Lassen Community College Course Outline

FS 96A Rope Rescue Awareness/Operations 1 Unit

I. Catalog Description

This course provides firefighters and emergency medical personnel with information on low-angle and high-angle rope rescue strategy and techniques. Students are familiarized with operation of simple, complex and compound rope rescue systems in the low-and high-angle environment. This course covers 40 hours of required State Fire Training.
Note: If able, Students should provide their own safety equipment which will include helmet, gloves, long pants, long sleeve shirt, and work boots with aggressive soles for traction on steep slopes (PPE***). Lassen College can provide PPE if needed, but students must provide their own boots and gloves.*** Students may re-enroll in course for credit as legally mandated to meet training requirements as a condition of continued paid or volunteer employment.
A supplemental $81.00 fee will be charged including a $5.00 materials fee for student manual flash drive and a $76.00 State Fire Training FSTEP certification fee is due to Lassen Community College and will be collected at the time of registration.

Recommended Preparation: Successful completion of ENGL 105 or equivalent multiple measures placement. Pre-course work (online FEMA website):
IS-100: Introduction to the Incident Command System
IS-200: ICS for Single Resources and Initial Action Incidents
IS-700: National Incident Management System, An Introduction
IS-800: National Response Framework, An Introduction

Transfer Status: NT
12 Lecture Hours, 24 expected Outside Class Hours, 28 Lab Hours, 64 Total Student Learning Hours.
Scheduled: Spring

II. Coding Information

Repeatability: None
Grading Option: Graded
Credit Type: Credit-Degree Applicable
TOP Code: 213300

III. Course Objectives

A. Course Student Learning Outcomes

Upon successful completion of the course, the student will be able to:
1. Demonstrate the appropriate use of selected rescue equipment.
2. Tie the following knots within one minute

A. Figure eight on a bite
B. Figure eight follow through
C. Water knot (double overhand bend)
D. Figure eight

3. Identify and explain hazard and minimum safety precaution for rescuers in steep or vertical terrain
4. Explain, demonstrate and operate various rope rescue systems to raise and lower people, equipment and patients in the safest possible manner in both low-angle and high-angle environments.

B. Course Objectives

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

1. Tie the following knots within one minute:
   A. Figure eight on a bite
   B. Figure eight follow through
   C. Water knot (double overhand bend)
   D. Figure eight
2. Explain and demonstrate the use of each knot within a rescue system.
3. Demonstrate proper and safe techniques in rigging various friction devices, repelling 100 feet in four minutes.
4. Identify and explain hazard and minimum safety precaution for rescuers in steep or vertical terrain.
5. Rig various litters for vertical lift with attachments for at least one rescuer to remain with the patient, within five minutes.
6. Secure patients to a Stokes basket for safe horizontal transport within eight minutes.
7. Demonstrate safe and proper techniques for stokes basket management on steep grades.
8. Set safe anchors using natural objects, man-made objects, using vehicles and improvised anchors.
9. Demonstrate “route finding” techniques that maintains maximum safety for the rescuers and victims.
10. Demonstrate safe and proper upper belay techniques and rope management for a rescuer descending or ascending hazardous terrain.
11. Demonstrate and explain all rope commands
12. Explain the difference between a dynamic and static belay, the dangers of a dynamic belay, and the standard procedures in a belay rescue and reasons for it.
13. Explain, demonstrate and operate various haul systems to raise and lower people, equipment and patients in the safest possible manner.
14. Identify kernmantle rope.
15. Identify laid rope.
16. Explain and demonstrate the proper care of ropes, carabiner slings, ascending devices, and other related equipment.
17. Explain and demonstrate the care and storage procedures for rope and associated climbing gear for rescue.

IV. Course Content

1. Recognizing the Need for Support Resources
2. Recognizing Incident Hazards and Initiating Isolation Procedures.
3. Recognizing Needed Resources for a Rescue Incident
4. Initiating a Discipline-Specific Search
5. Performing Ground Support Operations for Helicopter Activities
6. Initiating Triage of Victims
7. Assisting a Team in Operation of the Haul Line
8. Inspecting and Maintaining PPE
9. Inspecting and Maintaining Rescue Equipment
10. Demonstrating Knots, Bends, and Hitches
11. Constructing a Single-Point and Multi-Point Anchor System
12. Conducting a System Safety Check
13. Placing Edge Protection
14. Constructing a Belay System
15. Operating a Belay System
16. Belaying a Falling Load
17. Constructing a Fixed Rope System
18. Descending a Fixed Rope
19. Constructing a Lowering System
20. Operating and Directing a Lowering and a Raising System
21. Constructing a Simple Rope Mechanical Advantage System
22. Operating and Directing a Team in Operating a Simple Rope Mechanical Advantage System
23. Constructing a Compound Rope Mechanical Advantage System
24. Constructing a Complex Rope Mechanical Advantage System
25. Operating and Directing the Operation of a Compound and Complex Rope Mechanical Advantage System
26. Negotiating an Edge While Attached to a Rope Rescue System
27. Accessing, Assessing, Stabilizing, Packaging, and Transferring Victims
28. Operating and Directing a Litter-Lowering and Litter-Raising System in a low-angle and high-angle environment
29. Operating as a Litter Tender
30. Selecting, Constructing, and Using Travel Restrictions
31. Constructing and Operating Ladder Rescue Systems
32. Terminating a Technical Rescue Operation

V. Assignments

A. Appropriate Readings

- Read and follow instructions from Rescue Field Manuals

B. Writing Assignments

- Complete Incident Command Forms used in rescue incidents

C. Expected Outside Assignments

NA

D. Specific Assignments that Demonstrate Critical Thinking

The student, acting as a group leader, will analyze a field training exercise, select and set up a low-angle or high-angle rope rescue system, and employ the system to rescue a victim.

VI. Methods of Evaluation

Field exercises
Comprehensive final written exam

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

☒ **Traditional Classroom Delivery** ☐ Correspondence Delivery

☐ Hybrid Delivery ☐ Online Delivery

Demonstrated lecture, discussion, lab, and audio-visual materials.

VIII. Representative Texts and Supplies

Depending on instructor one or more of the following is recommended:
• **Rope Rescue Manual Technician**, current edition (6th ed), CMC Rescue, Inc., (available as hard copy, or as an app at cmcpro.com)
• **The Essential Technical Rescue Field Operations Guide (DRR)**, 5th edition, by Tom Pendley, (available as hard copy, and app at Desertrescue .com)
• **Fundamentals of Technical Rescue**, ISBN 9780763738372,2010
• **Fire Service Technical Search and Rescue**,8th edition, International Fire Service Training Association, ISBN: 978-0-87939-580-3

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Current Status: Active
Original Approval Date: 09/20/2022
Board Approval: 10/11/2022
Chancellor's Office Approval Date
Revised By: Dan Weaver
Latest Curriculum/Academic Standards Committee Revision Date: