

# DEPARTMENT OF FORESTRY AND FIRE PROTECTION OFICE OF THE STATE FIRE MARSHAL

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# ATTACHMENT 7

Date: November 21, 2013

**To:** State Board of Fire Services

From: Rodney Slaughter

Deputy State Fire Marshal, Specialist III

### SUBJECT/AGENDA ACTION ITEM:

Hybrid-Internet Course Evaluation

### **Recommended Actions:**

Information Only

## **Background Information:**

In October 17, 2008, STEAC accepted the "Company Officer Internet/Hybrid Beta Test Final Report" from Alan Hancock College. In that report a matrix was developed that identified topics in the course and if they should be taught in the classroom or could be taught via distance learning (internet). That matrix is used by SFT to in the approval of Internet/Hybrid classes. Alan Hancock College continues to offer on-line courses that were approved for Hybrid delivery.

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

The classes that have been approved by SFT for Hybrid delivery include; Fire Command 1A, 1B, 1C; Investigation 1A, Fire Management 1, Fire Prevention 1A and 1B and Training Instructor 1A, 1B and 1C. All of these courses have been recently updated and are about to be released. Analyzing these courses for hybrid delivery goes beyond the scope of work for the contract with CSU, Sacramento and the scope for the curriculum cadres. Community Colleges are interested in immediately adopting the updated courses for hybrid delivery as soon as they are released. A STEAC sub-committee was established to determine if new courses can be adopted and approved for hybrid delivery using the attached matrix as a guide.

# Appendix A CFSTES Fire Officer Classes Classroom\Internet Matrix

	I-300: INTERMEDIATE ICS (1994) FSTEP							
		1						
1	Course Content	Time	С	D	Rationale			
1	NWCG NFES 2452 Module 7	5		\ <u>'</u>				
2	NWCG NFES 2454 Module 8	5		X				
3	NWCG NFES 2456 Module 9	4		Х				
4	NWCG NFES 2458 Module 10	4		\ <u>'</u>				
5	NWCG NFES 2460 Module 11	8		Х				
	Classroom	27:00 T						
D: L	Distance	I I II S CIAS	SS II	as n	ot been approved for internet delivery			
	FIRE COMMAND 1A: COMMAND PRI Course Content	Time	C	D	Rationale			
1	Orientation and Administration	1:30		X	Rationale			
2	The Learning Process	0:15		Х				
3	Fire Command Overview	0:30		Х				
4	Fire Chemistry	0:30		Х				
5	Fire Phases	0:45		X				
6	Effects of Time	0:30		Х				
7	Fire Behavior within Structures	0:30		Х				
8	Extinguishing Agents	0:30		X				
9	Water Application	0:45		Х				
10	Protection Systems	1:00		Х				
11	Building Construction	0:45		Х				
12	Occupancy Types	0:15		Х				
13	Pre-Fire Planning	0:30		Х				
14	Fire Data	0:15		Х				
15	Local Resources	0:15		Х				
16	State and Federal Resources	0:15		Х				
17	Fireground Safety	0:30		Х				
18	Size-up	1:00		Χ				
19	Strategy, Tactics, and Methods	0:30		Х				
20	Report on Conditions	0:15		Χ				
21	Role of the First-In Officer	0:45		Х				
22	Company Operations	0:15		Х				
23	Determining Resources Requirements	0:30		Χ				
24	Apparatus Placement	0:30		Χ				
25	Initial Fire Attack	0:30		Χ				
26	Management Overview	0:30		Χ				
27	The Fire Service	0:30		Χ				
28	The Company Officer	0:30		Χ				
29	Pressure of Command	0:45		Χ				
30	Performance Standards	1:15		Χ				
31	Levels of Emergency	0:15		Χ				
32	Decision Making	1:00		Χ				
33	Communications	0:30		Χ				
34	Management by Objectives (MBO)	0:30		Χ				
35	Divisions of Fire Fighting	0:45		Χ				
36	Command/Control Components	0:45		Χ				
37	Simulation Overview	1:00	Χ					
38	Skull Session Exercises	3:00	Χ					
39	Simulator Use	12:00	Χ					
40	Daily Reviews	2:00		Χ				
41	Course Review and Certification Exam	1:00		Χ				
	classroom 16 hours	40:00 To	otal	Ηοι	ırs			
D: E	Distance 24 hours							

FIRE COMMAND 1B: INCIDENT MANAGEMENT FOR COMPANY OFFICERS (1998) CFSTES							
	Course Content	Time	С	D	Rationale		
Unit	1: Course Overview and ICS Review						
1	Orientation and Administration	1:00		Χ			
2	Course Overview	1:00		Χ			
3	Fire Command 1A Review	2:00		Χ			
4	Concepts of ICS Organization	3:00		Χ			
Unit	2: Multi-Casualty Incidents						
1	Components of Triage and START	2:00		Χ			
2	ICS and EMS Multi-Casualty	1:30		Χ			
3	ICS-MCI Implementation Overview	1:30		Χ			
Unit	3: Hazardous Materials Incidents						
1	Hazardous Materials Overview	0:30		Χ			
2	Properties of Hazardous Materials	1:00		Χ			
3	Toxicology	0:30		Χ			
4	Site Control/Work Zones	0:30		Χ			
5	Evacuation Considerations	1:00		Χ			
6	Decision-Making Process	0:30		Χ			
7	ICS & The Hazardous Materials Incident	1:30		Χ			
Unit	4: Wildland Fire Incidents						
1	Factors Affecting Wildland Fires	2:00		Χ			
2	Defensive and Offensive Strategies in Wildland Fire Fighting	0:30		Х			
3	Use of Direct and Indirect Attack Methods on Wildland Fires	1:00		Х			
4	Structure Protection and Triage in Wildland Fires	2:00		Х			
5	Wildland Fire Safety	1:00		Χ			
6	Simulation Exercises	14:00	Χ				
7	Course Review and Certification Exam	2:00		Χ			
	Classroom 14 hours Distance 26 hours	40:00 T	otal	Hou	ırs		

	FIRE COMMAND 1C: I-ZONE FIRE I	FIGHTING	G FO	R C	OMPANY OFFICERS (2004) CFSTES
	Course Content	Time	С	D	Rationale
Unit 1	: Introduction				
1-1	Orientation and Administration	1:00		Χ	
1-2	Authority	0:30		Χ	
Unit 2	: Fire Environment				
2-1	Fire Behavior and Weather	2:30		Х	
2-2	Fire Prediction Systems	1:00		Χ	
Unit 3	: ICS				
3-1	Review of the Incident Command	1:00		Χ	
	System				
3-2	Duties and Responsibilities of the	2:00		Χ	
	Company Officer				
3-3	Incident Action Plan	1:30		Χ	
Unit 4	: I-Zone Operation Principles				
4-1	Resources	3:00		Χ	
4-2	Communications	1:30		Χ	
4-3	Strategy and Tactics	1:00		Χ	
4-4	I-Zone Size-up	1:00	Х		
4-5	Report on Conditions	2:30		Χ	
Unit 5	: Safety and Survival				
5-1	Introduction to Safety and Survival in	0:45		Χ	
	the I-Zone				
5-2	The Risk Management Process	1:00		Χ	
5-3	Entrapment Avoidance	0:45		Χ	
5-4	Last Resort Survival	1:00		Χ	
5-5	Properly Refusing Risk	0:30		Χ	
5-6	Fire Fighter Fatality and Near-miss	4:30	Х		
	Case Studies				
Unit 6	: I-Zone Incident Operations				
6-1	Pre-incident Operations	2:00		Χ	
6-2	Incident Operations	5:00	Χ		
6-3	Post-incident Operations	1:00		Χ	
	Unit Tests	3:00		Χ	
	Course Review and Certification Exam	2:00		Χ	
C: Cla	assroom 10.5 hours	40:00 T	otal	Hou	ırs
D: Di	stance 29.5 hours				

	FIRE INSTRUCTOR 1A: INSTRU	CTIONAL	TEC	HNI	QUES, PART 1 (1996) CFSTES				
	Course Content	Time	С	D	Rationale				
1	Orientation and Administrative Details	1:00		Х					
2	Reasons for Instructor 1A	1:00		Х					
3	Utilization of the Occupational Analysis	2.00		Χ					
4	Development of a Course Outline	2:00	1	1	Prep work online				
5	Procedures Used for the Completion of a	2:00	1	1	Prep work online				
	Job Breakdown								
6	Identification of Instructional Terms	1:00		Χ					
7	Concepts of Learning	1:00		Χ					
8	Introduction to Levels of Learning	1:00		Χ					
9	Construction of Behavioral Objectives	2:00	Х						
10	Manipulative Lesson Planning	3:00	Х						
11	Qualities of a Good Instructor	1:00		Χ					
12	Introduction to the Psychology of	1:00		Х					
	Learning								
13	Methods Used to Evaluate Teaching	2:00	X						
	Demonstrations								
14	Teaching Demonstrations	15:00	Х						
15	The Impact of EEO and AA Programs	1:00		Χ					
16	The Role and Responsibilities of the	1:00		Х					
	Instructor								
17	Evaluation of Course Effectiveness	2:00		Χ					
18	Course Review and Certification Exam	1:00		Х					
	C: Classroom 24 hours 40:00 Total Hours								
D: [	D: Distance 16 hours								
	FIRE INSTRUCTOR 1B: INSTRUCTIONAL TECHNIQUES, PART 2 (1997) CFSTES								
	Course Content	Time		D	Rationale				
1	Orientation and Administration	0:30		Χ					

	FIRE INSTRUCTOR 1B: INSTRUCTIONAL TECHNIQUES, PART 2 (1997) CFSTES							
	Course Content	Time	С	D	Rationale			
1	Orientation and Administration	0:30		Χ				
2	Reasons for Fire Instructor 1B	0:30		Χ				
3	Course Outline Development	1:00		Χ				
4	Technical Lesson Plan Components	1:00		Χ				
5	Levels of Instruction	1:00		Χ				
6	Student Behavioral Objectives	2:00	Χ					
7	Technical Lesson Plan Development	1:30	Χ					
8	Introduction to Instructional Aids	1:00		Χ				
9	Utilization of Instructional Aids	1:30		Χ				
10	Introduction to Information and Activity	1:00		Χ				
	Sheets							
11	Managing the Classroom Environment	0:30		Χ				
12	Student Application Techniques	1:30		Χ				
13	Methods of Technical Lesson Plan	0:30		Χ				
	Delivery							
14	Introduction to Evaluation and Testing	1:00		Χ				
15	Utilization of Evaluation Tools	1:00		Χ				
16	Introduction to Test Construction	1:30		Χ				
17	Methods Used to Evaluate Teaching	0:30	Χ					
	Demonstrations							
18	Teaching Demonstrations	16:00	Х					
19	Administrative Details (Quizzes, Daily	5:00		Χ				
	Review, Student Assistance)							
20	Course Review and Certification Exam	1:30		Χ				
C: C	C: Classroom 20 hours		40:00 Total Hours					
D: [	D: Distance 20 hours							

	FIRE INVESTIGATION 1A: FIRE ORIGIN & CAUSE DETERMINATION (1996) CFSTES							
	Course Content	Time	С	D	Rationale			
1	Orientation and Administration	1:00		Χ				
2	Introduction to Fire Investigation	1:00		Χ				
3	Fire Behavior	4:00		Χ				
4	Legal Aspects of Fire Investigation	3:00		Χ				
5	Arson Law	1:00		Χ				
6	Fire Scene Documentation	1:00		Χ				
7	Point of Origin Determination	4:00	3	1	Prep work online			
8	Accidental Ignition Sources	3:00	2	1	Prep work online			
9	Electrical Ignition Sources	2:30	Χ					
10	Arson Fire Indicators	4:00	3	1	Prep work online			
11	Incendiary Devices	1:00		Χ				
12	Structure Fire Investigation	4:30	3:3	1	Prep work online			
			0					
13	Vehicle Fire Investigation	2:00		Χ				
14	Wildland Fire Investigation	4:00		Χ				
15	Explosions	2:00		Χ				
16	16 Course Review and Certification Exam			Χ				
C: C	lassroom 14 hours	40:00 Total Hours						
D: E	Distance 26 hours							

FIF	FIRE MANAGEMENT 1: MANAGEMENT/SUPERVISION FOR COMPANY OFFICERS (2000) CFSTES							
	Course Content	Time	С	D	Rationale			
Unit 1	- Introduction							
1-1	Orientation and Administration	1:00		Χ				
5-1	Introduction to Management &	1:30		Χ				
	Supervision							
Unit .	2 – Supervision							
2-1	Principles of Organizations and	1:00		Χ				
	Organizational Structure							
2-2	Motivation	2:00		Χ				
2-3	Delegation	1:00		Χ				
2-4	Problem Solving/Decision Making	1:30		Х				
2-5	Verbal Communication	2:00		Χ				
2-6	Written Communication	1:00		Х				
2-7	Group Dynamics	2:00	Х					
2-8	Managing Conflict	1:00	Х					
2-9	Performance Evaluations	1:30	Х					
2-10	Coaching, Counseling & Progressive	1:30	Х					
	Discipline							
2-11	Due Process	1:00		Χ				
5-2	Grievance Handling	1:00	Х					
Unit 3	- Management							
5-3	Internal and External Influences	2:00		Х				
3-1	Elements of Management	2:00		Χ				
3-2	Managing Change	1:00		Χ				
5-4	Time Management	1:30		Χ				
Unit 4	- Leadership							
4-1	Basic Views of Leadership	1:00		Χ				
4-2	Situational Leadership	1:00		Χ				
5-5	Leadership Qualities and Traits	1:00		Χ				
Unit 5	- Human Relations							
5-6	Managing The Workplace	2:00	1	1	Prep work online			
	Environment							
5-7	Affirmative Action, Equal Employment	1:30		Χ				
	Opportunity, and ADA							
Unit 6	<ul> <li>Safety and Wellness Programs</li> </ul>							
6-1	Safety Management	1:30		Χ				
6-2	Stress Management and Wellness	1:00		Χ				
6-3	NFPA 1500 Standard	1:00		Χ				
Unit 7	<ul> <li>Laws, Standards, and Liability</li> </ul>							
6-4	Liability of The Company Officer	1:00		Χ				
	Quizzes	2:00		Χ				
	Course Review & Certification Exam	1:30		Χ				
C: Cla	assroom 8 hours	40:00 T	otal	Hou	ırs			
D: Di	stance 32 hours							
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	FIRE PREVENTION 1A: INTRODUCTION	ON TO TH	IE CA	LIF	FORNIA FIRE CODE (2003) CFSTES
	Course Content	Time	С	D	Rationale
Unit 1	: Responsibility and Authority				
1-1	Orientation and Administration	2:00		Χ	
1-2	Terminology Relating to Responsibility	0:30		Х	
	and Authority	0.00			
1-3	Legally Established Responsibilities and	1:30		Χ	
' '	Empowerment	1.00		^	
1-4	Legal Responsibilities of The Inspector	2:00		Χ	
1-5	Understanding, Reading, and Using The	2:00		Х	
	California Fire Code	2.00		,,	
Unit 2	: Occupancy Classification and Types of Co	nstruction	1		
2-1	Terminology Relating to Occupancy	2:00	T	Χ	
	Classification and Construction	2.00		,,	
2-2	Building Construction Classifications	1:30		Χ	
2-3	Relationship of Fire Protection to	1:00		Х	
	Building Construction & Occupancy	1.00		,,	
2-4	Classification of Occupancies	3:00		Χ	
	: Egress Requirements	0.00			
3-1	Terminology Relating to Egress	1:00		Χ	
3-2	Determining Adequate Means of Egress	2:00		X	
3-3	Means of Egress Requirements	3:00		X	
3-4	Maintaining The Egress System	1:00		X	
	: Fire-Resistive Assemblies	1.00			
4-1	Terminology Relating to Fire-Resistive	0:30		Χ	
7-1	Assemblies	0.30		^	
4-2	Types of Classes & Roof Coverings	1:00		Χ	
4-3	Purpose & Location of Fire Rated	2:00		X	
' '	Building Construction & Components	2.00		^	
4-4	Fire Doors and Windows	0:30		Χ	
	: General Fire Safety Provisions	0.00	11		
5-1	General Fire Safety	1:30		Χ	
5-2	Fire Safety Requirements for	1:00		Х	
-	Decorative Materials & Furnishings				
5-3	Fire Drills and Emergency Evacuation	0:30		Χ	
	Plans				
5-4	High-Piled Storage Requirements	1:00		Χ	
5-5	Electrical Fire Hazards & Safety Devices	1:00		X	
	: Principles and Procedures for Fire Inspec		1 1		
6-1	Factors Relating to Life Safety	2:00		Χ	
6-2	Conducting a Life Safety Assessment	1:30		Χ	
6-3	General Fire Inspection Practices	1:30		X	
6-4	Procedures for Correcting Fire Hazards	1:30		Χ	
	and Modifications of Requirements			-	
6-5	Handling Fire Prevention Complaints	0:30		Χ	
	Course Review & Certification Exam	1:30		Χ	
C: Cla	ssroom 0 hours	40:00 T	otal		urs
	stance 40 hours				

Course Content   Time   C   D   Rationale		FIRE PREVENTION 1B: Introduc	tion to th	e Califo	rnia Fire Code (2003) CFSTES
Dniline					
Unit 1: Introduction to Fire Prevention 18	Classro	oom 0 hours		•	
Description and Administration   2:30   X	Online	40 hours			
Unit 2: Flammable and Combustible Liquids and Gases Flammable and Combustible Uquids Terms and Characteristics 2-2 Acceptable Containers for Flammable and Combustible Liquids and Combustible Liquids 2-3 Introduction to Material Safety Data 0:30 X Sheets 2-4 Inside Storage of Flammable and Combustible Liquids 2-5 Outside Storage of Flammable and 1:00 X Combustible Liquids 2-6 Dispensing, Using, Mixing, and 1:30 X Handling Flammable and Combustible Liquids 2-7 Properties of Compressed, Cryogenic, and Liquefied Gases 2-8 Fire Hazards of Compressed and 1:00 X Liquefied Gases 2-9 Procedures for Inspecting Motor Vehicle 0:30 X Dispensing, Stations 2-10 Procedures for Inspecting LPG 0:30 X Dispensing Stations 2-11 Procedures for Inspecting IPG 0:30 X Dispensing Stations 2-12 Methods for Controlling Ignition 1:00 X Dispensing Stations Sources and Explosive Atmospheres Unit 3: Hazardous Materials and Explosives 3-1 Hazardous Materials Terms & 1:00 X Characteristics 3-2 Sources of Technical Information 0 0:30 X Hazardous Materials Plazardous Materials 0 0:15 X Management Plan (HMMP) And Managem	Unit 1	: Introduction to Fire Prevention 1B			
Elammable and Combustible Liquids   Terms and Characteristics	6-6	Orientation and Administration	2:30	Х	
Elammable and Combustible Liquids   1:00   X   Terms and Characteristics   2-2   Acceptable Containers for Flammable   0:30   X   sheets   3-4   Introduction to Materials Safety Data   Sheets   1:00   X   Sheets   Combustible Liquids   1:00   X   Combustible Liquids   2-5   Outside Storage of Flammable and   1:00   X   Combustible Liquids   2-6   Dispensing, Using, Mixing, and   Handling Flammable and Combustible Liquids   2-7   Properties of Compressed, Cryogenic, and Liquefied Gases   2-8   Fire Hazards of Compressed and Liquefied Gases   2-9   Procedures for Inspecting Motor Vehicle   0:30   X   Dispensing Stations   2-10   Procedures for Inspecting LPG   0:30   X   Coccupancies   2-11   Methods for Controlling Ignition   1:00   X   Enrich Application Occupancies   2-12   Methods for Controlling Ignition   1:00   X   Sources and Explosive Atmospheres   Unit 3: Hazardous Materials Terms & Characteristics   3-2   Sources of Technical Information on   0:30   X   Characteristics   3-3   Regulating Hazardous Materials   0:15   X   Management Plan (HMMP)   3-5   Storage and Transfer Practices of   1:00   X   Storage and Transfer Practices of   1:00   X   Storage and Transfer Practices of   1:00   X   Storage of Hazardous Materials   1:	Unit 2	: Flammable and Combustible Liquids and	Gases		
Terms and Characteristics   2-2   Acceptable Containers for Flammable   0:30   X   and Combustible Liquids   Sheets   Sh				Х	
and Combustible Liquids 2-3 Introduction to Material Safety Data Sheets 2-4 Inside Storage of Flammable and Combustible Liquids 2-5 Outside Storage of Flammable and Combustible Liquids 2-6 Dispensing, Using, Mixing, and Handling Flammable and Combustible Liquids 2-7 Properties of Compressed, Cryogenic, and Liquefled Gases 2-8 Fire Hazards of Compressed and Liquefled Gases 2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations 2-10 Procedures for Inspecting LPG Occupancies 2-11 Procedures for Inspecting Flammable Finish Application Occupancies 2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres Unit 3: Hazardous Materials and Explosives 3-1 Hazardous Materials Terms & 1:00 X Characteristics 3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials Management Plan (HMMP) 3-5 Storage and Transfer Practices of Compressed and Liquefled Gases 3-6 Hazards of Storage of Hazardous Materials 1:00 X Storage of Explosives Atmerials 1:00 X Storage and Transfer Practices of Compressed and Liquefled Gases 3-6 Hazardos of Explosives and Fireworks 1:00 X Storage of Hazardous Materials 1:00 X Haterials 1:00 X Storage of Hazardous Materials 1:00		Terms and Characteristics			
2-3	2-2	Acceptable Containers for Flammable	0:30	Х	
Sheets 2-4 Inside Storage of Flammable and Combustible Liquids 2-5 Outside Storage of Flammable and 1:00 X Combustible Liquids 2-6 Dispensing, Using, Mixing, and 1:30 X Handling Flammable and Combustible Liquids 2-7 Properties of Compressed, Cryogenic, and Liquefied Gases 2-8 Fire Hazards of Compressed and Liquefied Gases 2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations 2-10 Procedures for Inspecting LPG 0:30 X Dispensing Stations 2-11 Procedures for Inspecting LPG 0:30 X Occupancies 2-11 Procedures for Inspecting LPG 0:30 X Firish Application Occupancies 2-11 Procedures for Inspecting LPG 0:30 X Dispensing Stations 2-11 Procedures for Inspecting LPG 0:30 X Dispensing Stations 3-1 Hazardous Materials and Explosives 3-1 Hazardous Materials and Explosives 3-2 Sources of Technical Information on 0:30 X Characteristics 3-3 Regulating Hazardous Materials 0:30 X Management Plan (HMMP) Management Plan (HMMP) Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazardous Materials 1:00 X Compressed and Liquefied Gases 3-7 Storage of Hazardous Materials 1:00 X Handling, & Storage of Hazardous Materials		and Combustible Liquids			
Combustible Liquids 2-5 Outside Storage of Flammable and Combustible Liquids 2-6 Dispensing, Using, Mixing, and Handling Flammable and Combustible Liquids 2-7 Properties of Compressed, Cryogenic, and Liquefied Gases 2-8 Fire Hazards of Compressed and Liquefied Gases 2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations 2-10 Procedures for Inspecting LPG 0:30 X Occupancies 2-11 Procedures for Inspecting Inspecting LPG 0:30 X Dispensing Stations 2-11 Procedures for Inspecting Inspecting LPG 0:30 X Occupancies 2-11 Procedures for Inspecting Flammable Finish Application Occupancies 2-12 Methods for Controlling Ignition 1:00 X Sources and Explosive Atmospheres Unit 3: Hazardous Materials and Explosives 3-1 Hazardous Materials and Explosives 3-2 Sources of Technical Information on 0:30 X Characteristics S Characteristics S Characteristics S Characteristics S Characteristics S Characteristics O:30 X Characteristics S Characteristics O:30 X Characteristics S Characteristics O:30 X Characteristi	2-3		0:30	X	
2-5 Outside Storage of Flammable and Combustible Liquids 2-6 Dispensing, Using, Mixing, and Handling Flammable and Combustible Liquids 2-7 Properties of Compressed, Cryogenic, and Liquefied Gases 2-8 Fire Hazards of Compressed and Liquefied Gases 2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations 2-10 Procedures for Inspecting LPG Occupancies 2-11 Procedures for Inspecting LPG Occupancies 2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres Unit 3: Hazardous Materials and Explosives 3-1 Hazardous Materials Terms & 1:00 X Characteristics 3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials 3-3 Regulating Hazardous Materials 3-4 Introduction to Hazardous Materials 3-5 Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazards of Explosives and Fireworks 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials 3-10 Inspection of The Extinguisher 3-10 Portable Fire Extinguisher 3-10 Portable Fire Extinguisher 3-10 Portable Fire Extinguisher	2-4		1:00	Х	
2-6 Dispensing, Using, Mixing, and Handling Flammable and Combustible Liquids  2-7 Properties of Compressed, Cryogenic, and Liquefied Gases  2-8 Fire Hazards of Compressed and Liquefied Gases  2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations  2-10 Procedures for Inspecting LPG Occupancies  2-11 Procedures for Inspecting LPG Occupancies  2-12 Methods for Controlling Ignition Finish Application Occupancies  2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres  Unit 3: Hazardous Materials Terms & 1:00 X Characteristics  3-1 Hazardous Materials Terms & 1:00 X Characteristics  3-2 Sources of Technical Information on Hazardous Materials  3-3 Regulating Hazardous Materials O:30 X Introduction to Hazardous Materials  3-4 Introduction to Hazardous Materials O:15 X Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases  3-6 Hazards of Explosives and Fireworks  3-7 Storage of Hazardous Materials  3-8 NFPA 704 Identification Systems  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguishers  0:00 X	2-5	Outside Storage of Flammable and	1:00	Х	
2-8 Fire Hazards of Compressed and Liquefied Gases 2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations 2-10 Procedures for Inspecting LPG Occupancies 2-11 Procedures for Inspecting Flammable Finish Application Occupancies 2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres 3-1 Hazardous Materials and Explosives 3-1 Hazardous Materials Terms & 1:00 X Characteristics 3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials 3-4 Introduction to Hazardous Materials 3-5 Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials 3-10 Inspection of Tire Extinguishers 4-1 Portable Fire Extinguishers 3-10 Portable Fire Extinguishers 3-2 Procedures for Inspecting Motor Vehicle 0:30 X V V V V V V V V V V V V V V V V V V	2-6	Dispensing, Using, Mixing, and Handling Flammable and Combustible	1:30	X	
2-8 Fire Hazards of Compressed and Liquefied Gases 2-9 Procedures for Inspecting Motor Vehicle Dispensing Stations 2-10 Procedures for Inspecting LPG Occupancies 2-11 Procedures for Inspecting Flammable Finish Application Occupancies 2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres 3-1 Hazardous Materials Terms & 1:00 X Characteristics 3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials 3-4 Introduction to Hazardous Materials Management Plan (HMMP) 3-5 Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials Waterials Unit 4: Portable Fire Extinguishers 4-1 Portable Fire Extinguishers  3-2 Na V V V V V V V V V V V V V V V V V V	2-7		1:00	Х	
Dispensing Stations 2-10 Procedures for Inspecting LPG Occupancies Procedures for Inspecting Flammable Finish Application Occupancies 2-11 Procedures for Controlling Ignition Sources and Explosive Atmospheres Unit 3: Hazardous Materials and Explosives 3-1 Hazardous Materials Terms & 1:00 X Characteristics 3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials 3-4 Introduction to Hazardous Materials Management Plan (HMMP) 3-5 Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard Unit 4: Portable Fire Extinguishers 4-1 Portable Fire Extinguishers 0:30 X	2-8	Fire Hazards of Compressed and	1:00	Х	
2-10 Procedures for Inspecting LPG Occupancies  2-11 Procedures for Inspecting Flammable Finish Application Occupancies  2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres  Unit 3: Hazardous Materials and Explosives  3-1 Hazardous Materials Terms & 1:00 X Characteristics  3-2 Sources of Technical Information on Hazardous Materials  3-3 Regulating Hazardous Materials  3-4 Introduction to Hazardous Materials  Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases  3-6 Hazardos Materials  3-7 Storage of Hazardous Materials  3-8 NFPA 704 Identification Systems  3-9 Classification By Hazard  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguishers  0:30 X  1:00 X  X  X  X  X  1:00 X  X  1:00 X  X  X  X  X  X  X  X  X  X  X  X  X	2-9		0:30	Х	
2-11 Procedures for Inspecting Flammable Finish Application Occupancies  2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres  Unit 3: Hazardous Materials and Explosives  3-1 Hazardous Materials Terms & 1:00 X Characteristics  3-2 Sources of Technical Information on Hazardous Materials  3-3 Regulating Hazardous Materials  3-4 Introduction to Hazardous Materials Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases  3-6 Hazards of Explosives and Fireworks  3-7 Storage of Hazardous Materials  3-8 NFPA 704 Identification Systems  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguishers  1:00 X	2-10	Procedures for Inspecting LPG	0:30	Х	
2-12 Methods for Controlling Ignition Sources and Explosive Atmospheres  Unit 3: Hazardous Materials and Explosives  3-1 Hazardous Materials Terms & 1:00 X Characteristics  3-2 Sources of Technical Information on Hazardous Materials  3-3 Regulating Hazardous Materials  3-4 Introduction to Hazardous Materials  Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases  3-6 Hazards of Explosives and Fireworks  3-7 Storage of Hazardous Materials  3-8 NFPA 704 Identification Systems  3-9 Classification By Hazard  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguishers	2-11	Procedures for Inspecting Flammable	1:00	Х	
Unit 3: Hazardous Materials and Explosives  3-1	2-12	Methods for Controlling Ignition	1:00	Х	
3-1 Hazardous Materials Terms & 1:00 X Characteristics  3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials 3-4 Introduction to Hazardous Materials Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher  1:00 X  1:00 X  1:00 X  3 X  3 1:00 X  4 1:00 X	Unit 3				L
3-2 Sources of Technical Information on Hazardous Materials 3-3 Regulating Hazardous Materials 3-4 Introduction to Hazardous Materials Management Plan (HMMP) 3-5 Storage and Transfer Practices of Compressed and Liquefied Gases 3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials Unit 4: Portable Fire Extinguishers 4-1 Portable Fire Extinguishers  0:30 X  X  X  X  X  X  X  X  X  X  X  X  X		Hazardous Materials Terms &	1:00	X	
3-4 Introduction to Hazardous Materials Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases  3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher  0:15 X  X  1:00 X  0:15 X  3:00 X  1:00 X	3-2		0:30	Х	
Management Plan (HMMP)  3-5 Storage and Transfer Practices of Compressed and Liquefied Gases  3-6 Hazards of Explosives and Fireworks  3-7 Storage of Hazardous Materials  3-8 NFPA 704 Identification Systems  3-9 Classification By Hazard  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher  1:00 X  X  3 X  3 Storage of Hazardous Materials  1:00 X  1:00 X  X  1:00 X  X  X  X  X  X  X  X  X  X  X  X  X	3-3	Regulating Hazardous Materials	0:30	Х	
Compressed and Liquefied Gases  3-6 Hazards of Explosives and Fireworks  1:00 X  3-7 Storage of Hazardous Materials  1:00 X  3-8 NFPA 704 Identification Systems  3-9 Classification By Hazard  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher  0:00 X  X	3-4		0:15	X	
3-6 Hazards of Explosives and Fireworks 3-7 Storage of Hazardous Materials 3-8 NFPA 704 Identification Systems 3-9 Classification By Hazard 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher  1:00 X  X  1:00 X	3-5		1:00	X	
3-7 Storage of Hazardous Materials 1:00 X 3-8 NFPA 704 Identification Systems 0:15 X 3-9 Classification By Hazard 0:30 X 3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials Unit 4: Portable Fire Extinguishers 4-1 Portable Fire Extinguisher 0:00 X	3-6		1:00	Х	
3-9 Classification By Hazard 0:30 X  3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher 0:00 X	3-7	Storage of Hazardous Materials	1:00	X	
3-10 Inspection of The Incidental Use, Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher 0:00 X	3-8	NFPA 704 Identification Systems	0:15		
Handling, & Storage of Hazardous Materials  Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher  0:00 X					
Unit 4: Portable Fire Extinguishers  4-1 Portable Fire Extinguisher 0:00 X	3-10	Handling, & Storage of Hazardous	1:00	X	
4-1 Portable Fire Extinguisher 0:00 X	Unit 4		I	1 1	L
		Portable Fire Extinguisher	0:00	X	
4-2 Portable Fire Extinguisher Placement 0:30 X	4-2		0:30	X	
4-3 Procedures for Inspecting Portable Fire 0:30 X					

	Extinguishers					
Unit 5	: Special Fixed Fire Suppression Systems					
5-1	Fixed Fire Protection Systems	1:00		Κ .		
5-2	Procedures for Inspecting Fixed Fire	1:00		Κ		
	Protection Systems					
5-3	Procedures for Inspecting Commercial	0:30		Κ		
	Cooking Equipment					
	: Detection and Alarm Systems	0.00	1 1	. 1		
6-1	Detection and Alarm Systems Terms and Characteristics	0:30		Κ		
6-2	Fire Alarm System Components	0:45		Κ .		
6-3	Fire Alarm Signaling System Classifications	0:30		K		
6-4	Procedures for Inspecting Fire Alarm	0:30		Κ		
	Systems					
6-5	CFC Requirements for Fire Alarm	0:15		Κ		
	Systems					
	: Water-Based Fire Protection Systems					
7-1	Water-Based Fire Protection Systems	1:00		Κ		
	Terms and Characteristics					
7-2	Water Supply Systems	0:30		Κ		
7-3	Sprinkler Systems Benefits, Limitations, and Design	0:30		Κ		
7-4	Types of Sprinkler Systems	1:00		Κ .		
7-5	Sprinkler System Components	1:00		K		
7-6	Procedures for Inspecting Sprinkler Systems	1:00		X		
7-7	Procedures for Conducting Tests on Wet-Pipe Sprinkler Systems	0:30		K		
7-8	Procedures for Conducting Tests on Dry-Pipe Sprinkler Systems	0:30		K		
7-9	Characteristics of Standpipe Systems	1:00		Χ		
7-10	Procedures for Inspecting Standpipe	1:00		<		
	Systems					
	Unit Tests	3:00		Κ		
	Course Review and Certification Exam	2:00 X				
C: Classroom 0 hours D: Distance 40 hours		40:00 Total Hours				