

Lassen Community College Course Outline

FS 3 Fundamentals of Fire Prevention

3.0 Units

I. Catalog Description

The history and philosophy of fire prevention, organization and operation of fire prevention bureaus, use of fire codes, identification and correction of fire hazards, and the relationship of fire prevention with fire safety education and detection/suppression systems. This course has been approved for online, hybrid and correspondence delivery.

Recommended Preparation: Successful completion of ENGL105 or equivalent multiple measures placement.

Transfers to CSU

51 hours of lecture, 102 expected outside of class hours, 153 Total Hours of Instruction
Scheduled: Spring (even)

II. Coding Information

Repeatability: Not repeatable

Open Entry/Open Exit: NA

Grading Option: Graded

TOP Code: 213300

III. Course Objectives

A. Course Student Learning Outcomes:

Upon completion of this course the student will be able to:

- 1) List and identify the basic fire prevention functions of a fire department.
- 2) Explain and identify principles and procedures used to correct fire hazards.
- 3) Identify occupancies and building construction types.

B. Course Objectives:

Upon completion of this course the student will be able to:

1. Describe the origin and history of fire prevention efforts in the United States.
2. List and identify the basic fire prevention functions of a fire department.
3. Identify the responsibility and authority for fire prevention inspections and related activities.
4. Explain and identify principles and procedures used to correct fire hazards.
5. Identify occupancies and building construction types.
6. Identify hazards of use, storage and transfer of flammable liquids and gases and other hazardous materials.
7. Explain basic exiting requirements.
8. Identify basic electrical fire hazards.
9. List operational deficiencies in sprinkler systems and special fixed fire protection systems.
10. List operational deficiencies of standpipe systems.
11. List operational deficiencies of detection and alarm systems.
12. Identify principles of placement, operation and inspection of portable fire extinguishers.
13. Describe basic principles of fire cause determination as they relate to fire prevention

- and fire investigation.
14. Identify the plan review function of a fire prevention bureau.
 15. Identify the relationship between fire safety education and fire prevention.
 16. Identify the importance of report preparation and records management in fire prevention efforts.

IV. Course Content

1. History and Development of Fire Prevention
2. Fire Prevention Organizations
3. Organization of a Fire Prevention Bureau
4. Building Codes and Fire Prevention
5. Fire Codes and Fire Prevention
6. Structural Elements
7. Inspection Procedures
8. Identification of Hazards
9. Abatement and Mitigation of Hazards
10. Fire Investigation
11. Public Fire Safety Education
12. Plan Review
13. Report Preparation and Record Keeping

V. Assignments

A. Appropriate Readings

Assignments in the textbook and research.

B. Writing Assignments

Research papers on fire prevention technology, major fire hazards found on a commercial fire inspection, and basic hazard correction process used by the modern fire prevention bureau.

C. Expected Outside Assignments

Research on fire prevention methods and fire hazards in both commercial and private properties, studying text and other materials available on fire prevention, and development of an organization chart of a large fire bureau.

D. Specific Assignments that Demonstrate Critical Thinking

Analyze current activities or changes in operations of fire prevention bureaus from research of trade-technical magazines and their effects on the fire prevention bureau.

VI. Methods of Evaluation

Traditional Classroom Evaluation

Mixed format exams and research papers

Online Evaluation

A variety of methods will be used, such as: research papers, asynchronous and synchronous discussions (chat/forum), exercises/assignments, online quizzes and exams, and postings to online website.

Correspondence Evaluation

Same as traditional classroom with the exception of the desired use of proctored exams. Students will be expected to complete assignments and activities equivalent to traditional classroom assignments and activities. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain effective communication between instructor and student.

Hybrid Evaluation

A combination of traditional classroom and online evaluations will be used. Traditional

Classroom: exercises/assignments, mixed format exams and research papers. Online: exercises/assignments, online quizzes and exams, essay forum postings, and chat rooms.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery

Online Delivery

Traditional Classroom Delivery

Lecture, Demonstration, Discussion

Online Delivery

Delivery includes the following: online written lectures, forum-based discussions, exercises/assignments contained on website, adding extra resources and other media sources as appropriate.

Correspondence Delivery

Assigned readings, instructor-generated typed handouts, lecture materials, exercises and assignments equal to traditional classroom delivery. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain communication between student and instructor.

Hybrid Delivery

A combination of traditional classroom and online instruction will be utilized. 26 hours will be taught through traditional classroom delivery by the instructor and the other 25 hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of lecture, demonstration, and discussion. Online delivery will consist of online written lectures, forum-based discussions, exercises/assignments contained on website, adding extra resources and other media sources as appropriate.

VIII. Representative Texts and Supplies

Diamantes, David, *Principles of Fire Prevention*, 4th edition, 2022; Jones & Bartlett Learning, ISBN# 9781284180237

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Current Status: Active

Original Approval Date: April 9, 1991

Revised By: Dan Weaver

Curriculum/Academic Standards Committee Revision Date: 09/20/2022