## I. GENERAL COURSE INFORMATION

Subject and Number: Fire and Emergency Technology 110A

Descriptive Title: Fire Inspector I
Course Disciplines: Fire Technology

Division: Industry and Technology

## **Catalog Description:**

This course parallels the first course in the series of fire prevention courses offered by the California Fire Service Training and Education System (CFSTES). It provides a broad, technical overview of fire prevention codes and ordinances, inspection practices, key hazards, and extinguishing systems. This course meets National Fire Protection Association 1031, Fire Inspector Professional Qualifications Standards, and applies to Fire Officer, Fire Prevention Officer I, and Public Education Officer certification requirements established by the California State Board of Fire Services.

## **Conditions of Enrollment:**

**Recommended Preparation: Fire and Emergency Technology 1** 

Course Length: X Full Term Other (Specify number of weeks):

Hours Lecture: 1.5 hours per week TBA Hours Laboratory: 0 hours per week TBA

Course Units: 1.5

**Grading Method:** Letter

Credit Status Associate Degree Credit

Transfer CSU: X Effective Date: 11/21/2016

Transfer UC:

General Education: El Camino College:

**CSU GE:** 

**IGETC:** 

#### **II. OUTCOMES AND OBJECTIVES**

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

Given lecture and related instructional material, the student will:

- 1. Calculate the required fire flow for a 10,000 square foot storage building.
- 2. Compare and contrast the advantages and disadvantages of a wet-pipe sprinkler system versus a drypipe sprinkler system.
- 3. Describe the typical fire hazards found in a "R" occupancy.

The above SLOs were the most recent available SLOs at the time of course review. For the most current SLO statements, visit the El Camino College SLO webpage at <a href="http://www.elcamino.edu/academics/slo/">http://www.elcamino.edu/academics/slo/</a>.

- B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)
  - 1. Compare and contrast the physical properties of flammable and/or combustible materials.
    - Objective Exams
  - 2. Evaluate inspection plans for various types of occupancies.
    - Performance exams
  - 3. Compare and contrast the principles of operation of fixed fire protection systems.
    - Essay exams
  - 4. Determine the placement, operation, and inspection requirements of portable fire extinguishers.
    - Performance exams
  - 5. Evaluate and design solutions to fire hazards in various types of occupancies.
    - Essay exams
  - 6. Interpret codes and ordinances related to fire prevention.
    - Objective Exams

I. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lecture	3	I	Legal Responsibilities A. Regulatory requirements B. Related agencies
Lecture	3	II	Codes and Standards A. California Building Code B. California Residential Code C. California Fire Code D. California Government Code E. California Health and Safety Code
Lecture	6	Ш	The Inspection Process  A. Need for inspections  B. Preparation for inspection  C. Physical inspection process  D. Methods for obtaining code compliance
Lecture	3	IV	Confidentiality and Privacy Requirement A. Confidential record keeping requirements B. Maintaining "trade secrets" C. Confidentiality requirements versus court orders
Lecture	3	V	Ethical Conduct A. Defining ethics and core values B. Gift and gratuity issues
Lecture	2	VI	The Permit Process  A. Identifying the jurisdictional permit policies  B. Types of permits
Lecture	3	VII	Plan Review A. Ensuring compliance with applicable codes, standards, and priorities B. Approving a construction project or process C. Activities that require a plan review
Lecture	2	VIII	Investigating Common Complaints A. Overview of the complaint process B. Methods to communicate complaint resolutions C. Political influence on the complaint process
Lecture	2	IX	Participating in Legal Proceedings A. Common terminology used in legal proceedings B. Types of legal proceedings C. Maintaining professional courtroom demeanor
Total Lecture Hours 2		27	
Total Laboratory Hours		0	
Total Hours		27	

#### IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

## A. PRIMARY METHOD OF EVALUATION:

Problem solving demonstrations (computational or non-computational)

### B. TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:

The AAA Tool and Die Company occupies a single-story concrete structure in a commercial zone designated as M3. The building comprises 4,000 square feet with workstations for 10 people and office space for three people. Research the codes and ordinances pertaining to the occupancy, develop an inspection plan and high-light the fields requiring information on an inspection report. Prepare a one to two-page report outlining your findings and submit to the instructor.

#### C. COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:

- 1. Formulate a one-page written plan for the correct placement, occupant training in the correct operation and a required maintenance schedule for portable fire extinguishers in a high hazard occupancy. Submit plan to the instructor.
- 2. An important role of the fire prevention officer is informing the public about fire safety. Prepare submit a one to two-page outline for a 30-minute talk on fire hazards in the home intended for the general public. Submit outline to the instructor.

#### C. OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:

Essay exams Other exams Quizzes Multiple Choice Completion

### V. INSTRUCTIONAL METHODS

Discussion
Lecture
Multimedia presentations
Role Play
Other (please specify)
Video

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

# VI. WORK OUTSIDE OF CLASS

Study Required reading Problem solving activities Written work

Estimated Independent Study Hours per Week: 3

### VII. TEXTS AND MATERIALS

### A. UP-TO-DATE REPRESENTATIVE TEXTBOOKS

Brett Lacey and Paul Valentine. <u>Fire Prevention Applications</u>. 2nd ed. Fire Protection Publications, Oklahoma State University. 2017

- B. ALTERNATIVE TEXTBOOKS
- C. REQUIRED SUPPLEMENTARY READINGS
- D. OTHER REQUIRED MATERIALS

### VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites and Corequisites)

Requisites Category and Justification
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B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification
Course Recommended Preparation or Fire and Emergency Technology-1	

## D. Recommended Skills

## **Recommended Skills**

The student should possess and understanding of the chemical and physical properties of combustion.

FTEC 1 - Compare and contrast the basic components of fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior.

# E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
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Course created by Junius Murray on 09/01/1993.

BOARD APPROVAL DATE: 02/22/1996

LAST BOARD APPROVAL DATE: 07/15/2019

Last Reviewed and/or Revised by JEFF BAUMUNK on 05/02/1019