

# FIRE 0005 - FIRE PREVENTION TECHNOLOGY

## Catalog Description

Advisory: Completion with grade of "C" or better or concurrent enrollment in FIRE 1

Hours: 54 lecture

Description: Fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization of a fire prevention bureau; use and application of codes and standards; plans review; fire inspections; fire and life safety education; and fire investigation. (C-ID FIRE 110X) (CSU-with unit limitation)

## Course Student Learning Outcomes

- CSLO #1: Analyze and interpret the origin and history of fire prevention.
- CSLO #2: Evaluate methods and procedures used in fire prevention programs.
- CSLO #3: Distinguish and identify the responsibility and authority for fire prevention inspections and related activities.
- CSLO #4: Correlate and examine the basic principles of fire cause determination as they relate to fire prevention and fire investigation.
- CSLO #5: Compare and contrast the relationship between fire safety education and fire prevention.
- CSLO #6: Evaluate the importance of report preparation and records management in fire prevention efforts.

## Effective Term

Fall 2018

## Course Type

Credit - Degree-applicable

## Contact Hours

54

## Outside of Class Hours

108

## Total Student Learning Hours

162

## Course Objectives

1. Identify laws, codes, ordinances, and regulations as they relate to fire prevention;
2. Outline code enforcement as it impacts life and property loss;
3. Define the national fire problem and role of fire prevention;
4. Identify and describe fire prevention organizations and associations;
5. Define laws, rules, regulations, and codes, and identify those relevant to fire prevention of the authority having jurisdiction;
6. Define the functions of a fire prevention bureau;
7. Describe the functions of a fire prevention bureau;
8. Describe inspection practices and procedures;

9. Identify and describe the standards for professional qualification for Fire Marshal, Plans Examiner, Fire Inspector, Fire and Life Safety Educator, and Fire Investigator;
10. List opportunities in professional development for fire prevention personnel.

## General Education Information

- Approved College Associate Degree GE Applicability
- CSU GE Applicability (Recommended-requires CSU approval)
- Cal-GETC Applicability (Recommended - Requires External Approval)
- IGETC Applicability (Recommended-requires CSU/UC approval)

## Articulation Information

- CSU Transferable

## Methods of Evaluation

- Classroom Discussions
  - Example: Following a lecture and reading assignment on the functions of the Fire Prevention Bureau, through discussion, students will identify the various functions and duties of the Fire Prevention Bureau and staff. Students are evaluated based on correctness of responses and participation.
- Objective Examinations
  - Example: Students will take a multiple choice test on Fire Prevention Laws, Rules, Regulations and Codes. Standard grading. Example: List five areas typically regulated by property maintenance codes.
- Reports
  - Example: Students will research and write a report on the National Fire Problem and the role of Fire Prevention. Students will be evaluated based on an instructor provided rubric.

## Repeatable

No

## Methods of Instruction

- Lecture/Discussion
- Distance Learning

Lecture:

1. The instructor will present, in lecture and PowerPoint format, the code adoption process for model codes. Instructor will lead class in a discussion to identify and explain each step, the importance of this process, and how it applies in fire prevention activities.
2. Instructor will divide students into groups and give each group a set of "construction plans" to identify at least five (5) various codes and standards that need to be applied to the plans. Instructor will then have each group present their findings to the class identifying the codes and standards applied to their assigned project.

Distance Learning

1. In the Occupancy Module the instructor will provide written lecture, pdf handouts of the Building Standards, written assignment instruction, and an assignment worksheet. Each student will review the Module materials and complete the assignment worksheet identifying the correct occupancy type(s) based on the information given. Each student will post his/her worksheet on the Discussion

Board, receive feedback from other students, and provide feedback to at least 2 other student postings. The instructor will review all student postings and provide feedback.

2. In the Public Education Module the instructor will provide written lecture, pdf handouts, PowerPoint presentation, and written assignment instruction. The assignment requires each student to develop a Public Educational Fire Safety Program outline using the 5-Step Method as outlined in the module materials and the course text. Each student will post his/her Public Educational Fire Safety Program outline using the 5-Step Method on the Discussion Board, receive feedback from other students, and provide feedback to at least 2 other student postings. The instructor will review all student postings and provide feedback.

## Typical Out of Class Assignments

### Reading Assignments

1. Read the chapter in the assigned textbook on Early Fire Prevention Efforts in America. Be prepared to discuss the outcome of the "America Burning" report in the next class session.
2. Read the handouts on the California Building Code: Exiting Requirements. Be prepared for group exercises using the Building Code materials.

### Writing, Problem Solving or Performance

1. Review the article on the Hamlet and Tyson Chicken Plant fires; compare and contrast four (4) different elements of each case. Prepare a written listing for each comparison and contrast.
2. Given the five (5) step process for the development of a Public Safety Program (Identification, Selection, Design, Implementation, and Evaluation), prepare an outline of a fire safety program using the five steps. Be prepared to present in a classroom presentation format.

### Other (Term projects, research papers, portfolios, etc.)

1. Students will develop a thesis statement on a fire prevention topic and construct a written term project/research paper formulating theory and application. Example of thesis: "The Stop, Drop, and Roll Program developed by the National Fire Protection Association is an integral part of America's public education of fire safety."

### Required Materials

- Principles of Fire Prevention
  - Author: Diamontes, David
  - Publisher: Jones and Bartlett Learning
  - Publication Date: 2016
  - Text Edition: 3rd
  - Classic Textbook?:
  - OER Link:
  - OER:

### Other materials and-or supplies required of students that contribute to the cost of the course.

Handouts of current model code sections