

CATALOG INFORMATION

Dept and Nbr: FIRE 74

Title: FIRE PROT EQUIP SYS

Full Title: Fire Protection Equipment and Systems

Last Reviewed: 11/25/2019

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: FIRE 54

Catalog Description:
Portable fire extinguishing equipment; protection systems for special hazards; sprinkler systems, fire detection, and alarm systems.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100.

Limits on Enrollment:

Schedule of Classes Information:
Description: State Core Course. Portable fire extinguishing equipment; protection systems for special hazards; sprinkler systems, fire detection, & alarm systems. (Grade Only)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100.
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:

IGETC:	Transfer Area	Effective:	Inactive:
---------------	----------------------	-------------------	------------------

CSU Transfer:	Transferable	Effective:	Spring 1984	Inactive:
----------------------	--------------	------------	-------------	-----------

UC Transfer:		Effective:		Inactive:
---------------------	--	------------	--	-----------

CID:

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:

COURSE GOAL: To develop the ability of the students to apply codes and policies as they relate to the installation, inspection, use, and testing of systems.

COURSE OBJECTIVES: Successful completion of this course will enable students to:

1. Identify fire cause and effect.
2. Recognize hazards of materials and identify extinguishing methods.
3. Recognize types of building construction and their relationship to systems and equipment.
4. Compare smoke and fire movement in various types of construction
5. Define federal, state, and local laws, case law and examples relating to fire and building codes.
6. Identify organizations that provide nationally recognized standards that apply to systems and equipment.
7. Identify organizations that provide information or service.
8. Define types and classifications of fire extinguishers.
9. Compare effectiveness ratings of fire extinguishers.
10. Identify distribution, installation, maintenance, and test requirements of fire extinguishers.
11. Recognize good inspection procedures for fire extinguishers.
12. Recognize and prevent fraud in sales and service of fire extinguishers.
13. Define special systems.
14. Define emulsifiers and surfactants.
15. Identify installation and maintenance requirements and outline inspection methods for the following special systems:
 - a. dry chemical
 - b. carbon dioxide
 - c. mechanical foam
 - d. high expansion foam
 - e. halogenated hydrocarbon

f. explosion suppression

16. Identify water supplies, equipment, systems, and services for interior protection.
17. Identify performance records for automatic sprinkler systems.
18. Identify automatic sprinkler system types.
19. Identify special sprinkler system types.
20. Identify water spray systems.
21. Identify standards applicable to water systems.
22. Identify detection and alarm connections for water systems.
23. Outline plan review procedures for water systems.
24. Identify installation, maintenance, and test requirements for water systems.
25. Recognize good inspection procedures for water systems.
26. Identify types of standpipe systems and recognize the differences between new and old classification.
27. Identify water supply requirements for standpipe systems.
28. Identify installation, maintenance, and test requirements for standpipe systems.
29. Recognize good inspection procedures for standpipe systems.
30. Identify detection, alarm, and supervisory devices.
31. Identify detection systems.
32. Identify alarm systems by the purpose they serve.
33. Identify supervisory systems.
34. Identify installation, maintenance, and test requirements for detection, alarm, and supervisory systems.
35. Outline plan review procedures for detection, alarm, and supervisory systems.
36. Recognize good inspection procedures for detection, alarm, and supervisory systems.
37. Identify heat and smoke control devices and fire hardware.
38. Identify installation, maintenance, and test requirements for heat and smoke control devices and fire hardware.
39. Recognize good inspection procedures for heat and smoke control devices and fire hazards.

Topics and Scope:

1. Fire cause and effect.
2. Portable fire extinguishers.
3. Protection systems and equipment for special hazards.
4. Evaluating water supplies, equipment, systems, and services for interior protection.
5. Sprinkler protection.
6. Supervisory, detection, and alarm devices and proprietary signaling equipment.
7. Standpipe systems.
8. Heat and smoke control systems.

A MORE DETAILED OUTLINE AVAILABLE IN THE AJ DEPT.

Assignment:

1. Required reading.

2. Field trips.
3. Written work (essays and reports).
4. Problem solving activity or exercise.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework	Writing 10 - 20%
------------------	---------------------

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Exams	Problem solving 5 - 10%
--------------------------	----------------------------

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Performance exams	Skill Demonstrations 5 - 10%
-------------------	---------------------------------

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, Completion	Exams 25 - 80%
-----------------------------	-------------------

Other: Includes any assessment tools that do not logically fit into the above categories.

None	Other Category 0 - 0%
------	--------------------------

Representative Textbooks and Materials:

Required texts:

Private Fire protection and Detection, Delmar Thomson, 2nd edition, 1994.