

FIP 260
FIRE PROTECTION PLANNING

COURSE DESCRIPTION:

Prerequisites: None

Corequisites: None

This course covers the need for a comprehensive approach to fire protection planning. Topics include the planning process, using an advisory committee, establishing goals and objectives, and techniques used to approve and implement a plan. Upon completion, students should be able to demonstrate a working knowledge of the concepts and principles of planning as they relate to fire protection. Course Hours Per Week: Class, 3. Semester Hours Credit, 3.

COURSE OBJECTIVES:

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

- a. Conduct a pre-planning program to study feasibility of a master plan.
- b. Construct a cost analysis of a master plan.
- c. Prepare a proposal for a master plan.
- d. Establish fire management areas.
- e. Define all fire problems in the community.
- f. Set the planning goals and objectives.
- g. Develop plan selection criteria.
- h. Generate several alternative master plan systems.
- i. Select a master plan from alternative plans.
- j. Prepare short, medium, and long range master plans.
- k. Determine manpower, equipment, and location needs.
- l. Implement a master plan.

OUTLINE OF INSTRUCTION:

- I. The nature of master planning
 - a. The planning function
 - b. Needs assessment
 - c. The need for inter-agency planning
 - d. The planning process
- II. The preplanning phase
 - a. The preplanning committee
 - b. Determination of the need for a plan
 - c. Determination of a methodology
 - d. Cost analysis of a plan
- III. Preparation of the proposal
 - a. Definition of the approval process
 - b. Identification of the planning committee

- c. Determination of the planning schedule
 - d. Preparation of the briefing materials
- IV. Development of the master plan
- a. Determination of fire management areas
 - b. Establishment of fire demand zones
 - c. Identification of data required
 - d. Definition of a data collection methodology
- V. Definition of fire problems
- a. Identification of major risks
 - b. Identification of key risks
 - c. Identification of typical risks
 - d. Selection of planning risks
 - e. Preparation of fire incidence profiles
 - f. Definition of the fire system management situation
- VI. Establishment of planning objectives
- a. Definition of fire protection goals
 - b. Definition of fire related objectives
 - c. Definition of community objectives
 - d. Definition of system management objectives
- VII. Development of selection criteria
- a. Establishment of cost criteria
 - b. Establishment of cost measurements
 - c. Assignment of priorities
 - d. Establishment of benefit criteria
 - e. Establishment of benefit measurements
 - f. Establishment of legislation compliance criteria
 - g. Establishment of political criteria
- VIII. Determination of alternative systems
- a. Definition of a baseline system
 - b. Comparison of alternative systems
 - c. Evaluation by objects
- IX. Analysis of system functions and resources
- a. Definition of current system
 - b. Definition of baseline system
 - c. Definition of alternative systems
 - d. Performance of resource analysis on all systems
- X. Comparison of alternative system plans
- a. Cost and revenue comparison
 - b. Performance of comparative benefit analysis
 - c. Performance of comparative legislative compliance analysis
 - d. Performance of comparative political analysis
 - e. Performance of uncertainty analysis
 - f. Performance of sensitivity analysis

- XI. Selection process for a master plan
 - a. Evaluation of systems by objectives
 - b. Comparison and ranking by performance criteria
 - c. Selection and approval process

- XII. Preparation of the master plan
 - a. Goals and objectives
 - b. Current year plan
 - c. Two- to five-year plan
 - d. Six- to ten-year plan
 - e. Functions, authorities, and responsibilities of the plan
 - f. Policies and procedures of the plan
 - g. Special projects under the plan

- XIII. Fire problem documentation
 - a. Fire problem location in the community
 - b. Occupancy categories
 - c. The UBC cross reference index
 - d. Estimation of fire flow requirements

- XIV. Fire protection resources
 - a. Determination of personnel requirements
 - b. Determination of apparatus requirements
 - c. Determination of water flow requirements
 - d. Determination of station location requirements
 - e. Determination of operational procedural requirements

- XV. Implementation
 - a. Task assignment selection
 - b. Data acquisition and analysis
 - c. Monitoring and report systems
 - d. Evaluation and modification process

REQUIRED TEXTBOOK AND MATERIALS:

Textbooks 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.