

# EASTERN ARIZONA COLLEGE

## Driver Operator for Fire Equipment

Course Design  
2011-2012

**Course Information**

**Division** Allied Health  
**Course Number** FSC 125  
**Title** Driver Operator for Fire Equipment  
**Credits** 3  
**Developed by** Stephen Cullen, Ph.D.  
**Lecture/Lab Ratio** 3 Lecture/0 Lab

**Transfer Status**

ASU	NAU	UA
Pending Evaluation	Pending Evaluation	Pending Evaluation

**Activity Course** No  
**CIP Code** 43.0203  
**Assessment Mode** Pre/Post Test (10 Questions/10 Points)  
**Semester Taught** Upon Request  
**GE Category** None  
**Separate Lab** No  
**Awareness Course** No  
**Intensive Writing Course** No

**Prerequisites**

None

**Educational Value**

This course is designed for fire department personnel and students interested in driving or operating fire vehicles. Firefighters will be able to safely operate and handle fire vehicles and associated equipment.

**Description**

This course will teach the techniques for driving and handling fire vehicles. Includes safe operating procedures, defensive driving, apparatus inspection, training in emergency maneuvers, and the key components of the driving system.

**Supplies**

None

## **Competencies and Performance Standards**

### **1. Describe the major consideration in preparing to drive a fire vehicle.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. Discuss how to correctly position the seat.
- b. Describe the proper hand position on the steering wheel.
- c. Describe how to properly adjust mirrors.
- d. Discuss how to read and interpret the instrument panel.

#### **Performance Standards**

*Competence will be demonstrated:*

- by written exams

*Criteria - Performance will be satisfactory when:*

- learner can discuss how to correctly position the seat.
- learner can describe the proper hand position on the steering wheel.
- learner can describe how to properly adjust mirrors.
- learner can discuss how to read and interpret the instrument panel.

### **2. Describe the major critical driving situations.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. Describe two major critical driving situations.
- b. Discuss five techniques that can be employed in critical driving situations.
- c. Discuss how to safely handle two critical driving situations.

#### **Performance Standards**

*Competence will be demonstrated:*

- by written exams

*Criteria - Performance will be satisfactory when:*

- learner can describe two major critical driving situations.
- learner can discuss five techniques that can be employed in critical driving situations.
- learner can discuss how to safely handle two critical driving situations.

### **3. Demonstrate safe operating procedures, including driver preparation and types of vehicular maneuvers.**

#### **Learning objectives**

*What you will learn as you master the competency:*

- a. Describe safe operating practices and procedures.
- b. Demonstrate safe operating practices on a controlled course.
- c. Demonstrate proper driver preparation procedures.
- d. Demonstrate various vehicular maneuvers on a controlled course.

#### **Performance Standards**

*Competence will be demonstrated:*

- by simulated exercise.

*Criteria - Performance will be satisfactory when:*

- learner can describe safe operating practices and procedures.
- learner can demonstrate safe operating practices on a controlled course.
- learner can demonstrate proper driver preparation procedures.
- learner can demonstrate various vehicular maneuvers on a controlled course.

**4. Discuss vehicle dynamics including kinetic energy, centrifugal forces, inertia, coefficient of friction, and tires.**

***Learning objectives***

*What you will learn as you master the competency:*

- a. Discuss the principles of vehicle dynamics.
- b. Define kinetic energy and its effect on vehicles in motion.
- c. Define centrifugal force and its effect on vehicles in motion, especially turning maneuvers.
- d. Define inertia and its effect on vehicles in motion and stopping distance.
- e. Define the coefficient of friction and its effect on vehicles in motion.
- f. Discuss how tire pressure, tread, and general characteristics effect vehicle operation.

***Performance Standards***

*Competence will be demonstrated:*

- by written exams

*Criteria - Performance will be satisfactory when:*

- learner can discuss the principles of vehicle dynamics.
- learner can define kinetic energy and its effect on vehicles in motion.
- learner can define centrifugal force and its effect on vehicles in motion, especially turning maneuvers.
- learner can define inertia and its effect on vehicles in motion and stopping distance.
- learner can define the coefficient of friction and its effect on vehicles in motion.
- learner can discuss how tire pressure, tread, and general characteristics effect vehicle operation.

**5. Demonstrate the use of emergency maneuvers.**

***Learning objectives***

*What you will learn as you master the competency:*

- a. Discuss the application of vehicle dynamics.
- b. Discuss when to use a serpentine maneuver.
- c. Discuss how to properly employ evasive procedures.
- d. Demonstrate controlled braking.
- e. Recover from a controlled skid.
- f. Demonstrate proper off-road recovery procedures.
- g. Demonstrate the proper technique to use in case of a blowout.

***Performance Standards***

*Competence will be demonstrated:*

- by written exams.

*Criteria - Performance will be satisfactory when:*

- learner can discuss the application of vehicle dynamics.
- learner can discuss when to use a serpentine maneuver.
- learner can discuss how to properly employ evasive procedures.
- learner can demonstrate controlled braking.
- learner can recover from a controlled skid.
- learner can demonstrate proper off-road recovery procedures.
- learner can demonstrate the proper technique to use in case of a blowout.

**6. List the key components of the driving system.**

***Learning objectives***

*What you will learn as you master the competency:*

- a. List key components of the driving system.
- b. Discuss the importance of understanding the relationship between driving system components.

***Performance Standards***

*Competence will be demonstrated:*

- by written exams.

*Criteria - Performance will be satisfactory when:*

- learner can list key components of the driving system.
- learner can discuss the importance of understanding the relationship between driving system components.

**7. Discuss the facilities and equipment that are required for creating and maintaining a driving course.**

***Learning objectives***

*What you will learn as you master the competency:*

- a. Discuss the layout of a driving course.
- b. Describe the safety aspects of a driving course.
- c. Describe how to properly prepare a vehicle for driving.

***Performance Standards***

*Competence will be demonstrated:*

- by written exams.

*Criteria - Performance will be satisfactory when:*

- learner can discuss the layout of a driving course.
- learner can describe the safety aspects of a driving course.
- learner can describe how to properly prepare a vehicle for driving.

***Types of Instruction***

Classroom presentation

**Grading Information**

**Grading Rationale**

Grades will be based on performance on a simulated exercise, class participation, and written tests. The Posttest will count as 10% of the final grade.

**Grading Scale**

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F 0-59%