



5055 Santa Teresa Blvd
Gilroy, CA 95023

Course Outline

COURSE: JFT 7A **DIVISION:** 50 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2021 **CURRICULUM APPROVAL DATE:** 10/12/2021

SHORT TITLE: DRIVER-OPERATOR

LONG TITLE: Fire Apparatus Drive-Operator 1A

| <u>Units</u> | <u>Number of Weeks</u> | <u>Type</u> | <u>Contact Hours/Week</u> | <u>Total Contact Hours</u> |
|--------------|------------------------|---------------------|---------------------------|----------------------------|
| 1 | 18 | Lecture: | .6 | 10.8 |
| | | Lab: | 1.65 | 29.7 |
| | | Other: | 0 | 0 |
| | | Total: | 2.25 | 40.5 |
| | | Total Learning Hrs: | 62.1 | |

COURSE DESCRIPTION:

This course provides information on fire apparatus preventive maintenance and driving/operating. Topics include routine tests, inspections, and servicing functions, operate, back, maneuver, and turn a fire apparatus in a variety of conditions; and operate all fixed systems and equipment on a fire apparatus. This course fulfills the requirements for a Class C Firefighter Endorsement. **PREREQUISITE:** JFT 8 or JFT 225.

PREREQUISITES:

Completion of JFT 8, as UG, with a grade of C or better.

OR

Completion of JFT 225, as UG, with a grade of C or better.

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES

L - Standard Letter Grade

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

- 02 - Lecture and/or discussion
- 03 - Lecture/Laboratory
- 04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

By the end of this course, a student should:

1. Perform and document routine tests, inspections, and servicing functions on the systems and components of a fire apparatus to verify their operational status.
2. Demonstrate various driving skills including defensive driving, backing into a restricted space and turning the apparatus 180 degrees during simulated driving conditions.

COURSE OBJECTIVES:

1. Student will be able to identify facility and classroom requirements and identify course objectives, events, requirements, assignments, activities, resources, evaluation methods, and participation requirements in the course syllabus.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Curriculum Approval Date: 10/12/2021

LECTURE CONTENT:

- I. Introduction (1 hour)
 - A. Orientation and Administration
 1. Facility requirements
 2. Classroom requirements
 3. Course syllabus
 - B. Fire Apparatus Driver/Operator- Pumping Apparatus Certification Process
 1. Course required
 2. Other requirements
 3. Certification task book process
 4. Certification testing process
- II. Preventive Maintenance (9 hours)
 - A. Perform routine tests, inspections, and servicing functions
 1. Manufacturer specifications and requirements
 2. Policies and procedures of the jurisdiction
 3. Fire apparatus systems and components
 4. Tools and equipment
 5. Inspection of the fire apparatus
 6. System problems and out-of-service criteria
 7. Correction of any deficiency noted
 - B. Document routing tests, inspections, and servicing functions
 1. Jurisdictional requirements for documenting maintenance performed
 2. Importance of keeping accurate records
 3. Related jurisdictional forms

LAB CONTENT:

III. Driving/

Operating (30 hours)

A. Operate a Fire Apparatus

1. Wearing passenger restraint devices to ensure crew safety
 2. Common causes of fire apparatus accidents
 3. Fire apparatus drivers/operators responsibilities
 4. Proper positioning of a fire apparatus
 5. Effects of liquid surge, braking reaction time, and load factors
 6. Effects of high center gravity
 - a. Roll-over potential
 - b. General steering reactions
 - c. Speed
 - d. Centrifugal force
 7. Laws and regulations
 - a. Driver's License
 - b. Medical requirements
 8. Policies and procedures
 9. Principles of skid avoidance
 10. Principles of night driving
 11. Principles of shifting
 12. Principles of gear patterns
 13. Negotiating intersections, railroad crossings and bridges
 14. Weight and height limitations for both roads and bridges
 15. Automatic braking systems in wet and dry conditions
 16. Automotive gauges and their operation
 17. Operational limits
 18. Passenger restraint devices
 19. Maintaining safe following distances
 20. Maintaining control of the fire apparatus while accelerating, decelerating and turning in various conditions
 21. Operating under adverse environmental or driving surface conditions
 22. Automotive gauges and controls
- #### B. Operate a Fire Apparatus Using Defensive Driving Techniques
1. Policies and procedures
 2. Applicable laws and regulations related to emergency response
 - a. California Vehicle Code
 - b. Local jurisdictional requirements
 - c. Code 3 driving
 3. Defensive driving techniques for emergency and nonemergency response
- #### C. Back a Fire Apparatus from a Roadway into a Restricted Space
1. Fire apparatus dimensions
 2. Turning characteristics
 3. Spotter signaling
 4. Principles of safe fire apparatus operation
 5. Using mirrors to judge fire apparatus clearance

D. Maneuver a Vehicle around Obstructions on a Roadway While Moving Forward and in Reverse

1. Fire apparatus dimensions
2. Principles of safe fire apparatus operation
3. Using mirrors to judge fire apparatus clearance

E. Turn a Fire Apparatus 180 Degrees within a Confined Space

1. Principles of safe fire apparatus operation
2. Using mirrors to judge fire apparatus clearance

F. Maneuver a Fire Apparatus in Areas with Restricted Horizontal and Vertical Clearances

1. Fire apparatus dimensions
2. Principles of safe fire apparatus operation
3. Using mirrors to judge fire apparatus clearance

G. Operate All Fixed Systems and Equipment on a Fire Apparatus

1. Fixed systems and equipment on a fire apparatus
 - a. Electrical power generators
 - b. Scene lighting
 - c. Electrical power distribution equipment
 - d. Rescue tools
 - e. Other jurisdictional fixed systems or equipment
2. Manufacturer specifications and requirements
3. Policies and procedures
4. Deploying, energizing, and monitoring the system or equipment
5. Recognizing and correcting deficiencies

METHODS OF INSTRUCTION:

Lecture Lab Skills demonstration Scenario-based training.

OUT OF CLASS ASSIGNMENTS:

Required Outside Hours 10

Assignment Description

practice the operation of a fire apparatus following a predetermined route on a public way in compliance with all applicable state and local laws and policies and procedures

Required Outside Hours 10

Assignment Description

Reading Fire Apparatus Driver Operator Student Manual

METHODS OF EVALUATION:

Writing assignments

Evaluation Percent 15

Evaluation Description

Percent range of total grade: 15 % to 20 % Lab Reports If this is a degree applicable course, but substantial writing assignments are not appropriate, indicate reason Course primarily involves skill demonstration or problem solving

Problem-solving assignments

Evaluation Percent 15

Evaluation Description

Percent range of total grade: 15 % to 25 % Quizzes; Exams

Skill demonstrations

Evaluation Percent 65

Evaluation Description

Percent range of total grade: 65 % to 75 % Class Performance/s Performance Exams

Objective examinations

Evaluation Percent 5

Evaluation Description

Percent range of total grade: 5 % to 10 % Multiple Choice

REPRESENTATIVE TEXTBOOKS:

lafc. Fire Apparatus Driver/Operator 2nd Edition. Jones & Bartlett, 2017.

ISBN: 9781284026917

Reading level of text, Grade: 12 Verified by: Doug Achterman

Other textbooks or materials to be purchased by the student:

Aerial Apparatus Driver/ Operator Handbook, 3rd Edition, IFSTA, ISBN-13: 9780134027234

Instructor Handouts

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 199870

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: JFT

CSU Crosswalk Course Number: 7A

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: Y

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000241545

Sports/Physical Education Course: N

Taxonomy of Program: 213300