

Lassen Community College Course Outline

FS 65A Driver/Operator 1A: Emergency Vehicle Operations

1.5 Units

I. Catalog Description

This course provides the student with information on driver responsibilities, recognized standards, and related laws for fire apparatus. Topics include basic inspections, documentation, maintenance, and troubleshooting fire apparatus, and techniques on driving and positioning fire apparatus. Each student also has the opportunity to increase his or her driving skills during simulated driving conditions. A supplemental State Fire Training CFSTES certification fee of \$141.00 is due to Lassen Community College and will be collected at the time of registration.

Requisites:

Note: If Possible, student should bring an agency apparatus. Student must possess a valid Class A, B, or C California driver's license.

Transfer Status: NT

18 Hours Lecture, 27 Hours Lab, 36 Hours Outside Work: 81 Total Student Learning Hours
Scheduled: Spring

II. Coding Information

Repeatability: Not repeatable

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 ability to drive fire apparatus safely, effectively and proficiently under simulated emergency and non-emergency conditions.
2. Demonstrate the ability to perform basic inspection, maintenance, documentation, and troubleshooting techniques on fire apparatus.
3. Describe driver responsibilities, recognized standards, and related laws for fire apparatus.

B. Course Objectives

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

1. Explain California's driving regulations and laws relating to emergency and non-emergency vehicle operation.
2. Demonstrate proper techniques of basic inspection, maintenance, and troubleshooting fire apparatus.
3. Demonstrate procedures for inspection and basic maintenance of key components of the driver and crew areas, apparatus body, and compartments.
4. Demonstrate procedures for inspection, troubleshooting, and basic maintenance of the frame, axles, steering and suspension systems, driveline, wheels, brake systems, and tires.
5. Demonstrate procedures for inspection, troubleshooting, and basic maintenance of engine systems, transmission, and clutch.

6. Demonstrate procedures for inspection, troubleshooting, and basic maintenance of charging, starting, and other electrical systems.
7. Demonstrate procedures for inspection and basic maintenance of auxiliary and accessory equipment.
8. Explain the process for completing inspection documentation and reports.
9. Explain the procedures for completing pre-trip inspections.
10. Demonstrate a knowledge of accident statistics and liability.
11. Explain the principles of defensive driving.
12. Demonstrate the ability to safely operate a fire apparatus under a variety of conditions including non-emergency response, emergency response, off-road driving, and during adverse weather conditions.
13. Demonstrate the ability to apply the principles of proper braking and stopping.
14. Demonstrate the ability to apply the principles of steering and load control.
15. Demonstrate the principles of properly positioning apparatus at a variety of incidents.
16. Demonstrate the ability to negotiate a fire apparatus through the mandatory driving exercises.

IV. Course Content

1. Responsibilities, Standards, and Laws
 - A. Orientation and Administration
 - B. Fire Apparatus Driver/Operator Responsibilities
 - C. Legal Aspects of Emergency and Non-emergency Driving
2. Inspection, Basic Maintenance, Documentation, and Troubleshooting
 - A. Introduction to Inspection, Basic Maintenance, and Troubleshooting
 - B. Inspection and Basic Maintenance of the Driver and Crew Areas, Apparatus Body, and Compartmentation
 - C. Inspection and Basic Maintenance of the Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, and Tires
 - D. Troubleshooting the Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, and Tires
 - E. Inspection and Maintenance of Engine Systems
 - F. Troubleshooting Engine Systems
 - G. Inspection and Basic Maintenance of the Transmission and Clutch
 - H. Troubleshooting the Transmission and Clutch
 - I. Inspection and Basic Maintenance of the Starting, Charging, and Other Electrical Systems
 - J. Troubleshooting the Starting, Charging, and Other Electrical Systems
 - K. Inspection and Basic Maintenance of Brake Systems
 - L. Troubleshooting Brake Systems
 - M. Inspection and Basic Maintenance of Auxiliary and Accessory Equipment
 - N. Inspection Documentation and Reports
 - O. Pre-trip Inspection Procedures
3. Driving Practices
 - A. Accident Statistics and Liability
 - B. Principles of Defensive Driving
 - C. Driving Apparatus to Incidents
 - D. Principles of Off-Road Driving
 - E. Principles of Braking and Stopping
 - F. Principles of Steering and Load Control
 - G. Driving During Adverse Weather Conditions

- H. Positioning Apparatus
- 4. Driving Exercises
 - A. Mandatory Driving Exercises
 - B. Optional Driving Exercises
 - C. Practice and Testing the Driving Exercises

V. Assignments

A. Appropriate Readings

Read the California Commercial Driver Handbook.

B. Writing Assignments

Document a fire apparatus accident report.

Document a fire apparatus inspection form.

Identify the applicable California Vehicle Code (CVC) section for a given topic and prepare a brief summary highlighting its important points.

C. Expected Outside Assignments

Complete a “pre-trip” vehicle inspection on a fire apparatus.

D. Specific Assignments that Demonstrate Critical Thinking

For credit courses, describe at least one typical assignment which includes critical thinking, writing, and problem solving skills:

1. Investigate a “near miss” driving accident and identify the causes that lead up to the “near miss” situation.
2. Complete a “pre-trip” vehicle inspection on a fire engine that has had at least three items changed that result in the vehicle being illegal for road conditions.

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

May include textbooks, manuals, periodicals, software, and other resources.

California Commercial Driver Handbook, California Department of Motor Vehicles, current edition

Fire Apparatus Driver/Operator, Third Edition, Jones & Bartlett, ISBN: 9781284147612, 2019

or

Pumping and Aerial Apparatus Driver/Operator Handbook, Third Edition, IFSTA,

ISBN: 9780879395711

-Maintenance and inspection forms

-California State Fire Training, current edition

Manufacturer's specifications and requirements

Applicable state and local laws

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Current Status: Active

Original Approval Date: 10/17/2017

Board Approval Date: 11/14/2017

Chancellor's Office Approval Date: 11/22/2017

Revised By: Dan Weaver

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