

# **COURSE SYLLABUS**

## **FPT 165 - Fire Protection Systems**

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

### **COURSE DESCRIPTION:**

This course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers.

PREREQUISITES: FPT 155, FPT 160, MAT 113

#### **EXPECTED COMPETENCIES:**

Upon completion of this course, the student will:

- 1. Explain the benefits of fire protection systems in various types of structures.
- 2. Describe the basic elements of a public water supply system including sources, distribution networks, piping, and hydrants.
- 3. Explain why water is a widely used extinguishing agent and describe how water extinguishes fires.
- 4. Identify the different types and components of sprinkler, standpipe, and foam systems.
- 5. Define the benefits of residential sprinkler legislation.
- 6. Identify three different types of non-water based fire suppression systems and describe how these systems extinguish fire.
- 7. Describe the basic components if a fire alarm system.
- 8. Identify three different types of detectors and explain how they detect fire.
- 9. Describe the hazards of smoke and list the four factors that can influence smoke movement in a building.
- 10. Recognize the appropriate application of the different types of sprinklers.
- 11. Explain the operation and appropriate application for the different types of portable fire extinguishing systems.

#### **ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

#### **GRADING SCALE:**

90%-100% = A 80%-89.9%= B 70%-79.9%= C 60%-69.9%= D <60% = E