BUTTE COLLEGE
COURSE OUTLINE

I. **CATALOG DESCRIPTION**

FSC 14 - Fire Protection Equipment and Systems **3 Unit(s)**

Prerequisite(s): NONE
Recommended Prep: NONE

Transfer Status: CSU
51 hours Lecture

This course introduces the student to a variety of fire protection equipment and systems. It will include installation, maintenance and operation of detection and suppression systems, as well as an examination of the suppression of special types of hazards.

II. **OBJECTIVES**

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

A. Recognize and identify various types of fire detection and supression systems.
B. Describe the function and operations of various types of sprinkler systems.
C. Identify, compare and contrast the types, classifications and uses of fire extinguishers.
D. Identify special types of hazards and describe related suppression methods.

III. **COURSE CONTENT**

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

Lecture

Topics	Hours
1. Fire protection systems and detection vs. supression	4.00
2. Installation, maintenance, operation and testing of fire protection systems	6.00
3. Detection systems	4.00
4. Fire alarms	2.00
5. Supression systems	6.00
6. Sprinkler systems	8.00
7. Water supplies	8.00
8. Fire extinguisher types and uses	8.00
9. Special hazard supression and smoke management systems	5.00
Total Hours	51.00

IV. **METHODS OF INSTRUCTION**

A. Lecture
B. Discussion
C. Demonstrations
D. Multimedia Presentations

V. **METHODS OF EVALUATION**

A. Exams/Tests
B. Homework
C. Class participation

D. Written Assignments

VI. EXAMPLES OF ASSIGNMENTS

A. Reading Assignments
1. Read the textbook chapter on detection systems, and be prepared to discuss the proper application of systems in class.
2. Read an article about an historic municipal fire where there were no fire protection systems in place. Be prepared to discuss protection system flaws in class.

B. Writing Assignments
1. Write a minimum two page report about a historic municipal fire, and describe the impact of the presence or absence of a fire protection system.
2. Prepare a consise reference sheet with mathematical formulas for calculating hydraulic equations.

C. Out-of-Class Assignments
1. Participate in a ride-along with a fire inspector, inspect a building and locate and identify the fire protection systems it has. Be prepared to describe your experience in class.
2. Prepare a Power Point presentaion regarding the importance of fire protection systems, and be prepared to present and discuss in class.

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Textbooks:

A. IFSTA. Fire Detection and Suppression Systems. 4th Edition. IFSTA, 2011.
B. IFSTA. Pumping Apparatus Driver/Operator Handbook. 2nd Edition. IFSTA, 2006.

Materials Other Than Textbooks:

A. Handouts
B. Audiovisual

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