

## Fire Services Administration (FIRE)

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### Courses

#### **FIRE 112 Hazardous Materials Awareness and Operations\* (3 Hours)**

**Prerequisites** : Department approval.

**Corequisites:** FIRE 113 and FIRE 114 and FIRE 115.

This course prepares the student for the Hazardous Materials Awareness certification through Kansas Fire and Rescue Training Institute. It provides the didactic and skills needed for state certification in a simulated manner for state certification. The purpose of this course is to develop an emergency response contingency plan to deal with hazardous material or chemical emergencies in compliance with regulations in order to protect human health and the environment as well as to minimize an organization's risk. Students seeking state certification for Hazardous Materials Operations are required to complete FIRE 115.

#### **FIRE 113 Firefighter I\* (3 Hours)**

**Prerequisites** : Department approval.

**Corequisites:** FIRE 112 and FIRE 114 and FIRE 115.

This course provides an entry level overview of firefighter safety, fire behavior, building construction, protective clothing, equipment, firefighting techniques and rescue procedures. Students receive a solid foundation of classroom and hands-on training to prepare them for the Firefighter I written certification test through Kansas Fire and Rescue Training Institute. Eligible students will be provided the opportunity to take the third-party certification written test upon completion of this course.

#### **FIRE 114 Firefighter II\* (3 Hours)**

**Prerequisites** : Department approval.

**Corequisites:** FIRE 112 and FIRE 113 and FIRE 115.

This course builds on the concepts and skills presented in FIRE 113 course. Students will have the opportunity to expand their understanding of fire ground operations and prevention activities reinforced by realistic exercises in various fire ground operations including: extrication, rescues, water supplies, ventilation, emergency communications and responsibilities of the firefighter. The students receive a solid foundation of classroom and hands-on training to prepare them for the Firefighter II certification written test through Kansas Fire and Rescue Training Institute.

#### **FIRE 115 Firefighter Practicum\* (3 Hours)**

**Prerequisites** : Student must be 18 years of age prior to first day of the class and Department approval.

**Prerequisites or corequisites:** FIRE 112 and FIRE 113 and FIRE 114.

This course builds on the concepts and skills presented in FIRE 112, FIRE 113, and FIRE 114. Students will take part in Live Fire training scenarios which prepare them specifically for their state certification skills tests through Kansas Fire and Rescue Training Institute. Students in this course will also produce two projects specific to the testing requirements for the firefighter certification.

#### **FIRE 119 Fundamentals of Wildland Firefighting, Firefighter Type II Training\* (3 Hours)**

**Prerequisites** : Department approval.

This course is designed to meet the Wildland Firefighter II knowledge and skill requirements of NFPA 1051, Wildland Fire Fighter Professional Qualifications, NWCG standards for the following classes: S-130, S-190, I-100, and L-180. Fires in the Wildland Urban Interface are a nationwide problem affecting firefighters with longer fire seasons. Teaches students to recognize the Situations That Shout Watchout, apply the appropriate Standard Fire Orders and how to deploy a fire shelter. Includes orientation to the Incident Command System. Teaches basic fireline construction, fire weather, and fire behavior. Includes practical field internship with the Kansas Forestry Service providing experience in fighting fires at wildfire and urban interface incidents. Studies wildland fire behavior, fire weather, and fire mitigation. Teaches size-up, chain of command, communications, strategy, and tactics. Includes developing water sources, learning engine tactics, understanding procedures for aircraft, firing and felling operations. Completers should develop skills necessary for the entry-level wildland firefighter.

#### **FIRE 126 Principles of Emergency Services\* (3 Hours)**

**Prerequisites** : Department approval.

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 loss analysis, organization and function of public and private fire protection 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, introduction to fire strategy and tactics, and life safety initiatives.

#### **FIRE 127 Building Construction for the Fire Service\* (3 Hours)**

**Prerequisites** : Department approval.

Building Construction for the Fire Service is designed to enhance the safety of fire service personnel who are working in and around structures, collapse zones, and building in all states of damage (fire, collapse, flood, tornado). The course covers building construction types, construction methods, various power supply systems and specific hazards for fire personnel.

## **FIRE 133 Fire Investigation\* (3 Hours)**

**Prerequisites** : Department approval.

An orientation and introduction to fire origin and cause, laws of arson, fire and police investigation, and a technical analysis of arson and fraud. Emphasis is placed on the collection and preservation of evidence, photography, diagrams, interviewing, and preparing for court.

## **FIRE 136 Fire and Emergency Management\* (3 Hours)**

**Prerequisites** : Department approval.

Managing resources is a part of every incident. The ability to manage these resources is crucial in safely and effectively mitigating the incident. Organizations must have a system in place prior to the incident, which will facilitate the management of resources. Federal legislation mandates organizations, which respond to hazardous materials incidents, use an incident management system. This course provides information about incident management systems, as well as pursues issues wherein it needs to be utilized.

## **FIRE 152 Codes, Detection and Suppression Systems\* (3 Hours)**

**Prerequisites** : Department approval.

This course will provide a basis for students to become familiar with and utilize fire codes that are in use today. It will also provide students with basic knowledge of detection and suppression systems that are an ever increasing part of fire control today.

## **FIRE 153 Fire Prevention\* (3 Hours)**

**Prerequisites** : Department approval.

This course provides students with a thorough understanding of how fire prevention and protection programs can greatly reduce fire loss, deaths, and injuries. The class features current statistics, codes, standards and references to the latest edition of NFPA Standard 1031, Standard for Professional Qualifications for Fire Inspector and Plan Examiner. Additionally, this class covers the elements of public education, plan review, inspection, fire investigation, community risk reduction as well as the logistics of staffing and financial management so that students are fully prepared to lead successful fire prevention programs. The class will include case studies, review and discussion questions, and additional resources for that describes how to create and use community risk profiles and demographic profiles to guide successful prevention programs. The class will also highlight financial management and budgeting to help students successfully plan, implement, and lead fire prevention programs.

## **FIRE 162 Firefighting Strategies and Tactics\* (3 Hours)**

**Prerequisites** : Department approval.

This course examines strategies and tactics from the incident commander's viewpoint. Students are challenged with decision-making through a variety of occupancies as they use basic firefighting procedures and considerations from today's fire service. The course is designed for the first arriving officers at the scene of a fire or other emergency incident and is intended to develop a street-smart officer. Whether a newly appointed fire officer or a career firefighter seeking to become a company officer, this course can help the participant become a more confident officer.

## **FIRE 165 Fundamentals of Wildland Urban Interface Fire Suppression\* (3 Hours)**

**Prerequisites** : Department approval.

This course provides students with the knowledge and skills required for responding to fires in the wildland/urban interface. This might include structural firefighters who are not primarily wildland firefighters who may be called on to help suppress fires in wildland fuels that threaten structures. This course is designed to assist structure and wildland firefighters who will be making tactical decisions when confronting wildland fire that threatens life, property, and improvements, in the wildland/urban interface.

## **FIRE 166 Fire Behavior and Combustion\* (3 Hours)**

**Prerequisites** : Department approval.

The purpose of this course is to explore the theories and fundamentals of how and why fires start, spread, and are controlled. The student can expect to identify the physical properties of the three states of matter; categorize the components of fire; recall the physical and chemical properties of fire; describe and apply the process of burning; define and use basic terms and concepts associated with the chemistry and dynamics of fire; discuss the various materials and their relationship to fires as fuel; demonstrate knowledge of the characteristics of water as a fire suppression agent; articulate other suppression agents and strategies; and compare other methods and techniques of fire extinguishments.

## **FIRE 184 Fire Services - Firefighter Safety and Survival\* (3 Hours)**

**Prerequisites** : Department approval.

This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services. The Fire service has long been considered a profession plagued with a history of unavoidable tragedy. As the number of line-of-duty deaths and injuries continues to be staggering year after year, this course exposes the false mentality of doing whatever it takes and provides solutions for both the individual and the fire department. Built around the 16 Life Safety Initiatives developed by the National Fallen Firefighters Foundation. This class will help the student reference NFPA guidelines and help them understand how to execute procedures and recommendations for putting safety first. The student will leave this class with modern solutions to challenge the existing attitudes toward safety and commit to making a change.

## **FIRE 185 Occupational Safety and Health for Emergency Services\* (3 Hours)**

**Prerequisites** : Department approval.

This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations. This course provides a historical look at industrial safety and health and how history has impacted the emergency services by providing a safer work environment that reduces first responder deaths and injuries. Occupational Safety and Health in the Emergency Services focuses on fire fighter health and safety and details how to stay safe and healthy in a high-risk environment. The class will include coverage of the "16 Fire Fighter Life Safety Initiatives" with emphasis on the positive impact these Initiatives can have when implemented. Case studies, review and discussion questions, on the latest research from Underwriters Laboratories (UL) and National Institute of Standards and Technology (NIST).

## **FIRE 201 Leadership in the Fire Service\* (3 Hours)**

**Prerequisites** : Department approval.

This is a course that will delve into leadership as defined and utilized in the fire service setting. It will review many types of leaders and the qualities that make them leaders. It will also provide students insight into the type of leaders they may see in the fire service as well as provide them with role models for their use as future fire service leaders.

## **FIRE 220 Fire Management\* (3 Hours)**

**Prerequisites** : Department approval.

This course will involve the student in learning proper methods of supervision and the duties of a fire department first line manager. It will encompass supervisory techniques as well as various management theories. This course will assist the student in the application of techniques and the practical use of management theories in the role as a fire service manager.

## **FIRE 222 Fire Science Law\* (3 Hours)**

**Prerequisites** : Department approval.

The student will have the opportunity to explore legal aspects of the fire and emergency services departments. This course discusses OSHA regulations, basic human resources concepts, employee and employer rights, HIPPA regulations from the lens of fire and emergency services administrators. Case studies of legal precedence for fire investigations are used as a method of applying concepts in this course.

## **FIRE 291 Independent Study\* (1-7 Hour)**

**Prerequisites** : 2.0 GPA minimum and department approval.

Independent study is a directed, structured learning experience offered as an extension of the regular curriculum. It is intended to allow individual students to broaden their comprehension of the principles of and competencies associated with the discipline or program. Its purpose is to supplement existing courses with individualized, in-depth learning experiences. Such learning experiences may be undertaken independent of the traditional classroom setting, but will be appropriately directed and supervised by regular instructional staff. Total contact hours vary based on the learning experience.

## **FIRE 292 Special Topics:\* (1-5 Hour)**

**Prerequisites** : Departmental approval.

This course periodically presents specialized topics in Fire Science that are not offered in the regular curriculum. Special Topics may be repeated for credit, but only on a different topic. This is a repeatable course and may be taken more than once for credit.