



# Fire Control 1: Basic Fire Chemistry (1996)

## Course Plan

### Course Details

<b>Description:</b>	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.
<b>Designed For:</b>	All entry-level fire service personnel
<b>Authority:</b>	Office of the State Fire Marshal
<b>Prerequisites:</b>	None
<b>Standard:</b>	N/A
<b>Hours:</b>	16 hours
<b>Maximum Class Size:</b>	40
<b>Instructor Level:</b>	Primary instructor
<b>Instructor/Student Ratio:</b>	1 primary instructor per 40 students
<b>Restrictions:</b>	None
<b>SFT Designation:</b>	FSTEP

## Required Resources

### Instructor Resources

To teach this course, instructors need:

#### Required

- None

### Student Resources

To participate in this course, students need:

- None

### Facilities, Equipment, and Personnel

The following facilities, equipment, or personnel are required to deliver this course:

#### Facilities

- Standard classroom equipped for 25 students
- Whiteboards or easel pads with appropriate writing implements
- Projector/TV with appropriate laptop connections
- Wifi/Internet access

## Time Table

Segment			Total
Course Introduction			0.5
Classes of Fire			0.5
Fundamentals of Combustion			1.0
Fundamentals of Heat Transfer			0.5
Fundamentals of Extinguishment			0.5
Fire Characteristics of Ordinary Combustible Solids			0.5
Fire Characteristics of Flammable and Combustible Solids			0.5
Products of Combustion			1.0
Hazardous and Explosive Materials			1.0
Effects of Extinguishing Agent Application			1.0
Procedures for Size-Up			1.0
Rescue Techniques			1.0
Exposure Protection Tactics			1.0
Ventilation Methods and Procedures			1.0
Methods Used to Confine Fire			1.0
Methods Used to Extinguish Fire			1.0
Methods Used to Overhaul Fire			0.5
Salvage Operations			1.0
Pre-Fire Plans			1.0
Methods Used to Attain Additional Assistance During Multiple Alarm Fires			0.5
<b>Course Totals</b>			<b>24.0</b>

### Time Table Key

1. The Time Table documents the amount of time required to deliver the content included in the course plan.
2. The Course Totals do not reflect time for lunch (1 hour) or breaks (10 minutes per each 50 minutes of instruction or assessment). It is the instructor's responsibility to add this time based on the course delivery schedule.
3. Application (activities, skills exercises, and formative testing) time will vary depending on the number of students enrolled and the acquired structure selected for training. The Application time documented is based on the maximum class size identified in the Course Details section.

4. Summative Assessments are determined and scheduled by the authority having jurisdiction. These are not the written or psychomotor State Fire Training certification exams. These are in-class assessments to evaluate student progress and calculate course grades.

## Objectives

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1. Information on how and why fires start
2. Information on how and why fires spread
3. Information on how and why fires are controlled