



El Camino College
COURSE OUTLINE OF RECORD – Official

Subject:	FTEC
Course Number:	500
Descriptive Title:	Basic Emergency Vehicle Operations
Division:	Health Sciences and Athletics
Department:	Fire and Emergency Technology
Course Disciplines:	Fire and Emergency Technology, Emergency Medical Technologies
Catalog Description:	This noncredit course provides information and skills training on the basic emergency vehicle operations. Topics include applicable laws, defensive driving techniques, basic inspection, and maintenance. Students also have the opportunity to increase their driving skills during simulated driving conditions.
Prerequisite:	
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	.5
Hours Laboratory (per week):	.5
Outside Study Hours:	1
Total Course Hours:	16
Course Units:	0
Grading Method:	Pass/No Pass only
Credit Status:	Noncredit
Transfer CSU:	No
Effective Date:	
Transfer UC:	No
Effective Date:	
General Education ECC:	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	

Student Learning Outcomes:	Upon completion of the course, students 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.
Course Objectives:	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 pretrip 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.
Major Topics:	I. Introduction to Emergency Vehicle Operation (30 minutes, lecture) II. Laws and Regulations (50 minutes, lecture) A. State B. Local C. Department III. Principles of Driving Techniques (1 hour, lecture) IV. Principles of Safe Driving (2 hours, lecture) A. Code 3 response B. Offroad C. Working on the freeway V. Placement of Emergency Vehicles at an Emergency Scene (10 minutes, lecture) VI. Mobile Pumping Safety Considerations (20 minutes, lecture) VII. How to Perform Routine Emergency Inspection (10 minutes, lecture) VIII. Reading and Interpreting Emergency Vehicle Gauges (30 minutes, lecture) IX. Routine Emergency Vehicle Maintenance (45 minutes, lecture) XI. Routine Maintenance Records and Reports (15 minutes, lecture) XII. Equipment Inventory Checks (1 hour, lecture)

	XIII. Route Map Book (30 minutes, lecture) XIV. How to Drive Apparatus (1 hour, lab) XV. Maneuvering Apparatus (7 hours, lab) A. Serpentine exercise B. Offset alley exercise C. Straight line exercise D. Turn around exercise E. Diminishing clearance exercise F. While mobile pumping G. Up and down hill exercise
Total Lecture Hours:	8
Total Laboratory Hours:	8
Total Hours:	16
Primary Method of Evaluation:	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	Investigate a “near miss” driving accident and identify the causes that lead up to the “near miss” situation.
Critical Thinking Assignment 1:	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.
Critical Thinking Assignment 2:	Demonstrate a serpentine exercise while driving the apparatus.
Other Evaluation Methods:	Class Performance
If Other:	
Instructional Methods:	Demonstration, Discussion, Group Activities, Lab, Lecture, Multimedia presentations
If other:	
Work Outside of Class:	Observation of or participation in an activity related to course content (such as theatre event, museum, concert, debate, meeting), Study
If Other:	
Up-To-Date Representative Texts:	Teacher-generated materials
Alternative Texts:	
Required Supplementary Readings:	
Other Required Materials:	
Requisite	
Category	
Requisite course:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding	

course objective under each skill(s).	
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill(s). if applicable	
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Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Matthew Kline
Date:	10/11/2024
Original Board Approval Date:	06/26/2025
Effective Term:	FA 2026