

# FIRE 0176 - FIRE INSPECTIONS AND INVESTIGATION FOR COMPANY OFFICERS - CO 2C

## Catalog Description

Prerequisite: Completion of FIRE 102 with grade of "C" or better or completion of California State Firefighter II educational requirements

Hours: 40 lecture

Description: Aligns with Company Officer 2C of the Company Officer Program. Provides an overview of the information necessary to conduct inspections, identify hazards and address violations, performing a fire investigation to determine preliminary cause and to secure the incident scene and preserve evidence. (C-ID FIRE 220X) (CSU-with unit limitation)

## Course Student Learning Outcomes

- CSLO #1: Outline a given occupancy and identify construction, alarm, detection, and suppression features that contribute to or prevent the spread of fire, heat and smoke.
- CSLO #2: Develop an occupancy pre-incident plan.
- CSLO #3: Analyze and determine fire origin and cause.
- CSLO #4: Demonstrate life-safety inspection of assigned occupancy.

## Effective Term

Fall 2019

## Course Type

Credit - Degree-applicable

## Contact Hours

40

## Outside of Class Hours

80

## Total Student Learning Hours

120

## Course Objectives

1. Describe the procedures for conducting fire inspections
2. Identifying hazards including hazardous materials and properly documenting and conducting follow-up in accordance with adopted policies
3. Identify the construction, alarm, detection and suppression features that prevent or contribute to the spread of fire, heat and smoke through a building and develop an occupancy pre-fire plan.
4. Describe the procedures for securing and incident scene which keeps unauthorized persons from restricted areas and protects evidence from damage or destruction.
5. Determine the point of origin and preliminary cause of fire to ascertain if arson is suspected

## 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

- Objective Examinations
  - Example: 1. Students will take a multiple-choice examination on common types of fires. Standard Grading. Example Question: What is the most common cause of residential structure fires? A. Smoking B. Electrical C. Cooking D. Portable heaters.
- Projects
  - Example: 1. Students will draft a pre-incident plan of a commercial building. Student work will be graded using an instructor created rubric that is shared with the students. 2. Students will use a provided residential fire scenario and from the information provided, create a matrix of the steps to be followed in a fire investigation and present it to the class. Grading will be based on a standard instructor designed rubric.

## Repeatable

No

## Methods of Instruction

- Lecture/Discussion
- Distance Learning

Lecture:

1. The instructor will lecture on the documentation steps of a preliminary fire investigation. Students will then be given a fire investigation scenario and shall document the appropriate findings in the proper sequence.
2. The instructor will lead students through a demonstration of the steps to be taken for conducting a fire safety inspection and review critical mistakes fire inspectors occasionally make. Students will then conduct a mock fire safety inspection on a given building.

Distance Learning

1. Following an instructor online lecture on determining points of origin, the students will determine the point of origin on instructor provided photos depicting various fire scenes. Students will post their findings and through the discussion board discuss why each student came up with their conclusions.

## Typical Out of Class Assignments Reading Assignments

1. Read Penal Code 832 and analyze how it affects the fire investigator.
2. Read the chapter on fire growth and development and be prepared to discuss in class how it can effect fire investigation procedures.

## **Writing, Problem Solving or Performance**

1. Create a comprehensive outline of the steps to be taken when determining the point of origin of a single family dwelling fire from time of dispatch to determining the point of origin. 2. Utilizing role playing scenarios, students will perform a preliminary fire investigation of a given fire scene.

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

### **Required Materials**

- Fire Investigator
  - Author: International Association of Fire Chiefs & National Fire Protection Association
  - Publisher: Jones and Bartlett
  - Publication Date: 2016
  - Text Edition: 4th
  - Classic Textbook?:
  - OER Link:
  - OER:

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