

# BUTTE COLLEGE

## COURSE OUTLINE

### I. CATALOG DESCRIPTION

**FSC 201E - Confined Space Rescue Operations**

**1.3 Unit(s)**

**Prerequisite(s):** NONE

**Recommended Prep:** NONE

**Transfer Status:** NT

11 hours Lecture

29 hours Lab

A study of the role of rescue personnel responding to a Confined Space incident. This course provides instruction in identifying confined spaces and permit-required confined spaces, the hazards associated with entering such spaces, target industries that possess these spaces and laws regulating entries/rescues performed in confined spaces. Participants will be taught the mandatory aspects of confined space entries and rescues including monitoring, ventilation, lock-out/tag-out, retrieval and communication systems, respiratory protection, etc. The course is designed for those personnel who are likely to make routine or rescue entries into confined spaces. Meets CSFM certification requirements. Pass/No Pass Only.

### II. OBJECTIVES

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

- A. Demonstrate a knowledge of the codes and regulations that impact operations within confined spaces.
- B. Identify confined spaces and permit required confined spaces.
- C. Recognize the hazards associated with confined spaces.
- D. Evaluate hazardous atmospheres within confined spaces.
- E. Demonstrate techniques to evaluate confined spaces.
- F. Identify the requirements of entrant retrieval systems.
- G. Develop rope and cable retrieval systems.
- H. Determine adequate levels of personnel protection.
- I. Demonstrate how to mitigate hazards in confined spaces.
- J. Recognize the required operational positions and their responsibilities as set forth by Cal-OSHA.

### III. COURSE CONTENT

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

Lecture	
<u>Topics</u>	<u>Hours</u>
1. Introductions & Administration	0.50
2. Orientation & Intro. To Cal Osha Code & Con. Space Dangers	1.00
3. Confined Space Regulation - Title 8	1.00
4. Types of Confined Space Hazards	1.00
5. Atmospheric Monitoring	1.00
6. Methods for Controlling Confined Space Hazards	1.50
7. Personal Protective Equipment	1.00
8. Phases of Confined Space Rescue	1.00
9. Review	1.00

10. Final Exam	1.00
11. Closing	1.00
Total Hours	11.00

#### Lab

<u>Topics</u>	<u>Hours</u>
1. Types of Equipment, Knots & Systems	1.00
2. How to Package a Victim	0.50
3. Commercial Retrieval Systems	0.50
4. Assessing and Permitting Confined Spaces	0.50
5. How to Utilize Knots, Anchor Slings, & Brake Systems	1.00
6. How to Package Rescuers	0.50
7. How to Construct a Ladder Rig	0.50
8. How to Construct a Safety Line System - Figure 8 Descender	1.00
9. How to Construct and Operate a Z-Rig Mechanical Advantage System	1.00
10. How to Construct a Piggy Back Mechanical Advantage System	1.00
11. How to Lash and Rig a Stretcher	0.50
12. How to Perform Basic Victim Packaging	0.50
13. How to Construct a Ladder Slide	0.50
14. How to Construct and Operate a Ladder Gin System	1.00
15. How to Construct and Operate a Ladder A-Frame	1.00
16. How to Construct a Simple Ladder Sling	0.50
17. How to Operate Respiratory Protective Equipment	0.50
18. How to Operate Communication Equipment	0.50
19. How to Operate Ventilation Equipment	0.50
20. Confined Space Rescue Exercises/Scenarios	16.00
Total Hours	29.00

#### IV. **METHODS OF INSTRUCTION**

- A. Lecture
- B. Group Discussions
- C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- D. Discussion
- E. Group and Individual Activities
- F. Manipulative Exercises

#### V. **METHODS OF EVALUATION**

- A. Quizzes
- B. Final Examination
- C. Manipulative Performance Standards

#### VI. **EXAMPLES OF ASSIGNMENTS**

- A. Reading Assignments
- B. Writing Assignments

C. Out-of-Class Assignments

VII. **RECOMMENDED MATERIALS OF INSTRUCTION**

Materials Other Than Textbooks:

A. CMC Confined Space Rescue Textbook

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