

Basic Course Information			
Semester:	Spring 2025	Instructor Name:	Robert Malek
Course Title & #:	Fire Protection Equipment & Systems	Email:	Robert.malek@imperial.edu
CRN #:	20448	Webpage (optional):	
Classroom:	3212	Office #:	3200 Building
Class Dates:	02/10/25- 06/06/25	Office Hours:	By email, Phone, or appointment
Class Days:	Tue- Thurs	Office Phone #:	760-897-9749
Class Times:	0940-1105	Emergency Contact:	Tricia Jones 760-355-6483
Units:	3	Class Format:	In-Person

Course Description line

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)

N/A

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. (IL02, IL05)

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)



Course Objectives

Student will demonstrate a working knowledge of:

- 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. The objectives in this course align with the Fire and Emergency Services Higher Education (FESHE)Initiatives, as well as FESHE course objectives;

What is FESHE? Working with coordinators of two- and four-year academic fire and emergency medical services (EMS) degree programs, the U. S. Fire Administration's National Fire Academy (NFA) has established the FESHE network of emergency services related education and training providers. The FESHE mission is to: Establish an organization of post-secondary institutions to promote higher education and to enhance the recognition of the fire and emergency services as profession to reduce loss of life and property from fire and other hazards. The initiatives are supported by solutions identified from other industries that could be applied to fire and emergency services

Textbooks & Other Resources or Links

Fire Protection Systems Third Edition

A. Maurice Jones Jr.

ISBN:9781284184600 © 2021

Course Requirements and Instructional Methods

Students MUST complete the current version of the following courses even if they took an older version.

Assignments

Students will complete the following assignment activities. When completing your written assignments in either Microsoft Word or rich text format (using Times New Roman size 12 font ONLY) – not Word Perfect, use APA CITED textbook concepts to analyze the disaster response issues. If you just complete the assignments in broad terms without applying text concepts using APA Imperial Valley College Course Syllabus

3 citations, your grade will be significantly lower. While older sources are fine, students must include



the required number of citations from the textbook and more current sources. APA Citations: APA citations are required for assignments. Please ensure you're familiar with the process for correctly citing sources in your course submissions.

I strongly recommend students review a grammar/writing guide prior to submitting assignments. My goal is assignments will be reviewed and grades posted within 24 hours of their submission. Assignments submitted late will have a 10 % penalty assessed for each week late. Cover, reference, appendix, and table pages DO NOT count towards the page length requirements. There is NO extra credit or makeup assignments offered in the course, so every assignment contributes to students' final course grades. Assignments MUST be posted to the BB site and do NOT get course messaged to me. I do not want a "backup" copy sent to me. Use Blackboard only – thanks!

Course Grading Based on Course Objectives & Anticipated Class Schedule/Calendar

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

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*Week 1 - Intro quiz (5pts)
*Week 2 - Chapter 1 quiz (5 points)
*Week 3 - Chapter 2 quiz (5 points)
*Week 4 - Chapter 3 quiz (5 points)
*Week 5 - Chapter 4 quiz (5 points)
*Week 6 - Chapter 5 quiz (5 points)
*Week 7 - Chapter 6 quiz (5 points)
*Week 8 - Mid Term (60 points) & case study (30 points)
Week 9 - Chapter 7 quiz (5 points) & discussion board (10 points)
*Week 10 - Chapter 8 quiz(5 points) & discussion board (10 points)
*Week 11 – Spring Break
*Week 12 - Chapter 9 quiz(5 points) & discussion board (10 points)
*Week 13 - Chapter 10 quiz (5 points) & discussion board (10 points)
* Week 14 - Chapter 11quiz (5 points) & discussion board (10 points)
*Week 15 - Chapter 12quiz (5 points) & discussion board (10 points)
*Week 16 - Chapter 13quiz (5 points) & discussion board (10 points)
*Week 17 - Final (60 points), case study (30 points) & discussion board (5 points)
Maximum points vou can earn for Midterm = 60
Maximum points you can earn for Final = 60
Maximum points you can earn for guizzes = 70
                           ***Subject to change without prior notice***
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Course Policies

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See <u>General Catalog</u> for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.
- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].
- Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.
- There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.
- <u>Plagiarism</u> is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the <u>General Catalog</u> for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.



Other Course Information

[Optionally, include other necessary information.]

IVC Student Resources

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **CANVAS Support Site**. The Canvas Support Site provides a variety of support channels available to students 24 hours per day.
- <u>Learning Services</u>. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your <u>Campus Map</u> for the <u>Math Lab</u>; <u>Reading</u>, <u>Writing &</u> <u>Language Labs</u>; and the <u>Study Skills Center</u>.
- **Library Services**. There is more to our library than just books. You have access to tutors in the <u>Study Skills Center</u>, study rooms for small groups, and online access to a wealth of resources.
- Any student with a documented disability who may need educational accommodations should notify the instructor or the <u>Disabled Student Programs and Services</u> (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- <u>Student Health Center</u>. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC <u>Student Health Center</u> at 760-355-6128 in Room 1536 for more information.
- <u>Mental Health Counseling Services</u>. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC <u>Mental Health Counseling Services</u> at 760-355-6196 in Room 2109 for more information.
- Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC <u>General</u> <u>Catalog</u>.
- Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC <u>Library Department</u> provides numerous <u>Information</u> <u>Literacy Tutorials</u> to assist students in this endeavor.