

FIRE SCIENCE (FIRE)

FIRE 1501 Introduction to Fire and Emergency Services 3 s.h.

This course gives the learner an extensive and comprehensive view concerning fire protection and emergency services; career openings in fire protection and corresponding fields; the prevalent culture and history of emergency services; fire loss concepts and analysis; the structure and function of both public and private fire safety services fire departments as they relate to and with local governments; regulations that affect fire services; fire service terminology; particular and explicit fire protection functions; fundamental fire chemistry, both inorganic and organic, along with physics basic introduction to fire safety systems; introduction to fire strategies, and lifesaving procedures.

FIRE 1503 Fire Protection and Detection Systems 3 s.h.

This course provides data concerning the design facets relating to the operations of fire alarm devices and their organizational groupings, water-based fire extermination systems, unique elimination systems for both electric and gas fires, water supplies for fire suppression, and portable fire extinguishers.

Prereq.: FIRE 1504 and FIRE 1521.

FIRE 1504 Fire Prevention 3 s.h.

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

Prereq.: FIRE 1501, FIRE 1511, and FIRE 1520.

FIRE 1505 Occupational Safety and Health for Emergency Services 3 s.h.

This course introduces the basic concepts of occupational health and safety as it relates to emergency services organizations. Topics include risk and hazard evaluation and control procedures for emergency services organizations.

Prereq.: FIRE 1501, FIRE 1511, and FIRE 1520.

FIRE 1511 Building Constructions for Fire and Life Safety 3 s.h.

This course examines the multiple components of building construction that relates to a firefighter's safety. The facets of construction and their design elements are shown to be key factors when inspecting structures, preplanning fire operations, and operating safely during emergencies.

Prereq.: None.

FIRE 1520 Public Sector Community Relations and Customer Service 3 s.h.

This course is designed to focus on the importance of effective community and public relation issues regarding the education planning process for the general public. It focuses on customer service and customer relation issues, research, ethics, and effective communication with all involved.

Prereq.: None.

FIRE 1521 Combustion Processes and Fire Behavior 3 s.h.

This course investigates the theories and basics of how and why fires begin, spread, and are hopefully controlled so that minimal damage occurs.

Prereq.: FIRE 1501 and FIRE 1520.

FIRE 2601 Fire Service Hydraulics 3 s.h.

This course lays out a foundation of knowledge, both theoretical and practical, in order for the student to understand the principles of the use of water in fire suppression and the knowledge to apply hydraulic principles to analyze and solve water supply dilemmas.

Prereq.: FIRE 1520.

FIRE 2602 Legal Aspects of Emergency Services 3 s.h.

This course will address the federal, state and local laws that regulate emergency services and include a review of national standards, regulations and consensus standards.

Prereq.: FIRE 1504, FIRE 1505, and FIRE 1521.

FIRE 2603 Principles of Fire and Emergency Services Administration 3 s.h.

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 service. Emphasis is placed on fire and emergency services ethics and leadership from the perspective of the company officer.

Prereq.: FIRE 1504, FIRE 1505, and FIRE 1521.

FIRE 2620 Fire Ground Strategy and Tactics 3 s.h.

This course provides the fundamental rules of fire ground control through the correct usage of personnel, tools, and extinguishing agents.

Prereq.: FIRE 1503, FIRE 2601, FIRE 2602, and FIRE 2603.

FIRE 2630 Fire Investigation Methods 3 s.h.

This course is intended to give the student the basic technical knowledge needed for proper fire scene interpretations, including recognizing and conducting origin and cause, preservation of evidence and factual reporting, scene security, motives of the arsonist, and types of fire causes.

Prereq.: FIRE 2602.

FIRE 2631 Hazardous Materials Operations and Command 3 s.h.

This course provides the student with the opportunity to explore hazardous materials through the lens of emergency services preparedness and response. This course reviews terminology, concepts, and best practices in relation to emergency services response to hazardous materials and related incidents at the awareness and operations level.

Prereq.: FIRE 1501 and FIRE 1520.

FIRE 2640 Emergency Services Safety and Survival 3 s.h.

This course is to introduce the basic principles and history concerning national firefighter life safety initiatives and focuses on the need for cultural and behavioral changes necessary within the emergency service that is involved.

Prereq.: FIRE 1503.