

Course Outline for FST 73A
FIRE PREVENTION OFFICER IA
Effective: Summer 2009

I. CATALOG DESCRIPTION:

FST 73A — FIRE PREVENTION OFFICER IA — 2.00 units

This course provides a broad, technical overview of Fire Prevention Codes and Ordinances, Inspection Practices and Key Hazards. The course is designed for Fire Prevention, Suppression, Public Education and Fire Investigation Personnel. This is a State of California Fire Marshal, State Fire Training, CFSTES (California State Fire Service Training and Education System) course approved by the California State Fire Board. A certificate will be issued upon successful completion of the course. The course satisfies one of the component requirements for the certification tracks of "Company Officer", "Fire Prevention Officer" and "Public Education Officer"

2.00 Units Lecture

Grading Methods:

Letter Grade

Discipline:

	MIN
Lecture Hours:	36.00
Total Hours:	36.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe the responsibility and authority for fire prevention inspections and related activities;
- B. Explain and identify principles and procedures used to correct fire hazards;
- C. Identify and describe occupancy classifications and types of construction;
- D. Explain basic means of egress requirements;
- E. Evaluate the operational readiness of fire related assemblies;
- F. Identify and describe general fire safety provisions;
- G. Explain public relations as it relates to fire prevention inspections.

V. CONTENT:

- A. Orientation and Administration
 - 1. Course Goals and Objectives
 - 2. CFSTES Certification Tracks
 - a. "Company Officer" Certification
 - b. "Fire Prevention Officer" Certification
- B. Terminology to Responsibility and Authority
 - 1. Terms
 - 2. Acronyms
- C. Legally Established Responsibilities and Empowerment
 - 1. Inspectors Power – Derived from State and Local Law
 - 2. State Law – Health and Safety Code
 - 3. CFC – California Fire Code
 - 4. CBC – California Building Code
 - 5. OSFM versus Locally Adopted Regulations
 - 6. CCR – California Code of Regulations
 - a. Title 19
 - b. Title 24
 - 7. Right of Inspection – Right of Entry
 - 8. Performing Inspections
- D. Legal Responsibilities of the Inspector
 - 1. Organization of the Fire Prevention Bureau
 - 2. Authority
 - 3. Enforcement Procedures
 - 4. Alternatives for Code Compliance
 - 5. Appeals
 - 6. Retroactive Application of the CFC

- 7. Subjects Not Specifically Regulated
- 8. Responsibilities
 - a. Technical Responsibilities
 - b. Judgmental Responsibilities
 - c. Moral Responsibilities
- E. Understanding, Reading and Using the CFC
 - 1. Components of the CFC
 - 2. Structure of the Body
 - 3. Using other Reference Standards
- F. Historical Incidents and their Affect on the Fire Code
 - 1. Colonial and Early America
 - 2. Laws of the 1600's
 - 3. Laws of the 1700's
 - 4. Laws of the 1800's
 - 5. Significant Fires in U.S. History
- G. Terminology Relating to Occupancy Classification and Construction
 - 1. General Terms
 - 2. Occupancy Classes
- H. Relationship of Fire Protection to Building Construction and Occupancy
 - 1. Construction and Design Features Affecting Life Safety
 - 2. Fire Suppression Systems
 - 3. Detection, Alarm and Communication Systems
 - 4. Structural Integrity
 - 5. Property Protection for High Value Stock
 - 6. Building Egress
 - 7. Building Site Design
 - 8. Fire Fighting Considerations
- I. Classifications of Occupancies
- J. Terminology Relating to Egress Requirements
 - 1. Means of Egress System
 - 2. Exit Door Requirements
 - 3. Hardware
 - 4. Public Way
 - 5. Occupant Load
 - 6. Illumination
 - 7. Exit Sign
 - 8. Horizontal Exit
- K. Determining Adequate Means of Egress
 - 1. Determining the Number of Exits
 - 2. Determining the Occupant Load
 - 3. Arrangement of Means of Egress
 - 4. Means of Egress Width
- L. Means of Egress Requirements
 - 1. General Means of Egress
 - 2. Exit Access
 - 3. Exit
 - 4. Exit Discharge
- M. Maintaining the Egress System
 - 1. Inspection
- N. Terminology Relating to the Fire-Resistive Assemblies
- O. Types and Classes of Roof Coverings
 - 1. Characteristics of a Good Roof Covering
 - 2. Roof Covering and Construction
 - 3. Roof Classifications by Code
- P. Purposes and Location of Fire-Resistance-Rated Building Construction Components
 - 1. Purposes of Fire Safe Design
 - 2. Purposes of Fire-Resistance-Rated Construction
 - 3. Building Elements which require Rated Construction
 - 4. Types of Fire Resistance Rated Walls
 - 5. Shaft Enclosures
 - 6. Concealed Spaces
 - 7. Draft Curtains
 - 8. Fire-Resistance Rating of Structural Members
 - 9. Opening Protectives
 - 10. Ducts and Air Transfer Openings
 - 11. Penetrations
- Q. Fire Doors and Windows
 - 1. Classification of Protected Openings
 - 2. Fire Doors and Assemblies
 - 3. Fire Door Ratings
 - 4. Fire Door Inspection
- R. General Fire Safety
 - 1. Fire Department Access
 - 2. House Keeping Practices
 - 3. Smoking
 - 4. Burning
 - 5. Weed Abatement
 - 6. Indoor/Outdoor Storage
 - 7. Above Ground Gas Meters
 - 8. Candles and Other Open-Flame Decorative Devices
 - 9. Vacant Buildings
- S. Fire Safety Requirements for Decorative Materials and Furnishings
 - 1. Flame Spread and Smoke Production Characteristics of Interior Finishes
 - 2. Methods Evaluating Flame Spread Ratings
 - 3. Fire Retardant Paints and Impregnation Treatments
 - 4. Flame Spread Field Determination
 - 5. Interior Finishes
 - 6. Tent Regulations
- T. Fire Drills and Emergency Evacuation Plans
 - 1. Fire Drill Requirements

- 2. Emergency Evacuation Plan Requirements
- 3. Conducting Fire Drills
- U. High Piled Combustible Storage
 - 1. CFC Definition and Permit Requirements
 - 2. Commodity Classification Products
 - 3. Housekeeping and Maintenance
 - 4. Fire Protection and Life Safety Features
- V. Electrical Fire Hazards and Safety Devices
 - 1. Electrical Equipment and Protection
 - 2. Electrical Installation in Hazardous Locations
 - 3. Inspecting Properties for Electrical Hazards
- W. Factors Related to Life Safety
 - 1. Achieving the Life Safety Goal
 - 2. Human Behavior
 - 3. Decision Processes of the Individual
 - 4. Influences to Behavior
 - 5. Behavior Actions of Occupants
- X. Conducting a Life Safety Assessment
 - 1. Step 1 – Occupant Characteristics
 - 2. Step 2 – Predict Fire Development
 - 3. Step 3 – Determine Acceptable Level of Safety
 - 4. Step 4 – Mitigate Hazards
- Y. General Fire Protection Practices
 - 1. Preparation
 - 2. The Approach
 - 3. The Inspection
 - 4. Final Interview
 - 5. Reports
 - 6. Recommendations
 - 7. Sketches and Plans
- A@. Procedures for Correcting Fire Hazards and Modifications of Requirements
 - 1. Types of Laws being enforced
 - 2. Code Violations
 - 3. Course of Action
 - 4. Noncompliance Actions
- AA. Handling Fire Prevention Complaints
 - 1. Reasons for Citizen Complaints
 - 2. Procedures for Handling Complaints

VI. METHODS OF INSTRUCTION:

- A. **Discussion** -
- B. Audio-visual aids
- C. Power point presentations
- D. **Lecture** -
- E. Individual activities
- F. **Field Trips** -
- G. Group exercises

VII. TYPICAL ASSIGNMENTS:

A. Student will participate in all Group Exercises. B. Students shall complete all required course "Activity Sheet" assignments. C. Students shall complete all required reading assignments.

VIII. EVALUATION:

A. **Methods**

- 1. Exams/Tests
- 2. Quizzes
- 3. Home Work
- 4. Other:
 - a. Methods
 - 1. Short quizzes (CFSTES required quizzes)
 - 2. Completion of Individual "Activity Sheets"
 - 3. Final examination (CFSTES State Certification Final)

B. **Frequency**

- 1. Frequency
 - a. Quizzes will be given at start of each class session
 - b. Homework will be assigned from each class session

IX. TYPICAL TEXTS:

- 1. - *Fire Prevention-IA Workbook.*, State Fire Marshal's Office, 2008.
- 2. - *Fire Inspection and Code Enforcement.* 6th ed., IFSTA, 0.
- 3. - *California Fire Code, California Building Standards Commission.*, -, 2007.
- 4. - *Barclays Official California Code of Regulations Title 19.*, West Group, 0.
- 5. - *Barclays Official California Code of Regulations Title 24.*, West Group, 0.
- 6. - *California Health and Safety Code.* Current ed., -, 0.

X. OTHER MATERIALS REQUIRED OF STUDENTS: