# Fire Protection Technology (FIR)

**(Interdisciplinary Studies Department)**

**FIR 101—Introduction to Fire Protection Technology**
3 cr.
This course is an essential component within the Fire Protection Technology core group. The student is introduced to the field of fire protection technology through a review of tragic fires of yesterday to provide a historical perspective on the development of fire safety practices in place today. Students are introduced to the chemistry and behavior of fire in order to develop an understanding of how technology is applied to detect, control and suppress fire today

**FIR 102—Introduction to Fire and Emergency Services Administration**
3 cr.
The premise of the course is to provide an introductory understanding of the administrative, management and leadership skills that are required in today's fire and emergency services. To accomplish this goal, the history and past practices of the Fire Service will be examined. An overview of the administration, financial management, human resources, customer service, training, educational requirements, and health and safety issues of the Fire and Emergency service will be explored.

**FIR 103—Principles of Building Construction**
3 cr.
This course is part of the Fire Protection Technology core group. It is designed to introduce the student to methods and techniques of building construction and how building construction impacts both fire behavior and the life safety of building occupants. Students are also introduced to the causes of building failures (structural collapse) and the role of interior finish in fire spread and toxic gas production.

**FIR 111—Fire Hazard Properties of Materials**
3 cr.
This course will introduce the student to various chemical and physical properties of solid, liquid, and gaseous materials that contribute to their potential for fire and explosion. Reactivity and health hazards will also be examined. The student will review basic combustion chemistry and chemical terminology. The student will be introduced to identification systems for hazardous materials, transportation practices, storage practices, and fire control strategies for a wide range of flammable and combustible substances.

**FIR 203—Fire Protection and Detection Systems**
3 cr.
A study of the various types of fire detection and extinguishing systems. Portable fire extinguishers, sprinkler systems and special agent systems are discussed. The operation of municipal and private alarm systems, automatic fire detection systems and guard services are also examined.
Prerequisite: FIR 101 or permission of discipline coordinator

**FIR 207—Legal Aspects of the Fire and Emergency Services**
3 cr.
The focus of this course is the exploration of the many legal issues associated with fire and emergency services. Issues confronting today's fire and emergency services include legal and civil liability, Occupational Safety and Health Administration (OSHA) compliance, workers compensation, physical abilities testing, negligence, discrimination and sexual harassment. These are but a few of the pivotal issues confronting today's fire and emergency services.
Prerequisite: FIR 101

**FIR 211—Investigation and Detection of Fire Incidents**
3 cr.
This course examines the causes of incendiary and accidental fires. In the study of intentional fires and explosions the scientific method is the analytic process now used that leads to accurate and defensible conclusions in fire investigation. The course will focus on the application of this process and create a sound basis for the student to use when evaluating fire scenes, preparing reports, gather evidence and offer testimony in an arson investigation case. Topics discussed include: investigation techniques, interrogation, reports, court procedures, testimony, legal opinions and processing of criminal evidence. State and local statutes related to the crime of arson are examined.