

FIP 244
FIRE PROTECTION PROJECT

COURSE DESCRIPTION

Prerequisites: Prerequisites: FIP 120, FIP 124, FIP 128, FIP 132, and FIP 220

Corequisites: None

This course provides an opportunity to apply knowledge covered in previous courses to employment situations that the fire protection professional will encounter. Emphasis is on the development of comprehensive and professional practices. Upon completion, students should be able to demonstrate knowledge of the fire protection service through written and performance evaluations. In addition, this course assesses critical competencies within the Fire Protection program. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

COURSE OBJECTIVES:

Upon completion of this course, the student will be able to:

- a. Demonstrate awareness of various automatic fire protection systems.
- b. Classify building construction.
- c. Explain fire behavior theory.
- d. Describe ventilation as applied to firefighting.
- e. Apply fire extinguishing techniques
- f. Preserve evidence of cause.
- g. Identify evidence of possible arson.
- h. Apply the principles of hydraulics.
- i. Determine pump pressures and water flows.
- j. Demonstrate knowledge of fire ground pumping procedures.
- k. Identify the nomenclature of hydrant systems.
- l. Identify sources of water supplies.
- m. Identify common causes of fires in buildings.
- n. Identify preventive measures for common causes of fire.
- o. Function within the organizational structure.
- p. Develop public fire educational materials/presentations.
- q. Utilize personal computers.
- r. Use sensitivity in working within a culturally diverse society.
- s. Communicate effectively orally and in writing.
- t. Utilize interpersonal dynamics.
- u. Determine hazard classifications and their effect on fire defenses.
- v. Recommend solutions to hazardous problems.
- w. Assess code compliance.
- x. Analyze aspects of fire safe building design.
- y. Assess need for continuing education/training.
- z. Research and prepare training materials/programs.
- aa. Apply decision-making skills.
- bb. Utilize data collection techniques for fire attack planning.
- cc. Apply investigative techniques.
- dd. Calculate friction losses.

- ee. Analyze water distribution systems.
- ff. Determine community fire flow requirements.
- gg. Apply inspection and pre-fire planning techniques.
- hh. Utilize personnel management techniques.
- ii. Develop labor relations strategies.
- jj. Apply decision-making skills.
- kk. Assess effectiveness of strategies employed.
- ll. Work effectively with appropriate agencies.
- mm. Provide community program leadership
- nn. Work cooperatively with civic and other community groups.
- oo. Apply principles of occupational health and safety.

OUTLINE OF INSTRUCTION:

- I. Assess fire defenses
 - a. Evaluate automatic fire protection systems.
 - b. Identify sources of water supplies.
 - c. Determine hazard classifications and their effect on fire defenses.

- II. Evaluate building construction
 - a. Classify building construction.
 - b. Determine hazards resulting from code violations.
 - c. Assess code compliance.
 - d. Analyze aspects of firesafe fire design.

- III. Participate/develop training programs
 - a. Assess need for continuing education/training.
 - b. Research and prepare training materials/programs.

- IV. Apply fire fighting strategies
 - a. Apply decision making skills.
 - b. utilize data collection techniques for fire attack training.
 - c. Assess effectiveness of strategies employed.
 - d. Explain fire behavior theory.
 - e. Describe ventilation as applied to fire fighting.
 - f. Apply fire extinguishing techniques.

- V. Investigate fires
 - a. Apply investigative techniques.
 - b. Preserve evidence of cause.
 - c. Identify evidence of possible arson.

- VI. Apply the principles of hydraulics/water distribution systems
 - a. Apply the principles of hydraulics.
 - b. Calculate friction losses.
 - c. Determine pump pressures and water flows.
 - d. Analyze water distribution systems.
 - e. Demonstrate knowledge of fire ground pumping procedures.
 - f. Identify the nomenclature of hydrant systems.

- g. Determine community fire flow requirements.
- VII. Conduct inspections
- a. Identify common causes of fires in buildings.
 - b. Identify preventive measures for common causes of fires.
 - c. Apply inspection and pre-fire planning techniques.
- VIII. Work effectively within the agency
- a. Function within the organizational structure.
 - b. Utilize personnel management techniques.
 - c. Develop labor relation strategies.
- IX. Apply hazardous materials strategies
- a. Apply decision making skills.
 - b. Work cooperatively with civic and other community groups.
 - c. Develop public fire educational materials/presentations.
- X. Develop fire prevention programs
- a. Provide community program leadership.
 - b. Use sensitivity in working within culturally diverse society.
 - c. Communicate effectively orally in writing.
 - d. Utilize interpersonal dynamics.
 - e. Apply principles of occupational health and safety.

REQUIRED TEXTBOOKS AND MATERIALS:

Textbook to be selected by instructor.

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 686-3652 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1309.