

OESM 150: Industrial Fire Protection

Course Description:

Basic fire protection-prevention course for industry. Includes planning, managing and training for fire emergencies. Cross-listed as OESM 150 and FIRE 150.

Course Objectives:

Upon completion of the course, students are expected to be able to:

- Describe the various principles of combustion and fire growth.
- Determine building classification and construction types.
- Explain the relationship between building systems and fire protection.
- Identify appropriate housekeeping requirements for fire protection.
- Describe the pros, cons and application of various fire protection systems.
- Perform a basic fire safety inspection.
- Appropriately determine occupancy classifications and understand unique fire protection needs for various occupancies.
- Describe unique fire protection measures required for hazardous materials.
- Draw a diagram of a structure identifying fire protection and classification types.
- Describe requirements for fire safety under HIOSH rules.
- Read plans and write an inspection report.
- Identify unique fire hazards associated with high-risk processes.

Required Textbook:

NFPA Fire and Life Safety Inspection Manual, 7th edition

Student Evaluation:

Students are expected to complete *all* of the following:

Exam 1-3 (50 points each)	150 points
Quiz 1-8 (15 points each)	120 points
Diagram Exercise	30 points
Attendance/Participation	50 points
TOTAL	350 points

Grading: The grading will be done on a percentage basis as follows:

- A = 100-90% (350-314 points)
- B = 89-80% (313-279 points)
- C = 79-70% (278-244 points)
- D = 69-60% (243-209 points)

F = 59% and below (< 209 points)

Final grades are permanent. Final "I" grades will not be allowed in this class. Final "N" grades will be given only in very rare and exceptional cases.

HCC Grading Policies:

- a. No Show Policy: Students must attend both of the first to class sessions of the semester or may be dropped unless they notify the instructor or the Division Chair in advance of their absence.

- b. Disappear Policy: Students may receive an "F" grade if they do not officially drop their course by the drop deadline listed in the Academic Calendar of the current HCC catalogue of the schedule of classes.

Emergency Procedures:

- a. Location of first aid kit:
- b. Evacuation of building: Use Diamond Head and Ewa stairs and proceed to parking lot #2 (by the cafeteria). Assemble and wait further instructions from the instructor.
- c. Accident or Injury During Evening, after 4:30 pm.:
 - 1. Call 911 for an ambulance. Give essential information:
 - Location – building and room number, road to enter campus.
 - Type of emergency and victim's condition.
 - Your name and phone number.
 - 2. Call extension 247 or 284-1270 (cell – Security)
 - To notify others that an ambulance has been summoned
 - To have Campus Security escort the ambulance to the location
 - To request other assistance

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Week	Topics*	Chapters Covered*
1	Introductions Course Overview Principles of Combustion & Fire Growth	
2	Quiz Building Construction & Construction Classifications	3, 4, 5, 6
3	Quiz Building Systems & Housekeeping	7, 8, 9, 30
4	Quiz Fire Protection Systems (Session 1)	10, 11, 12
5	Quiz Fire Protection Systems (Session 2)	13, 14
6	Exam 1 (50 points, Weeks 1-5) Introduction to Occupancy Classifications & Special Structures	
7	Occupancy Classifications (Session 1)	16, 17, 18, 19, 20, 21
8	Quiz Occupancy Classifications (Session 2)	22, 23, 24, 25, 26, 27, 28, 29
9	Field Trip	
10	Exam 2 (50 points, Weeks 6-9)	
11	Hazardous Materials	32, 35, 36, 39, 41, 42
12	Quiz Process & Storage Hazards (Session 1)	31, 33, 34, 37, 40
13	Quiz Process & Storage Hazards (Session 2)	43, 44, 45, 47
14	Quiz The Fire Inspector, Inspection Procedures, Inspection Forms, Report Writing, Plans Review, Diagrams	1,2
15	Field Trip Diagram Exercise	
16	HIOSH Rules related to Fire Protection/Prevention	
17	Final - Exam 3 (50 points, Weeks 12-17)	

* Subject to change