

**FE1-BCPS**  
**Fire, Building Construction & Protection Systems,**  
**AFC 2014**  
**2 Credits**

Instructor: TBA

Phone:

Original Developer: Chris Senaratne

Current Developer: Caylie Gnyra

Reviewer: Alan Jones

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## **FE1-BCPS Version: 3**



# **Fire, Building Construction & Protection Systems, AFC 2014**

## **Calendar Description**

This 32-hour course teaches the fundamentals of building construction and fire protection systems. It focuses on those elements of building construction and fire suppression that manage the impact of fire.

## **Rationale**

This is a required course for the Emergency Services Technology --Fire Specialization program. Building construction methods and suppression systems play an important role in determining how a fire will impact a building and its occupants. Personnel with responsibility for loss prevention, facilities planning, and management in industrial, institutional, and municipal settings must know the safety implications of different types of building construction and fire protection systems in order to carry out inspection and enforcement tasks.

## **Prerequisites**

None

## **Co-Requisites**

None

## **Course Learning Outcomes**

Upon successful completion of this course, students will be able to

1. identify basic types of building construction.
2. identify design and construction features aimed at managing fire impact.
3. inspect and identify properties where building and fire suppression features are inadequate for fire safety.
4. identify fire detection and protection systems.

## Resource Materials

Emergency Training Centre course text

## Conduct of Course

### A. Methods

1. Lecture

### B. Aids

1. PowerPoint
2. Whiteboard

### C. Assignments

1. Self-testing exercises in fire etc. modules

### D. Study Time

1. 8 hours

## Evaluation Procedures

Written exam, 70% pass mark.

## Grade Equivalents and Course Pass Requirements

The final mark is given as a letter grade.

Letter	F	B-	B	B+	A-	A	A+
Percent Range	0-69	70-74	75-79	80-84	85-89	90-94	95-100
Points	0.00	2.70	3.00	3.30	3.70	4.00	4.00

## Attendance

Regular attendance is essential for success in any course. Absence for any reason does not relieve a student of the responsibility of completing course work and assignments to the satisfaction of the instructor. Poor attendance may result in the termination of a student from a course.

## Course Units/Topics

1. Fundamentals of building construction
2. Beams and columns
3. Construction methods and materials

4. Fire behaviour
5. Fire load
6. Fire separations
7. Building occupancy classification
8. Alarm and detection systems
9. Public fire alarm and detection systems
10. Water-based fire protection systems
11. Standpipe systems
12. Non Water-based fire protection systems.



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