

Las Positas College
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Course Outline for FST 51W
FIRE EQUIPMENT OPERATIONS
Effective: Fall 2018

I. CATALOG DESCRIPTION:

FST 51W — FIRE EQUIPMENT OPERATIONS — 0.50 units

Application of Fire Equipment and tools for basic emergency service operations; use of PPE while responding to and operating at an emergency incident; traffic and scene control device deployment; communication device operations; equipment inspection, maintenance, transportation and set up; property conservation equipment application; thermal imaging camera operations for search; suppression and overhaul support

0.50 Units Lab

Prerequisite

FST 51 - Fire Service Operations
with a minimum grade of C
(May be taken concurrently)
or
Instructor approval of equitable course work

Grading Methods:

Pass/No Pass

Discipline:

- Fire Technology

	MIN
Lab Hours:	27.00
Total Hours:	27.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

Before entering the course a student should be able to:

A. FST51

1. List the various ways emergency calls can come into a dispatch system and explain how units are dispatched;
2. Identify and describe three separate pieces of fire apparatus and explain where they would be used;
3. Analyze the steps of size-up and explain how they apply to a structure fire;
4. Provide examples of the safety procedures used on a wildland fire;
5. List and compare the safety considerations that should be used on various emergency incidences;
6. Describe how a firefighter can preserve evidence for a fire investigator on a structural fire.

IV. MEASURABLE OBJECTIVES:

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

- A. Locate specific information within a standard of the National Fire Protection Association (NFPA)
- B. Use Don and Doff personal protective equipment and prepare for reuse
- C. Mount and dismount fire apparatus, properly using safety equipment provided
- D. Set up work areas including the proper use of traffic control devices
- E. Demonstrate telephone communications for a business call and a report of an emergency from the public
- F. Demonstrate two-way radio communication for both routine traffic and emergency traffic
- G. Operate a mechanical positive pressure ventilation fan
- H. Operate an electric generator and set up lighting equipment to illuminate a scene
 - I. Clean, inspect and maintain tools and equipment for later use
- J. Shut-off residential gas, electric and water utilities on simulation props
- K. Apply sprinkler wedges and tongs to a simulated activated sprinkler head
- L. Clean, inspect and repair fire department salvage covers
- M. Locate hidden fires using a thermal imaging camera

V. CONTENT:

- A. Fire Service Orientation
 1. Departmental Documents
 2. Standard Operating Guidelines/Procedures (SOG/SOP)
 3. National Fire Protection Association (NFPA) Standards.

- B. Structural Personal Protective Equipment (PPE)
 - 1. Don PPE
 - 2. Doff PPE and prepare for reuse
- C. Responding on Apparatus
 - 1. Response to Emergency Scene
 - 2. Mount and dismount procedures
- D. Operating at an emergency scene
 - 1. Traffic and scene control devices
 - 2. Safety Vests
 - 3. Protected Work Area
- E. Operating phone in in non-emergent and emergent situations
 - 1. Business telephone call
 - 2. Emergency call
 - 3. Initiating a response
 - 4. Record and relay information
- F. Operating Fire Department Radio
 - 1. Routine traffic
 - 2. Emergency traffic
 - 3. Radio etiquette and nomenclature
- G. Hand and Power Tools
 - 1. Transport hand and power tools
 - 2. Operate mechanical fan
- H. Portable Electric and Lighting Equipment
 - 1. Light a scene
 - 2. Deploy cords, connectors and ground-fault interrupter devices
- I. Maintenance of Equipment
 - 1. Inspecting equipment
 - 2. Cleaning and maintaining equipment
- J. Utility Control
 - 1. Secure electrical and gas sources
 - 2. Simulate water shut-off
- K. Property Conservation
 - 1. Sprinkler system water flow control
 - 2. Inspect salvage cover for damage
 - 3. Hidden fire search with Thermal Imaging Camera (TIC)

VI. METHODS OF INSTRUCTION:

- A. **Observation and Demonstration** -
- B. Hands on Activities
- C. **Simulations** -

VII. TYPICAL ASSIGNMENTS:

- A. Operate a fire department radio to transmit information
- B. Control the operation of an activated sprinkler head using wedges and or tongs and other commercial sprinkler stop devices
- C. Set up traffic control devices to protect a scene from oncoming traffic

VIII. EVALUATION:

- A. **Methods**
 - 1. Class Participation
 - 2. Final Performance
 - 3. Other:
 - a. Skills performance examination
- B. **Frequency**
 - 1. One (1) Final Performance Evaluation
 - 2. Daily class participation

IX. TYPICAL TEXTS:

- 1. IAFC. *Fundamentals of Fire Fighter Skills Evidence-Based Practices*. 3rd ed., Jones and Bartlett Learning, 2017.
- 2. IFSTA. *Essentials of Firefighting and Fire Department Operations*. 6th ed., Brady-Pearson, 2015.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. LPC Fire Service Technology Uniform