NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
FST 100 – PRINCIPLES OF EMERGENCY SERVICES (3 CR.)

Course Description

Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function to 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. Lecture 3 hours per week.

General Course Purpose

The purpose of this course is to introduce the Fire Science student or prospective student to topics related to the fire service and topics in the industry of fire protection. This course will also provide an overall foundation for upper level courses offered by the Fire Science Program at Northern Virginia Community College.

Prerequisites/Corequisites

The student is presumed to have successfully completed all requirements for a high school diploma or equivalent

Course Objectives

Upon completion of this course, a successful student will be able to:

- Illustrate and explain the history and culture of the fire service
- Analyze the basic components of fire as a chemical chain reaction, the major phases of fire, and examine the main factors that influence fire spread and fire behavior
- Differentiate between fire service training and education and explain the value of higher education to the professionalization of the fire service
- List and describe the major organizations that provide emergency response service and illustrate how they interrelate
- Identify fire protection and emergency-service careers in both the public and private sector
- Define the role of national, State and local support organizations in fire and emergency services
- Discuss and describe the scope, purpose, and organizational structure of fire and emergency services
- Describe the common types of fire and emergency service facilities, equipment, and apparatus
- Compare and contrast effective management concepts for various emergency situations
- Identify the primary responsibilities of fire prevention personnel including, code enforcement, public information, and public and private protection systems
- Recognize the components of career preparation and goal setting
- Describe the importance of wellness and fitness as it relates to emergency services

Major Topics to be Included

- International and National Concepts in Fire Protection
- History of Fire Protection
- Chemistry and Physics of Fire
- Water-based and Non-water Based Fire Protection Systems
- Alarm and Detection Systems
- Codes and Fire Protection for Building Construction
- Fire Department Resources and Support Organizations
- Special Emergency Operations/Arson Investigation