

COURSE OUTLINE

**Fire Technology 103
Fire Prevention**

I. Catalog Statement

Fire Technology 103 continues to present organization and function of the fire prevention organizations, inspection, surveying and mapping procedures, recognition of fire hazards, engineering a solution to the hazard, enforcement of the solution, public relations affected by fire prevention. Fire Technology 103 meets or exceeds the California State Fire Marshal's office core requirement for Fire 2.

Total Lecture Units: 3.0

Total Course Units: 3.0

Total Lecture Hours: 48.0

Total Faculty Contact Hours: 48.0

Prerequisite: Fire Technology 101 or equivalent.

II. Course Entry Expectations

Skills Levels Ranges: Reading 5; Writing 5; Listening/Speaking 5; Math 3.

Prior to enrolling in the course, the student should be able to:

1. describe and discuss the components of the history and philosophy of the modern day fire service;
2. analyze the basic components of fire as a chemical reaction, the major phases of fire, and examine the main factors that influence fire spread and behavior;
3. differentiate between fire service training and education; fire protection certificate program and a fire service degree program; and explain the value of education in the fire service;
4. list and describe the major organizations that provide emergency response service and illustrate how they interrelate;
5. identify fire protection and emergency-service careers in both the public and in the private sector;
6. synthesize the role of national, state and local support organizations in fire protection and emergency services;
7. discuss and describe the scope, purpose, and organizational structure of fire and emergency services;
8. describe the common types of fire and emergency services facilities, equipment, and apparatus;

9. compare and contrast effective management concepts for various emergency situations;
10. identify and explain the components of fire prevention including code enforcement, public information, and public and private fire protection systems.

III. Course Exit Standards

Upon successful completion of the required coursework, the student should be able to:

1. explain the purpose of fire prevention and the codes and laws that authorize its existence;
2. describe fire prevention bureau functions and services;
3. identify fire hazards and methods of correction;
4. explain built-in fire protection systems in relation to fire prevention.

IV. Course Content

Total Faculty Contact Hours = 48

A. Fire Prevention Organization	8 hours
1. Fire department	
2. Other local departments	
3. Other governmental agencies	
4. Private organizations	
B. Inspection, Surveying, and Mapping procedures	8 hours
1. Preparation	
2. Inspection and survey	
3. Recording	
C. Recognizing the Hazard	10 hours
1. Housekeeping and general storage practices	
2. City and county fire codes	
3. City and county building codes	
4. State fire prevention regulations	
5. Health and safety codes	
6. National safety codes	
7. Recognized standards	
D. Engineering a Solution	8 hours
1. Combustible solids, liquids, and gases	
2. Extinguishing systems	
3. Construction problems	
4. Special fire problems	
E. Enforcing the Solution	8 hours
1. General approach	
2. Court procedure	

- F. Public Relations 6 hours
1. Efficient service
 2. Information

V. Methods of Instruction

The following methods of instruction may be used in the course:

1. lecture;
2. multimedia;
3. guest speakers;
4. field trips.

VI. Out of Class Assignments

The following out of class assignments may be used in the course:

1. individual projects (i.e. written assignment, reading reports);
2. group projects (i.e. Homework problems, problem solving demonstrations, discussion on textbook topics).

VII. Methods of Evaluation

The following methods of evaluation may be used in the course:

1. quizzes;
2. midterm examination;
3. final examination.

VIII. Textbooks

International Fire Service Training Association (IFSTA). *Fire Inspection & Code Enforcement [7TH edition]*. Stillwater, OK: IFSTA, 2009.
10th Grade Textbook Reading Level. ISBN: 0879393483

IX. Student Learning Outcomes

1. Students will be able to explain the purpose of fire prevention and the codes and laws that authorize its existence.
2. Student will be able to describe fire prevention bureau functions and services.
3. Student will be able to identify fire hazards and methods of correction.
4. Student will be able to explain built-in fire protection systems in relation to fire prevention.