

FIRE SCIENCE (FIRE)

FIRE 111, INTRODUCTION TO FIRE SERVICE 3 (3)

Basic introduction to fire protection, including the role, history, development and organization of the Fire Service. Topics include fire equipment, apparatus, fire ground operations, fire prevention, and career opportunities. (TAG)

General Education: IN1

Course Entry Requirement(s): None

Typically Offered: Summer, Fall and Spring Semesters

FIRE 112, BUILDING DESIGN AND CONSTRUCTION 3 (3)

Introduction to the elements of building design, construction techniques, and building materials. Emphasis is on the firefighting tactics that are deployed to control fire in various types of construction. (TAG)

General Education: IN1

Course Entry Requirement(s): None

Typically Offered: Fall and Spring Semesters

FIRE 120, FIRE INVESTIGATION I 3 (3)

This course is designed to provide the student with the knowledge of basic fire chemistry, fire scene analysis, evidence collection, arson investigation and documentation for preparation of arson litigation. The role of the arson investigation in relation to the legal system will be included as well.

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 111, FIRE 112 and FIRE 125

Typically Offered: Fall and Spring Semesters

FIRE 123, BUILDING DESIGN AND CONSTRUCTION I 1 (1)

Introduction to the elements of building design, construction techniques, and building materials. Emphasis is on the firefighting tactics that are deployed to control fire in various types of construction.

General Education: IN1

Course Entry Requirement(s): None

Typically Offered: Summer and Fall Semesters

FIRE 125, FIRE BEHAVIOR AND COMBUSTION 2 (2)

Course covers the theories and fundamentals of how and why fires start, spread, and are controlled. (TAG)

General Education: IN1

Course Entry Requirement(s): None

Typically Offered: Fall Semester

FIRE 127, FIREFIGHTER ORIENTATION 1 (2)

This course is an introduction to the basic concepts of firefighting. Topics include fire behavior, personal protective equipment, ventilation, tools, ladders, water supply and overhaul. Laboratory required. (A special fee will be assessed.)

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Fall Semester

FIRE 130, EMERGENCY SERVICES SAFETY AND SURVIVAL 2 (2)

This course introduces the basic principles and history related to the national firefighter life safety initiatives. It will focus on the need for the cultural and behavioral change throughout the emergency services. (TAG)

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Spring Semester

FIRE 131, FIREFIGHTING LEVEL I 2 (3.5)

This course introduces the student to the role of the Firefighter I. Topics include fire department communications, fire ground operations, fire prevention and preparedness, preventive maintenance, and apparatus driving and operation. Laboratory required. A special fee will be assessed.

General Education: IN1, IN2

Course Entry Requirement(s): Prerequisite: High school diploma or equivalent

Typically Offered: Summer, Fall and Spring Semesters

FIRE 132, FIREFIGHTING LEVEL II 2 (3.5)

This course covers the advanced role of the Firefighter II. Topics include fire department communications, advanced fire ground operations and command, fire prevention and preparedness, and preventive maintenance. Laboratory required. Special fees will be assessed.

General Education: IN1, IN2

Course Entry Requirement(s): Prerequisite: FIRE 131, Concurrent: FIRE 111 and FIRE 127

Typically Offered: Summer, Fall and Spring Semesters

FIRE 134, FIRE PROTECTION HYDRAULICS AND WATER SUPPLY 2 (2)

This course provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principals in analyze and to solve water supply problems.

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Spring Semester

FIRE 136, STRATEGY AND TACTICS 3 (3)

Principles of fire ground control through the utilization of personnel, equipment, and extinguishing agents.

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 111

Typically Offered: Fall Semester

FIRE 210, HAZARDOUS MATERIALS CHEMISTRY 2 (2)

This course emphasizes the concepts of basic chemistry in order to identify the hazards encountered by emergency responders when responding to hazardous materials incidents.

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Fall Semester

FIRE 214, FIREFIGHTING TACTICS & WATER SUPPLY I 1 (1.75)

Course covers various techniques that are deployed to address different types of fires and the importance of effective water supply/hydraulics in deploying those tactics. Topics include supplementary fire suppression systems and water relay systems. Laboratory required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 111

Typically Offered: Fall Semester

FIRE 215, FIREFIGHTING TACTICS AND WATER SUPPLY II 2 (2)

Course covers various techniques that are deployed to address different types of fires and the importance of effective water supply/hydraulics in deploying those tactics. Topics include building construction, supplementary fire suppression systems, and water relay systems. Laboratory required. (A special fee will be assessed.)

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 214

Typically Offered: Fall Semester

FIRE 216, COMMAND AND LINE SUPERVISION I 1 (1)

This course will engage the student with the principles of national incident command systems (i.e. NIMS) and the specific responsibilities associated with each position within the command and general staff. Incident command management will be applied to large conflagrations, mass casualty incidents, hazardous material incidents, wildland fires, weapons of mass destruction, and everyday operations.

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 111

Typically Offered: Fall Semester

FIRE 217, COMMAND AND LINE SUPERVISION II 2 (2)

This course will engage the student with the principles of national incident command systems (i.e. NIMS) and the specific responsibilities associated with each position within the command and general staff. Incident command management will be applied to large conflagrations, mass casualty incidents, hazardous material incidents, wildland fires, weapons of mass destruction, and everyday operations.

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 216

Typically Offered: Fall Semester

FIRE 218, HAZARDOUS MATERIALS OPERATIONS 1 (2)

This course emphasizes the concepts of basic chemistry in order to identify the hazards encountered by emergency responders when responding to hazardous materials incidents.

General Education: IN1

Course Entry Requirement(s): None

Typically Offered: Spring Semester

FIRE 224, LEGAL CONCEPTS FOR EMERGENCY SRVCS 3 (3)

The student will be introduced to Federal, State, and local laws that apply to today's emergency services, Fire, EMS and Police, the national standards that can influence emergency services, standard of care, tort, liability, and a review of pertinent court cases that have an effect on the Fire Service.

General Education: IN1, IN3, IN4

Course Entry Requirement(s): Prerequisite: FIRE 111, FIRE 120 and FIRE 212, None

Typically Offered: Fall and Spring Semesters

FIRE 227, FIRE PREVENTION 3 (3)

Course addresses the principles of fire prevention including role of the fire prevention bureau, application of codes and standards, inspections, investigations, and fire and life safety education. National Fire Protection Association (NFPA), Ohio Fire Code, and municipal code standards also discussed. (TAG)

General Education: IN1, IN2, IN5

Course Entry Requirement(s): None

Typically Offered: Spring Semester

FIRE 228, FIRE AND EMERGENCY SERVICE ADMINISTRATION 2 (2)

Course examines the administrative functions of fire departments. Topics include business management, personnel management, labor relations, personnel training, fire command, and budget.

General Education: IN1

Course Entry Requirement(s): Prerequisite: FIRE 111

Typically Offered: Spring Semester

FIRE 229, FIRE PROTECTION SYSTEMS 2 (2)

Course addresses the principles of building inspection and fire code enforcement. Emphasis is on the legal requirements and liability policies as identified in National Fire Protection Association (NFPA), Ohio Fire Code, and municipal code standards. (TAG)

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Spring Semester

FIRE 240, EMERGENCY SERVICES OCCUPATIONAL HEALTH AND SAFETY 2 (2)

Course introduces the basic concepts of occupational health and safety for emergency services including risk and hazard evaluation and control procedures for emergency services.

General Education: IN1, IN5

Course Entry Requirement(s): None

Typically Offered: Spring Semester

FIRE 299, INDIVIDUALIZED STUDIES IN FIRE 1-2 (1)

An in-depth study of areas in Fire Science presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to a total of four (4) credit hours. Prerequisite: Second-year standing and divisional approval.

Course Entry Requirement(s): Prerequisite: Second-year standing and division approval

Typically Offered: Offer as required