FIRE 272 Course Outline as of Fall 2016

CATALOG INFORMATION

Dept and Nbr: FIRE 272 Title: FIRE INSPECT/INVESTIGATE

Full Title: Fire Inspections and Investigations for Company Officers

Last Reviewed: 9/23/2019

Units		Course Hours per Wee	ek	Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	2.00	4	Lecture Scheduled	8.00
Minimum	1.00	Lab Scheduled	8.00	2	Lab Scheduled	32.00
		Contact DHR	0		Contact DHR	0
		Contact Total	10.00		Contact Total	40.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 16.00 Total Student Learning Hours: 56.00

Title 5 Category: AA Degree Applicable

Grading: P/NP Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:

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. Upon successful completion, the student will be awarded a completion certificate from the State Board of Fire Services.

Prerequisites/Corequisites:

Course Completion of FIRE 208.1 (Completion of basic fire academy or equivalent as determined by the Dean of Public Safety Instruction)

Recommended Preparation:

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:

Description: 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. Upon successful completion, the student will be awarded a completion certificate from the State Board of Fire Services. (P/NP Only)

Prerequisites/Corequisites: Course Completion of FIRE 208.1 (Completion of basic fire academy

or equivalent as determined by the Dean of Public Safety Instruction)

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment: Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

IGETC: Transfer Area Effective: Inactive:

CSU Transfer: Transferable Effective: Spring 2020 Inactive:

UC Transfer: Effective: Inactive:

CID:

Certificate/Major Applicable:

Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:

Upon completion of the course, students will be able to:

- 1. Identify course objectives, requirements, assignments, activities, evaluation methods and participation requirements
- 2. Identify the different levels in the Fire Officer Certification track, the courses and requirements for Level I and II certification and the capstone task book and testing process
- 3. Describe the duties of a Level I Company Officer, a Level II Company Officer and a Level I Wildland Officer
- 4. Describe the procedures for conducting fire inspections, identifying hazards including hazardous materials and properly documenting and conducting follow-up in accordance with adopted policies
- 5. 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
- 6. Describe the procedures for securing an incident scene which keeps unauthorized persons from restricted areas and protects evidence from damage or destruction
- 7. Determine the point of origin and preliminary cause of fire to ascertain if arson is suspected

Topics and Scope:

- I. Orientation and administration
 - A. Review of facilities
 - B. Review of classroom requirements
 - C. Review of syllabus, participation, assignments and evaluation methods
- II. Fire Officer Certification track course requirements
 - A. Level I requirements
 - B. Level II requirements

- C. The capstone task book process
- D. The capstone testing process

III. Definitions of Duty

- A. Duties of a Level I Company Officer
- B. Duties of a Level II Company Officer
- C. Duties of a Level I Wildland Fire Officer

IV. Fire Inspection Procedures

- A. California Fire Code classifications
- B. Inspection procedures
- C. Fire detection systems
- D. Fire alarm systems
- E. Fire protection systems
- F. Common fire hazards
- G. Life safety hazards
- H. Hazardous materials marking and identification systems
- I. Application of codes and standards
- J. Wildland Urban Interface inspection procedures
- V. Factors that prevent or contribute to fire spread
 - A. Fire behavior and fire spread in various occupancies
 - B. Building construction types
 - 1. Type I non-combustible
 - 2. Type II non-combustible
 - 3. Type III non-combustible exterior
 - 4. Type IV heavy timber
 - 5. Type V combustible
 - C. Building construction features
 - 1. Fire walls
 - 2. Fire barriers
 - 3. Fire partitions
 - 4. Fire doors
 - 5. Vertical openings
 - 6. Interior finishes
 - 7. Roofing
 - 8. Draft stops and smoke vents
 - D. Impact of
 - 1. Detection systems
 - 2. Alarm systems
 - 3. Suppression systems
 - 4. Codes
 - 5. Ordinances
 - 6. Standards
 - E. Purpose of pre-incident plans
 - F. Pre-incident plan survey process
- VI. Securing incident scenes
 - A. Types of evidence
 - B. Fire scene security
 - C. Evidence preservation
 - D. Establishing perimeters at incident scenes
- VII. Determining cause and origin
 - A. Methods used by arsonists
 - B. Common causes of fire
 - C. Basic fire cause and origin determination

- D. Fire growth and development
- E. Procedures to document preliminary investigations
- F. Applying knowledge using deductive skills

Assignment:

- 1. Pre-course reading and writing assignments of up to three hours
- 2. Reading 20- 80 pages between sessions
- 3. Written homework assignments
- 4. 2-5 individual inspection/investigation exercises
- 5. 5-10 group exercises
- 6. Manual worksheets
- 7. Summative exam

Written exercises

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Problem Solving: Assessment tools, other than exams, that

demonstrate competence in computational or noncomputational problem solving skills.

Individual and group inspection and investigation exercises

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Individual and group inspection and investigation exercises

Exams: All forms of formal testing, other than skill performance exams.

Summative exam

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Skill Demonstrations

5 - 15%

Problem solving

5 - 15%

Writing

Exams 70 - 85%

Other Category 0 - 0%

Representative Textbooks and Materials:

Fire Inspections and Investigations for Company Officers Course Plan California Fire Service Training and Education System, 2014 edition

California Fire Inspector's Guide, California Fire Chief's Association, 2013 edition Fire Officer: Principles and Practices, 3rd Edition, Michael Ward, Jones and Bartlett, 2014