best suited for a particular job or assignment.	
Enabling Learning Objectives (ELO):	
1. Describe the functions that need to be performed by the burning teams.	
2. Describe the advantages and disadvantages of the various types of metal burning equipment.	
3. Describe the different and most expedient methods to be used with each cutting or burning system to safely accomplish the assigned task.	
Topic 5-1 Lifting and Moving	8:00
Terminal Learning Objective (TLO): The student will be able to size-up objects that have entrapped people and efficiently apply a variety of machines and power to safely move these objects.	
Enabling Learning Objectives (ELO):	
1. Describe basic physics as it relates to weight, gravity, center of gravity, and friction and resistance force.	
2. Demonstrate the use of a mechanical advantage to move heavy objects.	
3. Demonstrate the effective use of air bags.	
4. Demonstrate proper load stabilization techniques.	
5. Demonstrate the use of a wedge anchor and eye nut.	
6. Calculate the weights of common materials.	
7. Use proper safety protocols.	



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RESCUE SYSTEMS 2 ACCREDITED TRAINING SITE REQUIREMENTS

An accredited Rescue Systems 2 (RS 2) Training Site has facilities, structures, work areas, materials, props, tools, and equipment of adequate size, type, and quantity to fully and safely support the cognitive and psychomotor training required to deliver the RS2 curriculum.

SITE CAPACITY

A RS2 Training Site is evaluated on its ability to deliver the required training to a maximum of 48 students. Each capacity level represents the maximum number of modules that can be taught on the site at any given time. This maximum number will be determined based on the suitability of the site to safely train between 12 students in each of the individual modules. A site may be capable of delivering from one to four modules simultaneously.

Four Modules

- Interior Shores Module
- Exterior Shores Module
- Breaking and Breaching Module
- Lifting and Moving Module

One-module Site

- Supports the instruction for teaching the maximum of one (1) module at a time for twelve (12) students
- One (1) RS 2 Primary Instructor is required for a student instructor ratio of 12:1

Two-module Site

- Supports the instruction for teaching the maximum of two (2) modules for twenty-four (24) students
- One (2) RS 2 Primary Instructors are required for a student instructor ratio of 12:1

Three-module site

- Supports the instruction for teaching the maximum of three (3) modules for thirty-six (36) students
- Three (3) RS 2 Primary Instructors are required for a student instructor ratio of 12:1
- One (1) RS 2 Senior Instructor is required

Four-module site

- Supports the instruction for teaching the maximum of four (4) modules for forty-eight (48) students
- Four (4) RS 2 Primary Instructors are required for a student instructor ratio of 12:1
- One (1) RS 2 Senior Instructor is required

MINIMUM SITE REQUIREMENTS

The accredited RS 2 Rescue Training Site assumes all responsibility, liability, and maintenance for the engineering design, strength, stability, and adequacy of all props, including anchor points and tie offs. The requesting agency further assumes all responsibility, liability, and maintenance for all tools, equipment, and supplies used at the site for the delivery of a RS2 class. This includes, but is not limited to, ladders, ropes, rescue hardware, shoring and cribbing materials. The facilities and props for each module should be in close proximity to each other to facilitate timeframes.

Facilities

- Classroom of adequate size and capability (including audiovisual equipment) to support cognitive training
- Wash areas
- Bathrooms
- Rehabilitation area
- Safe and adequate parking

Interior and Exterior Shores Module

- Structure(s) adequate for simultaneous operations of interior and exterior shoring systems that is of sound and safe engineering design
 - Area large enough to accommodate lumber supply (near cutting station)
- Interior shore
 - Working area: 20'x20' minimum with 8' ceiling
- Double-T spot shore
 - Area with simulated or actual joist(s) to construct one (1) Double-T spot shore
- Vertical shore
 - Area with simulated or actual joist(s) to set one (1) vertical shore with three (3) posts
- Laced post shore
 - Area with simulated or actual joist(s) to construct one (1) laced post shore



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- Window, door, and horizontal shore
 - Two window openings 2' to 4' wide
 - At least one opening to be racked 10 to 15 degrees from plumb
- Two door openings 30" to 48" wide
 - At least one opening to be racked 10 to 15 degrees from plumb
- Sloped surface shore
 - 20'x20' working area with a 12' wide 12' long sloped surface
 - Configured so that the sloped surface is no shorter than 3' in height at the low end
 - Slope angle to be at least 6" in 10' (3 deg, 5%) to a max of 120" in 10' (45 deg. 100%)
- Raker shore
 - One 16' high minimum 16' long wall
 - One 16' high 16' long wall raked 5 to 15 degrees from plumb
 - 20'x20' working area
- Cutting station and table
 - 20'x20' working area
 - Cutting table construction as per student/instructor manual

Breaking and Breaching Module

- Working area at grade level, 20' long, 20' wide
 - Concrete, asphalt, or unimproved ground
 - Length of work area is dependent on the length of the pipe-shaped props
- Four (4) concrete pipes or concrete vaults
 - 48" diameter
 - 8' long
- Twelve (12) re-enforced concrete slabs
 - 4'x4'x6" minimum with a maximum thickness of 8"
 - #3 rebar placed 12" on center
 - 5 sack mix
 - 2,500 psi
- Twelve (12) re-enforced concrete slabs
 - 4'x4'x3" minimum with a maximum thickness of 6"
 - #3 rebar placed 12" on center
 - 5 sack mix
 - 2,500 psi
- Two (2) steel plates
 - ¼"x4'x8'
 - Can be scrap material
- Two (2) steel I-beams
 - Various lengths
 - Can be scrap material
- Ten (10) feet wire rope
 - ½" diameter
- Two (2) steel siding / decking
 - 10'x2'x20 gauge
- Twelve (12) wood dunnage
 - 4"x4"x8'

Lifting and Moving Module

- Three (3) 20'x20' concrete pads with a 10' diameter buffer area at grade level (may be contiguous)
 - Concrete or asphalt
- Two (2) 5'x8'x12" concrete reinforced slabs (6,000 pounds each)
- One (1) 4'x8' minimum, solid concrete reinforced cylinder (15,000 lbs.)
 - This can be accomplished by filling the 4'x8' aqua conduit with concrete
- One (1) 5'x10'x5 ½" concrete reinforced slab
- Any combination of props to meet the KSAs of the final practical exercise



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EQUIPMENT STANDARDS

Student safety is of paramount importance when conducting the type of high-risk training associated with the RS2 course. The equipment listed below is the minimum for each accredited RS2 Training Site. The equipment is in compliance with or exceeds the standards listed in NFPA 1983, Standard on Fire Service Life Safety Rope, Harness, and Hardware. Student safety is of paramount importance when conducting the type of high-risk training associated with the RS2 course. All PPE shall be the responsibility of the student and shall meet agency and site requirements. Lumber list does not include lumber required to construct props.

Rescue Systems 2 Equipment Standards	Description	Exterior Shores	Interior Shores	Lifting & Moving	Breaking & Breaching	Total 4 Modules
CONSUMABLES						
Anchors	Concrete wedge ½"x5½"				48	48
Cleats	2"x4"x12"	12	12			24
Common nails	8d	10 lbs	10 lbs			20 lbs
Common nails	16d	15 lbs	15 lbs			30 lbs
Drinking cups		50	50	50	50	200
Duplex nails	8d	100 lbs	100 lbs			200 lbs
Duplex nails	16d	100 lbs	100 lbs			200 lbs
Eye nuts	Female H/D ½" eye nuts				12	12
Gasoline – premix	5 gallon – safety can - funnel	1			1	2
Gasoline - unleaded	5 gallon – safety can - funnel	1			1	2
Lumber	6"x6"x16'	10	10			20
Lumber	4"x4"x16'	12	12			60
Lumber	4"x4"x14'	15	15	4		34
Lumber	4"x4"x10'	12	12			24
Lumber	2"x6"x16'	30	30			60
Lumber	2"x4"x12'	20	20			40
Lumber	2"x4"x10'	5	5			10
Lumber	2"x4"x16'	12	12			24
Lumber markers		12	12			24
Nails, pneumatic	8d, full head type nails	½ case	½ case			1 case
Nails, pneumatic	16d, full head type nails	½ case	½ case			1 case
Nails, powder actuated (optional)	2 ½" with washers	48				48
Nails, powder actuated (optional)	3" with washers	48				48
Plywood	4'x8'x¾"	4	4			8
Plywood	2'x2'x¾" (size of air bag)			4		4
Plywood gussets	12"x12"x¾"	36	36			72
Plywood gussets	6"x12"x¾"	36	36			72
Powder actuated charges (optional)	22 cal	96				96
Rotary hammer bit (optional)	2" carbide tip masonry bit				1	1
Rotary hammer bits	½" carbide tip masonry bits	1			6	7
Rotary hammer bits	¾" carbide tip masonry bit	1			4	5
Rotary hammer bits	1½" carbide tip masonry bit	1			4	5
NONCONSUMABLES						
Cribbing	4"x4"x18" (24" recommended)			140	24	164
Cribbing	2"x4"x18" (24" recommended)			50	12	62
Cribbing	4"x4"x9"			25		25
Cribbing	2"x4"x9"			25		25
Fire extinguishers	Dry chemical				1	1
Fire extinguishers	Water can				1	1
First aid kit						1
Picket, steel	1"x4'	12	12	optional	4	28
Rescue litter or Sked				optional	1	1
Rescue manikin				1	1	2
Tarps/salvage covers	Cover a 24'x24' area	1	1	1	2	5
Water jug	5 gallon	1	1	1	1	4
Wedges	4"x4"x18"	12 sets		24 sets	12 sets	48 sets
Wedges	2"x4"x12"	12 sets	24 sets	24 sets	12 sets	72 sets
TOOLS						
Anchor kit	1 wrench (per manufacturer's specifications)			1		1



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Rescue Systems 2 Equipment Standards	Description	Exterior Shores	Interior Shores	Lifting & Moving	Breaking & Breaching	Total 4 Modules
Air bags kit, high pressure per OSD	1 pressure regulator 1 supply hose 1 controller 2 hose (color coded) 2 HP air bags (50 ton minimum capability, any combination)			1		1
Air bags kit, low pressure per OSD	1 pressure regulator 1 supply hose 1 controller 1 air bag hose 1 LP air bags (minimum 5 ton capability any combination)			1		1
Air cylinders	SCBA bottles			10		10
Air chisel (optional)					1	optional
Atmospheric monitor (optional)					1	1
Bolt cutters	30"				2	2
Building marking kit	Spray paint (orange) Lumber chalk (stick) Lumber crayon (red) Lumber crayon (yellow) Lumber pencil Flagging tape (1" orange or red)				1	1
Carabiners				4 (optional)	6	10
Cats paw		4	4			8
Crow bar	3'	4	4	4	2	14
Carpenter belts		10	10			20
Come-a-long	2 ton minimum			1 (optional)	1	2
Chain	20' - 3/8" - grade 7 with a grab and slip hook			1		1
Chain	10' - 3/8" - grade 7 with a grab and slip hook			1		1
Chalk line with chalk		1	1			2
Chain saw kit - gasoline	Chain adjusting tool Spare chain Spare bar Spare spark plug Bar oil	1				1
Chain saw kit - electric	Chain adjusting tool Spare chain Spare bar Bar oil		1			1
Cutting torch kit: Plasma cutter or exothermic or oxy/acetylene or gasoline	Rods Tips Strikers Tip cleaning tools Burner's goggles, gloves, jacket				1	1
Cutting torch	Oxy/acetylene, oxy/gasoline, exothermic, or plasma				1	1
Circular saw kit - 7 1/4"	Spare carbide tip Blade replacement wrench	1	1			2
Circular saw kit - 10 1/4" (Beam saw)	40 tooth spare carbide tip Blade replacement wrench	1	1			2
Demolition hammer, small with chisel and bull point bits	35-45 lbs. Electric, hydraulic, pneumatic, or gasoline				1	1
Demolition hammer, large with chisel and bull point bits	60 lbs. minimum Electric, hydraulic, pneumatic, or gasoline				1	1
Drill kit	1/2" variable speed Bits (1/2", 3/4", and 1")	1			1	2
Extension cord w/adapters	50' - 12/3 - 20 amp	2	2		4	8
Ellis clamps	4"x4"		8			8
Ellis jack			1			1
Ellis post screw jack	4"x4"		4			4
Framing hammer	16 ounce or larger	10	10			20
Framing square	24"	2	2			4



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Rescue Systems 2 Equipment Standards	Description	Exterior Shores	Interior Shores	Lifting & Moving	Breaking & Breaching	Total 4 Modules
Fork lift or front loader	15,000 lbs. minimum			1		1
Generator, portable or 110v power supply	5 kw minimum with 5 gallons of fuel in safety fuel can	1	1		1	3
High lift jack				1		1
Level	4'	1	1			2
Level	6"	12	12			24
Lumber crayon	Red or blue	6	6	2		14
Lumber pencil		12	12	2		26
Nail gun, powder actuated (<i>optional, certification required</i>)		1	1			2
Nail gun, pneumatic (framing type)	With pneumatic, gas, compressor, or bottles Appropriate hoses 100'+ 2 regulators 2 gun oil	1	1			2
Pneumatic shore kit (<i>optional if available</i>)	2'-6' Regulator Hose Extensions and ends	3 each	3 each			6
Pipe, steel	Schedule 40 - 6"x1½"			8		8
Pipe cutter (<i>optional</i>)	2" capacity					
Pry bar, pinch point	60"			6	2	8
Rebar cutter	¾" electric/hydraulic				1	1
Rotary saw - gasoline	14" or 16" Belt adjusting tool Spare belt Spare spark plug				2	2
Rotary saw blades	14/16" carbide wood cutting				4	4
Rotary saw blades	14/16" metal cutting				4	4
Rotary saw blades	14/16" diamond blade				4	4
Rotary hammer	1½" electric with depth range capability	1			2	3
Reciprocating saw - electric	6 metal blades 6 wood blades	1	1		1	3
Reciprocating saw – cordless (<i>optional</i>)	Battery with charger 6 metal blades 6 wood blades	1	1		1	
Rope kit (<i>optional</i>)	1 static kernmantle (75' utility) 3 orange webbing (20') 1 green webbing (5') 3 rescue pulleys (2" or 4") 2 prusik cords			1		1
Single jack hammer	3-4 lbs.	4	4		2	10
Sledge hammer	8-10 lbs.	1	1	<i>optional</i>	2	4
Speed square		12	12			24
Shovel	Round point	1				1
Shovel	Square point	1				1
Tape measures	25'	12	12	2	2	28
Technical search device (<i>optional</i>)	Optical with articulating viewing				1	1
Tool kit	Miscellaneous tools					1
Utility knife	Razor knife with spare blades	12	12			24
Utility rope	100'				1	1
Ventilation fan (<i>optional</i>)	With 20' ducting				1	1
Water can	Pressurized				1	1
Webbing	1"-15' long				8	8
PROPS						
Concrete - slabs	4'x4'x6" #3 rebar 12" on center 2,500 psi 5 sack mix				12	12
Concrete - slabs	4'x4'x3" #3 rebar 12" on center 2,500 psi 5 sack mix				12	12
Concrete - pipe	48"x8'				2	2
Steel - plates	¼"x4'x8' (can be scrap)				2	2



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Rescue Systems 2 Equipment Standards	Description	Exterior Shores	Interior Shores	Lifting & Moving	Breaking & Breaching	Total 4 Modules
Steel – I Beam	Various lengths (can be scrap)				2	2
Steel – wire rope	½"x10'				1	1
Steel – Q decking	10'x2'x20 gauge				2	2
Wood – dunnage	4"x4"x8'				12	12
Concrete slabs	5'x8'x12" reinforced concrete slabs (6,000 lbs. each)			2		2
Concrete slabs	5'x10'x6"			1		1
Pipe shaped props	4'x8' solid reinforced concrete cylinder (15,000 lbs.)			1		1

SITE DEVIATION

In the event that a training site has a facility, structure, or prop that does not comply with the RS2 minimum site requirements and equipment standards, the site has the opportunity to apply for a site deviation. A RS2 Senior Instructor or designee submits to the Chief of State Fire Training a formal letter requesting site deviation. This letter must describe the site deviation in detail by listing:

- The need and parameters of the deviation.
- New or revised lesson plans linked to the deviation that ensures consistency with the standards and behavioral objectives of the approved RS2 curriculum.
- Demonstration, either live or through visual aids, of any deviated technique or procedure.

The Chief of State Fire Training will review the request for site deviation. Any deficiencies will be appropriately documented and discussed with the RS2 Senior Instructor or designee requesting the site deviation. If site deviation is denied, a provisional accreditation may be granted at this time. If a site is not approved, they have three (3) months to comply with the site requirements identified as deficient in the inspection report.

SITE ACCREDITATION PROCESS

Rescue Systems 2 Training Sites will be inspected for compliance with the RS2 minimum site requirements and equipment standards. Sites may be accredited as one of the following:

- Full Accreditation
 - A permanent-use site that fully meets the RS2 minimum site requirements and equipment standards.
- Temporary Accreditation
 - A short-term use site that meets the RS2 minimum site requirements and equipment standards.
 - Typically, these sites are in areas where permanent sites are not practical or available.
 - Accreditation is granted for the purpose of delivering a set number of courses.
 - Once the training is complete, the temporary accreditation is rescinded.

Full Accreditation

A RS2 Training Site representative submits to the Chief of State Fire Training a formal letter requesting full accreditation for a permanent site. This letter must describe the site in detail by listing the facilities, structures, work areas, materials, props, tools, and equipment available and ready for delivering a RS2 course. State Fire Training staff and/or a registered RS2 Senior Instructor, operating under the direction of the Chief of State Fire Training, will conduct an inspection of the RS2 Training Site. Any discrepancies or deficiencies will be appropriately documented and discussed with the site representative at the time of the inspection. Copies of all inspection documents and notes will be kept on file. The Chief of State Fire Training will notify the RS2 Training Site of their status after the inspection.

Temporary Accreditation

A registered RS2 Senior Instructor or designee submits to the Chief of State Fire Training a formal letter requesting temporary accreditation for delivering a RS2 course. This letter must describe the site in detail by listing the facilities, structures, work areas, materials, props, tools, and equipment available and ready for delivering a RS2 course. Photographs of each required structure, work area, and prop must be included in the application package. A completed "Request for Rescue Systems Course Scheduling" providing the dates of the upcoming course and all instructors must be included in the application package. Temporary accreditation must be requested at least ninety (90) days before the beginning date of the course.



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Appeals

Step 1

The RS 2 Training Site representative must submit in writing to the Chief of State Fire Training all evidence to support reversing SFT's denial of site accreditation. After review of all submitted materials, the Chief of State Fire Training will notify the site representative in writing of the decision to uphold, modify, or withdraw the denial of accreditation.

Step 2

If the denial of accreditation is upheld, the site representative may appeal the findings to the Assistant State Fire Marshal.

The RS2 Training Site representative must submit in writing all evidence to support reversing the decision of the Chief of Education and Training. After review of all submitted materials, the Assistant State Fire Marshal will notify the site representative in writing of the decision to uphold, modify, or withdraw the denial of accreditation.

The decision of the Assistant State Fire Marshal is final.