

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 meets the National Fire Academy, Fire and Emergency Services Higher Education (FESHE) curriculum model for Fire Prevention. This course has been approved for online, hybrid and correspondence delivery.

Diversity Statement:

Our commitment to diversity requires that we strive to eliminate barriers to equity and that we act deliberately to create a safe and inclusive environment where individual and group differences are valued and leveraged for the growth and understanding as an educational community.

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

Additional Course Information

Transfer Status: Transfers to CSU

Total Number of Hours by Instructional Method: 51 hours of lecture, 102 expected outside of class hours, 153 Total Hours of Instruction

Scheduled: Spring (even)

II. Coding Information

Repeatability: Not repeatable

Grading Option: Graded

Credit Type: Degree Applicable Credit

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

- A. History and Development of Fire Prevention
- B. Fire Prevention Organizations
- C. Organization of a Fire Prevention Bureau
- D. Building Codes and Fire Prevention
- E. Fire Codes and Fire Prevention
- F. Structural Elements
- G. Inspection Procedures
- H. Identification of Hazards
- I. Abatement and Mitigation of Hazards
- J. Fire Investigation
- K. Public Fire Safety Education
- L. Plan Review
- M. 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. Students will be required to complete two hours of outside-of-class homework for each hour of lecture.
- 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 Evaluation

Term paper (topic choice, thesis statement, outline, bibliography, rough draft, final draft),

homework, classroom discussion, essay, journals, lab demonstrations and activities, multiple choice quizzes, and participation.

Correspondence Evaluation

Same as face to face with the exception of the desired use of proctored exams and exclusion of participation in classroom activities. Students will be expected to complete assignments and activities equivalent to in-class 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

Quizzes and exams could be administered in person and/ or online. Students will be expected to complete online assignments and activities equivalent to in class assignments and activities for the online portion of the course. Electronic communication, both synchronous and asynchronous (chat/forum) will be evaluated for participation and to maintain effective communication between instructor and students.

Online Evaluation

A variety of methods will be used, such as: research papers, asynchronous and synchronous (chat/forum) discussions, online quizzes and exams, posting to online website and email communications using the districts approved learning management system.

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, discussion, audio/visual aids, demonstration, group exercises, guest speakers, lab, individualized programs and other as needed.

Correspondence Delivery

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

Hybrid Delivery

A combination of traditional classroom and online instruction will be utilized. Each semester a minimum of 17 hours, or 1/3 of the instruction hours, will be taught face-to face by the instructor and the remaining hours will be instructed online through the technology platform adopted by the District. Traditional class instruction could consist of exercises/assignments, lectures, visual aids, practice exercises, exams and quizzes. Online delivery could consist of exercises/assignments, lecture posts, discussions, exams and quizzes, adding extra resources and other media sources as appropriate.

Online Delivery

A variety of methods will be used, such as: research papers, asynchronous and synchronous (chat/forum) discussions, online quizzes and exams, posting to online website and email communications using the districts approved learning management system.

VIII. Representative Texts and Supplies

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

IX. Course Status

1. Current Status: Active
2. Original Approval Date: April 9, 1991
3. Course Originator:
4. Board Approval Date:
5. Revised By: Dan Weaver
6. Curriculum/Academic Standards Committee Revision Date: 05/07/2024