FIRE 0079 - FIRE INVESTIGATION

Catalog Description

Advisory: Completion of FIRE 1 and 8 with grades of "C" or better

Hours: 54 lecture

Description: Introduces the general practices involved in fire investigation. Topics include determining the cause of fires (accidental, suspicious, and incendiary); types of fires; related laws; introduction to incendiary fires; motives for starting fires; recognizing and preserving evidence; interviewing witnesses and suspects; and arrest, detention, and court procedures. (CSU)

Course Student Learning Outcomes

- CSLO #1: Explain how to investigate Vehicle Fires, Structure Fires, and Wildland Fires.
- CSLO #2: Outline the evidence collection process.
- CSLO #3: Explain how to interview witnesses and suspects.
- CSLO #4: Explain the Fire Investigator's role in court procedures.

Effective Term

Fall 2019

Course Type

Credit - Degree-applicable

Contact Hours

54

Outside of Class Hours

108

Total Student Learning Hours

162

Course Objectives

1. Describe how to recognize, protect, and preserve evidence of fire cause
2. Explain the techniques relating to court procedures
3. Explain the techniques for interviewing witnesses and suspects
4. Diagnose the point of origin at a fire scene
5. Describe the scientific method of fire investigation

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

- Essay Examinations
  - Example: Students will write an essay on the arrest and detention procedures. Rubric Grading.
- Objective Examinations
  - Example: Students will take a multiple-choice examination on Fire Cause Determination. Standard Grading. Example Question: What is the process used by the investigator to identify the ignition source? A. The scientific method, B. Ignition sequence assessment, C. Ignition source analysis, D. All of the above.
- Problem Solving Examinations
  - Example: Students will be given a wildland fire scenario and are to determine where the fire started. Rubric Grading.

Repeatable

No

Methods of Instruction

- Lecture/Discussion
- Distance Learning

Lecture:

1. The instructor will lecture on recognizing, protecting and collecting evidence of fire cause. Students will then outline the proper procedure for collecting evidence during an instructor provided scenario.
2. The instructor will lecture on diagnosing the point of origin for a wildland fire. Students will then determine points of origin for a given scenario.

Distance Learning

1. Following an on-line lecture on fire scene evidence, students will be given a fire scenario with video and photos. Students are to review the scenario and describe how to recognize, protect, and preserve evidence of fire cause. Students will post their findings for an on-line discussion.

Typical Out of Class Assignments Reading Assignments

1. Read chapter in text book on Planning an Investigation and be prepared to discuss in class. 2. Read chapter in text book on motor vehicle fires and complete "In Action" review questions at the end of the chapter.

Writing, Problem Solving or Performance

1. Following a lecture on writing a fire investigation report, students will write a 2 page report on an instructor provided fire scenario. 2. Given instructor provided photographs of an extinguished residential structure fire, students are to determine the point of origin by outlining specific fire scene indicators.

Other (Term projects, research papers, portfolios, etc.)
Required Materials

- Fire Investigator
  - Author: International Association of Fire Chiefs, Arson Investigators & National Fire Protection Assoc.
  - Publisher: Jones and Bartlett Learning
  - 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.