

Basic Course Information				
Semester:	Spring	Instructor Name:	Salvador Flores	
	Fire Protection Equipment			
Course Title & #:	& Systems	Email:	sal.flores@imperial.edu	
CRN #:	Fire 102	Webpage (optional):	www.imperial.edu/students/canvas/	
Classroom:	Online	Office #:	By appointment	
Class Dates:	Feb 12 – June 7th	Office Hours:	By appointment	
Class Days:	Online	Office Phone #:		
Class Times:	Online	Emergency Contact:	7604270012	
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)

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 riskand 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**

- 1. Understand the relations between fire behavior and fire protection systems.
- 2. Understand the fire model code.
- 3. Understand and identify components of a fire alarm system.
- 4. Identify the types of fire alarms and detection systems.
- 5. Understand water supplies for the fire protection system.
- 6. Differentiate between standpipe and house suppression systems.
- 7. Understand automatic fire sprinkler systems.
- 8. Recognize water-based fire protection systems.
- 9. Differentiate between wet and dry chemical extinguishing systems.
- 10. Identify the components of gaseous agent extinguishing systems.
- 11. Understand and recognize the different components of a portable fire extinguisher.
- 12. Recognize the workings of a smoke control and management system.
- 13. Learn about property security, emergency response, and fire protection systems as a whole.

#### **Textbooks & Other Resources or Links**

### Fire Protection Systems

- A. Maurice Jones Jr.
- Print ISBN 9781284180138, 1284180131
- e-text ISBN 9781284205336, 1284205339
- Edition -3rd

### **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 11:59 pm

- \*Week 1 Intro quiz (5pts) & discussion board (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 Spring Break
- Week 9 Mid Term (60 points) & case study (30 points) Sunday by 11:59pm
- \*Week 10 Chapter 7 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm
- \*Week 11 Chapter 8 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm
- \*Week 12 Chapter 9 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm
- \*Week 13 Chapter 10 quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm
- \*Week 14 Chapter 11quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm
- \*Week 15 Chapter 12quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm



\*Week 16 - Chapter 13quiz (5 points) & discussion board (10 points) Sunday by, 11:59pm

\*Week 17 - 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 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 <a href="http://www.imperial.edu/studentresources">http://www.imperial.edu/studentresources</a> 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>	Activity, Assignment and Evaluations	<u>Due Dates</u>
1	<ul> <li>Introductions, Policies and</li> <li>Self-introduction Discussion Board (Post)</li> <li>Quiz</li> </ul>	Due by Sunday 23:59hrs
2	<ul> <li>Reading Chapter 1</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
3	<ul> <li>Reading Chapter 2</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
4	<ul> <li>Reading Chapter 3</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
5	<ul> <li>Reading Chapter 4</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
6	<ul> <li>Reading Chapter 5</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
7	<ul> <li>Reading Chapter 6</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
8	Spring Break	
9	Mid Term     Case Study	Due by Sunday 23:59hrs



10	<ul> <li>Reading Chapter 7</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
11	<ul> <li>Reading Chapter 8</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
12	<ul> <li>Reading Chapter 9</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
13	<ul> <li>Reading Chapter 10</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
14	<ul> <li>Reading Chapter 11</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
15	<ul> <li>Reading Chapter 12</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
16	<ul> <li>Reading Chapter 13</li> <li>Quiz</li> <li>Discussion Board (Post and Reply)</li> </ul>	Due by Sunday 23:59hrs
17	<ul><li>Final Case Study</li><li>Discussion Board (Post and Reply)</li></ul>	Due by Sunday 23:59hrs

<sup>\*\*\*</sup>Subject to change without prior notice\*\*\*