

11009

Imperial Valley College
Fire Technology

Fire 225 - Fire Prevention 1A
Introduction to the California Fire Code

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Course Description:

Fire Prevention 1A: Introduction to California Fire Code: This course is the study of fire prevention. Course will include introduction to organization and function of fire prevention bureaus. Fire inspections, surveying and mapping procedures and recognition of fire and life hazards are emphasized. Material presented will focus on code use, improvements, enforcement and fire cause, considerations of various flammable materials, properties of plastics, and portable and fixed fire protection equipment. Successful completion fulfills one of the fire prevention requirements for California State Fire Officer Certification, Fire Prevention Officer, Public Education Officer I.

Required Text:

California Fire Code 2007
Fire Inspection and Code Enforcement Sixth Edition
Student Supplement- Provided

Prerequisites: None

Course Objectives

Student will:

1. Apply general fire inspection practices and procedures for correcting fire hazards to given scenarios and handling of fire prevention complaints.
2. Define the functions of a fire prevention bureau.
3. Analyze the relationship between fire prevention efforts and the reduction of life and property loss.
4. Identify, in writing and verbally, the major types of fire hazards that could be found during a commercial building fire inspection.
5. Describe, in writing, the basic hazard correction process used by the modern fire prevention bureau.
6. Apply codes to a simulated exercise.

Student will be able to demonstrate knowledge of:

1. responsibilities, tasks, and areas of influence of fire inspectors, as well as other requirements for Fire Inspector with an overall exam score of 70% or higher.
2. an understanding and use of the UFC with an overall exam score of 70% or higher.
3. legally established responsibilities and empowerment with an overall exam score of 70% or higher.
4. the IFCI and ICBO code development process.
5. Fire incident reporting awareness and factors relating to life safety.
6. General fire inspection practices, procedures for correcting fire hazards and modification requirements, fire drills, emergency evacuation, and handling fire prevention complaints.
7. Basis instruction techniques for public education, teaching children and adults about fire safety, teaching public fire prevention issues, teaching public fire and burn prevention, and juvenile firesetter awareness.

8. General fire safety, basic electrical theory, electrical fire hazards and safety devices, and reference sources related to electrical codes and safety.
9. Building construction classifications, relationship of fire protection to building construction and occupancy, types and classes of roof coverings, purpose and location of fire related building construction, fire doors and window, inspection kitchen cooking equipment, fire safety requirements for decorative material and furnishings.
10. Classification of occupancies
11. Exit requirements and determination of adequate egress
12. High piled combustible storage, enclosed stairwells and smoke proof enclosures
13. Ability to use critical thinking in such activities as written and oral analysis and evaluation of readings, in class discussion and critiques of inspection procedures and problems.

Course Requirements

Hours: 45

Assignments

In class work as well as reading outside of class. Classroom activities- all activities must be turned in to pass the course (State Requirement). All homework must be completed to pass the course (State Requirement).

Methods of Evaluation

Successful completion of the course will include the following:

- o Four formative tests
 - o Test scores count toward final grade
- o Must take all tests
- o Class Discussion
- o A cumulative score of 80% is required to take Certification Exam

Grading will be based on the following scale:

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-70%
- F = Below 60%

To advance to the next course the student must successfully complete the State Exam. A score of 80% is required to pass the State Certification Exam. It is possible to receive a passing score in this course and not pass the State Certification Test.

The student is responsible for dropping (W) the class before the deadline as outlined on registration forms. Failure to pass this class will affect the ability to progress to the next semester.

Attendance

State Fire Training policy requires every student to attend the entire class. If there is a problem meeting this requirement the student must inform the instructor. State Certification test will only be given to those students who meet the attendance requirement of the State.

Attendance:

Students are required to attend all lessons. At the discretion of the primary Instructor, a student missing a lesson may demonstrate the fulfillment of all skills and knowledge covered in the missed lesson. If the

student cannot meet the minimum fulfillment of the lesson missed, it may lead to dismissal and failure of this course.

It is the student's responsibility to drop the class thru Webstar before the drop date if they do not intend to continue in the class. Failure to drop the class by the drop date will result in possible failure of the class. Please inform the instructor if you have problems in meeting these requirements.

Methods of Instruction

The appropriate method of instruction has been determined by the State. Your instructor may utilize the following: classroom lecture, small group discussions, student presentations, demonstration and return demonstration, simulations, video/CD assisted instruction, audiovisuals, textbooks, handouts, and required reading and assignments.

Simulations may be utilized during this class and simulation materials will be handed out during the semester. All advance assignments must be completed before the start of class.

Student Learning Outcomes

Upon completion of this course, the student will:

- Define the functions of the Fire Prevention Bureau
- Identify major fire hazards
- Apply codes to basic fire hazard situations

Disabilities

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible.

Course Standards:

This course is taught at a professional level to teach students to become fire service professionals. Students are expected to behave professionally in all aspects of this class. In attending this course it is hoped that students will act in a professional manner. Admission to Imperial Valley College is governed by the laws of the state and such supplementary regulations as prescribed by the Board of Trustees. It is assumed that the entry of a student into Imperial Valley College constitutes the student's acceptance of the Standards of Student Conduct and the regulations published by the college in the General Catalog.

Excerpt from the general catalog:

Students shall assume an obligation to conduct themselves in a manner compatible with the college's function as an educational institution. Students shall observe the rules and regulations of the College and shall refrain from conduct which interferes with the College's teaching and administration, or which unreasonably interferes with the rights of others. Misconduct while on the college campus is subject to disciplinary action as stated in the General Catalog.



FIRE PREVENTION 1A (BRIDGE)

Introduction To The California Fire Code

Course Outline

Course Objectives: To prepare the student 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 rated assemblies.
- f) Identify and describe general fire safety provisions.
- g) Explain public relations as it relates to fire prevention inspections.

Course Content: *See Calendar of events*40:00

Unit 1: Responsibility and Authority

- 1-1 Orientation And Administration2:00
- 1-2 Terminology Relating To Responsibility And Authority0:30
- 1-3 Legally Established Responsibilities And Empowerment.....1:30
- 1-4 Legal Responsibilities Of The Inspector2:00
- 1-5 Understanding, Reading, And Using The CFC2:00
- 1-6 Historical Incidents And Their Affect On The Fire Code1:00

Unit 2: Occupancy Classification and Building Construction

- 2-1 Terminology Relating To Occupancy Classification And Construction2:00
- 2-2 Relationship Of Fire Protection To Building Construction And Occupancy.....1:00
- 2-3 Classification Of Occupancies3:00

Unit 3: Egress Requirements

- 3-1 Terminology Relating To Egress Requirements0:30
- 3-2 Determining Adequate Means Of Egress3:00
- 3-3 Means Of Egress Requirements.....3:00
- 3-4 Maintaining The Egress System1:00

Unit 4: Fire-Resistive Assemblies

- 4-1 Terminology Relating To Fire-Resistive Assemblies0:30
- 4-2 Types Of Classes And Roof Coverings1:00
- 4-3 Purpose And Location Of Fire-Resistance-Rated Building Construction
And Components.....1:30
- 4-4 Fire Doors And Windows0:30



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Introduction To The California Fire Code

DAY	TOPIC	TITLE	TIME	ACTIVITY	EVALUATION	
Day 4	4-1	Terminology Relating To Fire-Resistive Assemblies	0:30	4-1-1		
	4-2	Types Of Classes And Roof Coverings	1:00			
	4-3	Purpose And Location Of Fire-Resistance-Rated Building Construction And Components	1:30			
	4-4	Fire Doors And Windows	0:30			
	5-1	General Fire Safety	1:15			
	5-2	Fire Safety Requirements For Decorative Materials And Furnishings	1:00			
	5-3	Fire Drills And Emergency Evacuation Plans	0:30			
	5-4	High-Piled Storage Requirements	1:00	5-4-1 5-4-2		
	5-5	Electrical Fire Hazards And Safety Devices	0:45			
		Day 4 Total		8:00		
Day 5			0:30	Activity review		
	6-1	Factors Relating To Life Safety	2:00	6-1-1		
	6-2	Conducting A Life Safety Assessment	1:30	6-2-1		
	6-3	General Fire Inspection Practices	1:15			
	6-4	Procedures For Correcting Fire Hazards And Modifications Of Requirements	1:15			
	6-5	Handling Fire Prevention Complaints	0:30			
		Certification Exam	1:00			Exam
		Day 5 Total		8:00		

- Day 1 - Field exercise - occupancy classification - 1hr
- 2 - Field exercise - mixed use occupancy class - 1hr
- 3 - Field exercise - identify means of egress - 40 min
- 4 - Field exercise identify separation walls - 40 min
- 5 - Field exercise identify separation doors - 40 min
- 6 - Field exercise - occupancy load calculations - 1hr



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Calendar of Events

DAY	TOPIC	TITLE	TIME	ACTIVITY	EVALUATION	
Day 1	1-1	Orientation And Administration "Escape" video, NOVA	2:00	1-1-1		
	1-2	Terminology Relating To Responsibility And Authority	0:30	One of the following: 1-2-1 1-2-2 1-2-3		
	1-3	Legally Established Responsibilities And Empowerment	1:30			
	1-4	Legal Responsibilities Of The Inspector	2:00	1-4-1 1-4-2		
	1-5	Understanding, Reading, And Using The CFC	2:00	1-5-1 1-5-2		
			Day 1 Total	8:00		
Day 2			0:30	<i>Activity Rev</i>	XXXXXXXXXX	
	1-6	Historical Incidents And Their Affect On The Fire Code	1:00			
	2-1	Terminology Relating To Occupancy Classification And Construction	2:00	2-1-1 2-1-2		
	2-2	Relationship Of Fire Protection To Building Construction And Occupancy	1:00			
	2-3	Classification Of Occupancies	3:00	2-3-1 2-3-2		
				0:30	<i>Act Rev</i>	XXXXXXXXXX
			Day 2 Total	8:00		
Day 3	3-1	Terminology Relating To Egress Requirements	0:30	3-1-1		
	3-2	Determining Adequate Means Of Egress	3:00	3-2-1		
	3-3	Means Of Egress Requirements	3:00	3-3-1		
	3-4	Maintaining The Egress System	1:00			
				0:30	<i>Act Rev</i>	XXXXXXXXXX
			Day 3 Total	8:00		