



**Note to Instructor: Replace the placeholder text beneath the headings with the appropriate information for your course. Please note that all sections, with the exception of "Other Course Information," are required elements.**

### Basic Course Information

Semester:	<b>Spring</b>	Instructor Name:	<b>Salvador Flores</b>
Course Title & #:	<b>Fire Protection Equipment &amp; Systems</b>	Email:	sal.flores@imperial.edu
CRN #:	<b>Fire 102</b>	Webpage (optional):	www.imperial.edu/students/canvas/
Classroom:	<b>Online</b>	Office #:	<b>By appointment</b>
Class Dates:	<b>20888</b>	Office Hours:	<b>By appointment</b>
Class Days:	<b>Online</b>	Office Phone #:	
Class Times:	<b>Online</b>	Emergency Contact:	<b>7604270012</b>
Units:	3	Class Format:	Distance Education

### Course Description

This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.

This is one of six CORE courses required for an associate degree in Fire Technology. (CSU)

### Course Prerequisite(s) and/or Corequisite(s)

*The student must be able to navigate themselves through Canvas and be knowledgeable on the basics of a computer or mobile device (which ever platform being used to take the course).*

*The student is highly recommended to have taken basic math (pre-algebra) and college level English.*

*This is a standalone course and no other fire knowledge is required.*

Upon course completion, the successful student will have acquired new skills, knowledge, and or aptitudes as demonstrated by being able to:

1. Analyze the relationship between fire prevention efforts and the reduction of life and property loss. (ILO2, ILO5)
2. Draw and describe the basic elements of a public water supply system including sources, distribution networks, piping and hydrants. (ILO2, ILO3)
3. Identify the components of sprinkler, standpipe and foam systems. (ILO2, ILO4)
4. Identify five different types of non-water based fire suppression systems and describe how these systems extinguish fire (ILO2, ILO4)
5. Describe fire protection systems in various structures and the history of sprinkler ordinances and legislation. (ILO2)

6. Describe the components of a fire alarm system and different types of detectors and
7. Explain the operation and application of portable fire extinguishing systems. (ILO2, ILO3)
8. Identify and analyze the causes of line of duty firefighter deaths and training and research into the reduction of risk and accidents. (ILO2, ILO3, ILO4)

## Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Analyze the relationship between fire prevention efforts and the reduction of life and property loss. (ILO2, ILO5)
2. Draw and describe the basic elements of a public water supply system including sources, distribution networks, piping and hydrants. (ILO2, ILO3)
3. Identify and analyze the causes of line of duty firefighter deaths and training and research into the reduction of risk and accidents. (ILO2, ILO3, ILO4)

## Course Objectives

In addition to architects, engineers, and design professionals, fire fighters also need to understand fire protection systems in order to manage the fire scene and minimize risks to life and property.

Fire Protection Systems, Second Edition provides a comprehensive overview of the various types of fire protection systems, their operational abilities and characteristics, and their applications within various types of structures.

This Course covers:

- Water supply basics, including sources, distribution networks, piping, and hydrants.
- Active fire protection systems and components, their operational characteristics, and installation, inspection, testing, and maintenance requirements.
- Passive fire protection systems such as firewalls, fire separation assemblies, and fire dampers
- Smoke control and management systems, gas-based suppression, access and egress control systems, and the code requirements for installation of these systems.

## Textbooks & Other Resources or Links

### *Fire Protection Systems*

by A. Maurice Jones Jr.

- Publisher: Jones & Bartlett Learning
- Print ISBN: 9781284035377, 1284035379
- E-Text ISBN: 9781284055498, 1284055493

- Edition: 2nd

## Course Requirements and Instructional Methods

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

## Course Grading Based on Course Objectives

**Quizzes** (5pts x 14modules) 70 Points Total

**Discussion Boards** (10pts x 14modules) 140 Points Complete a one paragraph entry. The entry should be an overview of the main points of the chapter and closely related to the instructions posted on each board.

**Weekly Chapter Quizzes & Discussions Due Date** (ALL Standard Pacific Time) **due Sunday of that week by 11:59pm**

\*Week 1 - Intro quiz (5pts) & Introduction Video (10 points) Sunday by 11:59pm

\*Week 2 - Chapter 1 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 3 - Chapter 2 quiz (5 points) & discussion board (10 points) Sunday by, 11:59 pm

\*Week 4 - Chapter 3 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 5 - Chapter 4 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 6 - Chapter 5 quiz (5 points) & discussion board (10 points) Sunday, 11:59pm

\*Week 7 - Chapter 6 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

Week 8 - Mid Term (60 points) & case study (30 points) Sunday by 11:59pm

\*Week 9 - Chapter 7 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 10 - Chapter 8 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 11 - Chapter 9 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 12 - Chapter 10 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 13 - Chapter 11quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 14 - Chapter 12quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 15 - Chapter 13quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 16 - Final (60 points), case study (30 points) & discussion board (5 points) Sunday by, 11:59pm

**Maximum points you can earn for Midterm = 60**

**Maximum points you can earn for Final = 60**

**Maximum points you can earn for quizzes = 70**

**Maximum points you can earn for case studies =**

**60 Maximum points you can earn for discussions=**

**140 Total Points Possible = 390 total**

## Course Policies

*First week attendance will be based on introduction, failure to participate will result in a no-show and can result in a drop from class.*

## Other Course Information

*[Optionally, include other necessary information.]*

## IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

## Anticipated Class Schedule/Calendar

*[Provide a tentative overview of the readings, assignments, tests, and/or other activities for the duration of the course. A table format as in the example below may be used for this purpose.]*



<u>Week</u>	<u>Activity, Assignment and Evaluations</u>	<u>Due Dates</u>
1	Introductions, Policies and Syllabus Video introduction Assignment Self introduction Discussion Board (Post)	Due by Sunday 23:00hrs
2	Reading Chapter 1 (p.5-18) PPT 1 Quiz Discussion Board (Post and Reply)	Due by Sunday 23:00hrs
3	Reading Chapter 2 (p.21-32) PPT 2 Quiz Discussion Board (Post and Reply)	Due by Sunday 23:00hrs
4	Reading Chapter 3 (p.39-70) PPT 3 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
5	Reading Chapter 4 (p.77-95) PPT 4 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
6	Reading Chapter 5 (p.103-104) PPT 5 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
7	Reading Chapter 6 (p.146-165) PPT 6 Quiz Discussion Board (Post and Reply)	<i>Due by Saturday 23:00hrs</i>
8	Mid Term Test Fire Protection Systems Project 1/2 Case Study Essay	<i>Due by Sunday 23:00hrs</i>
9	Reading Chapter 7 (p.170-213) PPT 7 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>



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10	Reading Chapter 8 (p.220-221) PPT 8 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
11	Reading Chapter 9 (p.244-262) PPT 9 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
12	Reading Chapter 10 (p.263-282) PPT 10 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
13	Reading Chapter 11 (p.283-299) PPT 11 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>
14	Reading Chapter 12 (p.302-316) PPT 12 Quiz Discussion Board (Post and Reply)	<i>Due by Sunday 23:00hrs</i>

**\*\*\*Subject to change without prior notice\*\*\***