

FIRE & OCCUPATIONAL SAFETY

FIR 100 FIRE SCIENCE INTRO SEMINAR

1 Lecture 0 Lab 1 Credit Hours(s)

A seminar designed to provide students with the opportunity to learn and practice strategies that will enhance their ability to successfully complete their educational program in the field of Fire Science. Emphasis will be on identification and clarification of personal goals, career planning, curriculum planning and study techniques. It will also explore effective program management and maximum utilization of college resources as well as career opportunities in fire and safety.

FIR 102 FUNDAMENTALS-FIRE PROTECTION

3 Lecture 0 Lab 3 Credit Hours(s)

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems and introduction to fire strategy and tactics; and life safety initiatives.

FIR 104 FUNDAMENTALS-FIRE PREVENTION

3 Lecture 0 Lab 3 Credit Hours(s)

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards: plans review, fire inspections, fire and life-safety education, and fire investigation.

FIR 110 FIRE BEHAVIOR AND COMBUSTION

3 Lecture 0 Lab 3 Credit Hours(s)

This course is a study of the behavior and dynamics of fire. Additional topics to include theories and fundamentals of pyrolysis, heat transfer, energy absorption and fire suppression.

FIR 112 PRIN. EMER.SERV. SAF. & SRVIVL

3 Lecture 0 Lab 3 Credit Hours(s)

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

FIR 114 BLDG CONSTRUCT-FIRE PROTECTION

3 Lecture 0 Lab 3 Credit Hours(s)

This course studies the components of building construction, design, the function and testing of building materials and building code compliance in designing and maintaining life safety.

Prerequisites: FIR 102 and FIR 104.

FIR 204 FIRE PROTECTION SYSTEMS

3 Lecture 0 Lab 3 Credit Hours(s)

An introduction to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers. Prerequisites: FIR 102 and FIR 110.

FIR 212 HYDRAULICS AND WATER SUPPLY

3 Lecture 0 Lab 3 Credit Hours(s)

This course provides the student with a foundation of theoretical knowledge of water at rest and in motion. Principles of the use of water in fire protection and hydraulic principles to analyze to solve water supply problems.

Prerequisites: PHY 121 and FIR 102.

FIR 214 LEGAL ASPECTS IN FIRE & SAFETY

3 Lecture 0 Lab 3 Credit Hours(s)

The course will address Federal, State and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards.

Prerequisite: FIR 102

FIR 222 FIRE & SAFETY ADMINISTRATION

3 Lecture 0 Lab 3 Credit Hours(s)

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire services. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer.

Prerequisite: FIR 102

FIR 224 STRATEGY AND TACTICS

3 Lecture 0 Lab 3 Credit Hours(s)

This course provides the fundamentals of fire ground control through utilization of personnel, equipment, and extinguishing agents.

Prerequisites: FIR 112 and FIR 114.

FIR 226 FIRE INVESTIGATION

3 Lecture 0 Lab 3 Credit Hours(s)

This course is intended to provide the student with 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.

Prerequisite: FIR 110 and FIR 114

FIR 271 SPECIAL STUDY PROJECT I

1 Lecture 0 Lab 1 Credit Hours(s)

A special learning experience designed by one or more students with the cooperation and approval of a faculty member. Proposed study plans require departmental approval. Projects may be based on reading, research, community service, work experience or other activities that advance the student's knowledge and competence in the field of fire science or related areas. The student's time commitment to the project will be approximately 35-50 hours.

FIR 272 SPECIAL STUDY PROJECT II

2 Lecture 0 Lab 2 Credit Hours(s)

Similar to FIR 271, except that the student's time commitment to the project will be approximately 70-90 hours.

FIR 273 SPECIAL STUDY PROJECT III

3 Lecture 0 Lab 3 Credit Hours(s)

Similar to FIR 271, except that the student's time commitment to the project will be approximately 105-135 hours.