

Lassen Community College Course Outline

FS 156 Basic Pump Operations for Volunteer Firefighters 0.0 Units

I. Catalog Description

This course provides the student with the information, theory, methods, and techniques for operating fire service pumps. (Course certified by the California State Fire Marshal.) This course may be taken for a total of four enrollments.

Does Not Transfer to UC/CSU

16 Hours Lab: 16 Total Student Learning Hours

Scheduled: As Needed

II. Coding Information

Repeatability: Take 4 Times

Grading Option: Not Graded (noncredit)

Credit Type: Noncredit

TOP Code: 213300

III. Course Objectives

A. Course Student Learning Outcomes

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

- 1) Demonstrate proper operation of fire service pumps.
- 2) Employ methods and techniques for routine maintenance and record keeping on pumping apparatus

B. Course Objectives

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

1. Identify and define types of fire service pumps and their operation.
2. Employ methods of performing basic field hydraulics.
3. Employ methods and techniques for routine maintenance and record keeping on pumping apparatus.
4. Employ methods and procedures for pump operations from tank, a fire hydrant, water tender and at a draft.
5. Identify and interpret fire apparatus and pump gauges.

IV. Course Content

1. Introduction to Pump Operations
2. Types of Pumps
3. Types of Priming Devices
4. Maintenance Records and Reports
5. Rated Performance of Fire Service Pumps
6. Unsafe Pumping Conditions
7. Pressure Relief Valve
8. Auxiliary Cooling Systems
9. Water Supplies for Pump Operations
10. Tandem Pumping Operations
11. Hose Lay Supply Operations
12. Relay Pumping Operations

- 13. Power Transfer
- 14. Water Drafting Procedures

V. Assignments

A. Appropriate Readings

NA

B. Writing Assignments

NA

C. Expected Outside Assignments

NA

D. Specific Assignments that Demonstrate Critical Thinking

The student will be able to safely demonstrate the proper operation of fire service pumps.

VI. Methods of Evaluation

Traditional Evaluation

Written examinations, oral examinations, and manipulative examinations.

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

Traditional Classroom Delivery

Lecture, discussion, audio/visual aids, demonstration, group exercises, guest speakers, lab, individualized programs and other as needed.

VIII. Representative Texts and Supplies

Fire Apparatus Driver/Operator, 3rd Edition, Jones & Bartlett,
ISBN: 9781284147612

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Current Status: Active

Original Approval Date: 5/28/1991

Revised By: Dan Weaver

Chancellor's Office Approval Date: 10/09/1991

Latest Curriculum/Academic Standards Committee Revision Date: 10/04/2022