NorthWest Arkansas Community College
Division of Health Professions/Fire Science

Course Number and Title:
FIRE 1003 Introduction to Fire Science

Catalog Description:
This course will study the philosophy and history of fire science, the review and analysis of fire losses, the introduction to fire protection agencies, career possibilities, the use of protective clothing and equipment, the use and identification of basic fire fighting equipment, and current technological developments.

Prerequisites:
None

Credit Hours/Contact Hours/Load Hours:
3/3/3

Target Audience/Transferability:
This course is designed for students desiring a career in the fire service or related areas. Students working towards a two-year degree in fire science, as well as those planning to transfer to a four-year college, will benefit from this course.

Student Learning Outcomes:
- Describe and discuss the components of the history and philosophy of the modern fire service
- Analyze the basic components of fire as a chemical reaction, the phases of fire growth, and the factors that influence its growth and spread
- Differentiate between fire service training and education, including certificate and degree programs, and explain the value of education as it relate to the fire service today
- List and describe major organizations that provide emergency response and their interrelation
- Identify fire protection and related careers in both the public and private sectors
- Synthesize the role of the various national, state, and local support organization related to fire protection
- Discuss the scope, purpose, and organizational structure of fire and emergency services
- Describe the common type of fire and emergency apparatus, equipment, and facilities
- Demonstrate knowledge of effective management concepts for various emergency operations
- Identify and explain the various components of fire prevention and fire protection systems

Outline of Instruction:
I. The Making of a Firefighter
II. Firefighter Safety and Survival – “Everyone Goes Home” Life Safety Initiative
III. The Fire Service as a Career
IV. Roles of Fire Service Personnel
V. Early Traditions and History
VI. Fire Prevention, Safety, Public Education and Fire Investigation
VII. Scientific Terminology
VIII. Building Construction
IX. Fire Detection, Alarm and Suppression Systems
X. Role of Public and Private Support Organizations
XI. Fire and Emergency Services
XII. Fire Department Organization and Management

Forms of Assessment
Complete course requirements and show learning via written exams with a minimum cumulative grade of 70%.