

## Emergency Services Fire Officer (ESFO)

### ESFO 1100

#### Fire Behavior and Combustion

3

Explores the theories and fundamentals of how and why fires start, spread and how they are controlled. Addresses the fire problem in America, background of research, and how to approach the study of fire. Provides an overview of various flames, smoldering, and spontaneous combustion.

### ESFO 1110

#### Fire Prevention

3

Provides fundamental information regarding the history and philosophy of fire prevention. Introduces the organization and operation of a fire prevention bureau. Covers the use of fire codes, identification and correction of fire hazards. Discusses the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

### ESFO 1350

#### Fire Protection Hydraulics and Water Supply

3

Introduces basic mathematical operations, including fractions, decimals, percentages, measurements, statistics, graphs, formulas and equations. Completers should be able to apply mathematical skills in solving basic fire service hydraulic and water supply problems.

### ESFO 2020

#### Incident Command

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Presents the basic principles of managing an emergency scene through the utilization of an incident command system for simple single unit, to complex multi unit response. Requires use of personnel, equipment, and additional resources to manage an incident by completing a size-up, analyze, develop and implement an action plan, maintain on scene accountability of personnel and resources by following IMS principles. Meets the incident command requirements for Fire Officer I, Fire Officer II, NFPA 1021, Presidential Directive #5, and NIMS compliance.

### ESFO 2030

#### Fire Inspector I

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For Fire Science and Building Inspection Technology students. Addresses the principles of fire inspection and application of the International Fire Code. Topics include identification of fire hazards, fire prevention measures, inspection techniques, and pre-fire planning. Includes classroom discussion and actual inspections of both under-construction and occupied buildings. Successful completers should be prepared to attain Fire Inspector I certification. Course fee of \$80 for state services & testing, materials applies.

### ESFO 2050

#### Fire Protection and Detection Systems

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Teaches students to become familiar with the various types of fire protection and detection systems. Explains how each type of system functions, where such systems are required by code and how the various systems are serviced and maintained. Course fee of \$17 for materials applies.

### ESFO 2080

#### Building Construction for the Fire Services

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For second year Fire Science students. Explores components of building construction that relate to fire and life safety. Explains construction and design factors to be considered during fire inspections, pre-fire planning and fire fighting operations. Emphasis is placed on firefighter safety.

### ESFO 2100

#### Fire Officer I Supervision and Leadership

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For second year Fire Science students and experienced firefighters. Addresses the NFPA requirements for Fire Officer I. Discusses human resource management, community and government relations, application of fire department policies, fire investigation procedures, emergency service delivery and safety considerations. Completers should be prepared to certify as Fire Officer I. Course fee of \$40 for state services & testing applies.

### ESFO 2110

#### Fire Instructor I and II

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Teaches the NFPA 1041 requirements for Instructor I and II. Includes job factors that influence teaching, developing behavior objectives and lesson plans, organizing the learning environment, methods of instruction, training aids, and principles of testing and evaluations. Lab activities include classroom presentations, preparing audiovisuals, and developing objectives. Course fee of \$83 for state services & testing, materials applies.

### ESFO 211A

#### Fire Service Instructor I

1

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

For second year Fire Science students. Addresses the knowledge and skills required to deliver a training lesson from a prepared outline and instructor's guide. Includes psychology of learning, instructional techniques, instructional media, evaluation techniques, and legal considerations. Completers should be prepared to instruct a fire service audience and certify as Fire Service Instructor I. Course fee of \$43 for state services & testing, materials applies.

### ESFO 211B

#### Fire Service Instructor II

2

\* Prerequisite(s): ESFO 211A or Departmental Permission

For those who have already completed ESFO 211A or attained Fire Service Instructor I certification. Explores job factors that influence teaching, developing behavior objectives and lesson plans, organizing the learning environment, methods of instruction, training aids, and principles of testing and evaluations. Completers should be able to prepare and conduct classroom presentations, prepare audiovisual materials and equipment, and be prepared to certify as Fire Service Instructor II. Course fee of \$40 for state services & testing applies.

### ESFO 2200

#### Fire Officer II

3

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Addresses the administrative skills and abilities required for Fire Officer II certification. Includes occupational health and safety concepts, injury prevention, risk management, application of departmental policies and procedures, preparation of budget requests, preparation of news releases, and preparation and maintenance of departmental records and reports.

# Course Descriptions

## **ESFO 2310**

### **Fire Investigator I**

**3**

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences

Presents basic requirements for fire investigators as found in NFPA 1033. Includes scene examination, documenting the scene, evidence collection and preservation, interviewing techniques, post incident investigation and presenting investigation findings.

## **ESFO 2320**

### **Fire Investigator II**

**3**

\* Prerequisite(s): ESFO 2310 or Departmental Approval

Presents advanced skills for fire investigators. Explores all aspects of the investigative process, scene documentation, advance collection tools and evidence preservation, advanced investigative techniques, case preparation, presenting findings in a legal/court proceeding.

## **ESFO 2330**

### **Public Fire Education I**

**2**

\* Prerequisite(s): ESFF 1000 or sufficient emergency services work experiences.

Teaches professional qualifications of NFPA 1035. Identifies fire risks and problems in a community. Teaches selecting, designing, and implementing fire prevention and education programs.

## **ESFO 2400**

### **Fire Officer Work Experience**

**3**

\* Prerequisite(s): ESFO 2020 and ESFO 2200

Provides an opportunity for students to complete the Fire Officer II work place performance requirements of NFPA 1021, Standard for Fire Officer Professional Qualifications. Under the supervision of an experienced fire officer, requires meeting performance objectives in areas of human resource management, community relations, governmental relations, inspection procedures, investigation procedures, emergency service operations, emergency services planning and personnel safety procedures, through a non-paid work experience.