

# BUTTE COLLEGE

## COURSE OUTLINE

### I. CATALOG DESCRIPTION

**FSC 2 - Introduction to Fire Science**

**3 Unit(s)**

**Prerequisite(s):** NONE

**Recommended Prep:** Reading Level III; English Level III

**Transfer Status:** CSU

51 hours Lecture

This course introduces students to the history and philosophy of the fire service and concepts of fire protection. It includes study of fire organizations and career opportunities in the fire service and related fields; fire loss analysis and the impact of fire on society; public, quasi-public and private fire protection services; specific fire protection techniques and functions; and an introduction to fire chemistry and physics.

### II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Explain the impact of fire on society.
- B. Describe the history, functions and general goals of fire protection.
- C. Describe various types of fire protection organizations, and identify career opportunities in fire protection and related fields.
- D. Describe the general process of fire loss analysis.
- E. Critically analyze the relative effectiveness of specific fire protection concepts, past and present, utilized in the response to fires.

### III. COURSE CONTENT

#### **A. Unit Titles/Suggested Time Schedule**

Lecture	
<u>Topics</u>	<u>Hours</u>
1. History and philosophy of fire protection.	6.00
2. Fire protection functions.	6.00
3. Fire protection organizations and career opportunities.	7.00
4. Public fire protection services.	5.00
5. Quasi-public fire protection services.	5.00
6. Private fire protection services.	6.00
7. Fire loss analysis and the impact of fire on society.	4.00
8. Introduction to fire chemistry.	6.00
9. The physics of fire.	6.00
Total Hours	51.00

### IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- C. Discussion
- D. Demonstrations
- E. Reading Assignments

F. Multimedia Presentations

G. Handouts

**V. METHODS OF EVALUATION**

A. Quizzes

B. Projects

C. Class participation

D. Written Examinations

**VI. EXAMPLES OF ASSIGNMENTS**

A. Reading Assignments

1. Read a textbook chapter on organizations related to the fire service, and successfully pass a quiz on the chapter.

2. Read an instructor provided article on the history of the fire service, and be prepared to discuss in class.

B. Writing Assignments

1. Write a minimum one page autobiography which describes your interest in the study of fire technology.

2. Prepare a minimum two page formatted report describing your tour of a local fire department.

C. Out-of-Class Assignments

1. Prepare a PowerPoint presentation which overviews a local fire service agency.

2. Arrange and participate in a tour of a local fire department, and be prepared to discuss in class.

**VII. RECOMMENDED MATERIALS OF INSTRUCTION**

Textbooks:

A. IFSTA. Fire Service Orientation and Terminology. 5th Edition. IFSTA, 2011.

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