

Course Outline

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

TERM EFFECTIVE: Fall 2016 **CURRICULUM APPROVAL DATE:** 02/22/2016

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:	.8	14.4
		Lab:	1.48	26.64
		Other:	0	0
		Total:	2.28	41.04

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. **ADVISORY:** Eligible for English 250 and English 420. **PREREQUISITE:** California State Marshal certified fire fighter 1 academy or equivalent as determined by the Dean of Academy Instruction. Note: Approval of equivalent training is not a guarantee state regulatory or licensing agencies will also grant equivalency. Prior to beginning this course students must already be familiar with, and be able to demonstrate all of the skills listed below. These will not be taught in the course, rather they will be the starting point for advanced fire fighter training that builds upon them. These minimum knowledge and skill levels are regarding: 1. Firefighter safety 2. Familiarity with safe techniques for mounting and dismounting an apparatus. 3. Knowledge of all firefighting tools and equipment, ladders, and hoses. 4. Knowledge of all firefighting personal protective equipment, including hand and eye protection 5. Radio procedures 6. Effective verbal communication used in fire fighting 7. Fire Protection Water Systems

PREREQUISITES:

Completion of JFT 8, 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:

1. Perform and document routine tests, inspections, and servicing functions on the systems and components of a fire apparatus to verify their operational status.

Measure: Skill demonstration, class written assignments, role play

PLO:

ILO: 2, 3, 7

GE-LO:

Year assessed or anticipated year of assessment: 2015

2. Demonstrate various driving skills including defensive driving, backing into a restricted space and turning the apparatus 180 degrees during simulated driving conditions.

Measure: Student application of expected skills, practical exercise tests for vehicle operations

PLO:

ILO: 2,7

GE-LO:

Year assessed or anticipated year of assessment: 2015

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

Curriculum Approval Date: 02/22/2016

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

SPO: Describe the certification task book and testing process.

Assignment: Review instructor handouts regarding the Pumping Apparatus certification process.

II. Preventive Maintenance (7 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

SPO: Demonstrate the ability to perform routine tests, inspections, and servicing functions on the systems and components of a fire apparatus to verify their operational status.

Assignment: Complete an fire apparatus inspection form to aid in class presentation.

III. Driving/ Operating (33 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

SPO: Demonstrate the ability to operate the fire apparatus during emergency and nonemergency situations.

Assignment: Review a fire apparatus accident and develop recommendations for preventing a reoccurrence.

METHODS OF INSTRUCTION:

Lecture

Lab

Skills demonstration

Scenario-based training

METHODS OF EVALUATION:

Category 1 - The types of writing assignments required:

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

Category 2 -The problem-solving assignments required:

Percent range of total grade: 15 % to 20 %

Quizzes

Exams

Category 3 -The types of skill demonstrations required:

Percent range of total grade: 65 % to 75 %

Class Performance/s

Performance Exams

Category 4 - The types of objective examinations used in the course:

Percent range of total grade: 5 % to 10 %

Multiple Choice

REPRESENTATIVE TEXTBOOKS:

Required:

Iafc. Fire Apparatus Driver/Operator 2nd Edition. Jones & Bartlett, 2015. Or other appropriate college level text.

ISBN: 978-1-284-02691-7

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: N

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000241545

Sports/Physical Education Course: N

Taxonomy of Program: 213300