

Course Description

FFP1302 | Apparatus Operations | 3.00 credits

This course covers the laws, rules and driving techniques for emergency vehicles as well as a review of hydraulics. Fireground evolutions and driving make up the practical part of the course. The evolution portion of the course includes the use of pre-connected lines, tandem pumping, drafting relays, and master streams. The student should have a basic understanding of fire stream hydraulics prior to entering this course. Prerequisite: FFP1301

Course Competencies

Competency 1: The student will explore the theories and fundamentals of how and why fires start, spread, and how they are controlled by:

1. Discussing other-than-water suppression agents and strategies

Competency 2: The student will understand the principles of the use of water in fire protection and how to apply hydraulic principles to analyze and to solve water supply problems by:

1. Explaining the design principles of fire service pumping apparatus

Competency 3: The student will describe the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, and water supply for fire protection and portable fire extinguishers by:

1. Explaining the operation and appropriate application for the different types of portable fire extinguishing systems

Competency 4: The student will discuss fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization, management, and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; and introduction to fire strategy and tactics by:

1. Describing the common types of fire and emergency services facilities, equipment, and apparatus

Competency 5: The student will define risk evaluation and control procedures for fire stations, training sites, emergency vehicles, and emergency situations involving fire, EMS, hazardous materials, terrorism, and technical rescue by:

1. Describing the components of an effective response safety plan to include fire stations and emergency response vehicles
2. Discussing the value of personal protective equipment

Competency 6: The student will discuss the federal, state, and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of court cases by:

1. Describing federal, state, and local laws, which regulate or influence emergency services

Competency 7: The student will identify the fundamentals and technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the fire setter, and types of fire causes by:

1. Identifying the responsibilities of a firefighter when responding to the scene of a fire

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Solve problems using critical and creative thinking and scientific reasoning
- Create strategies that can be used to fulfill personal, civic, and social responsibilities
- Demonstrate knowledge of ethical thinking and its application to issues in society