

NorthWest Arkansas Community College
Allied Health/Fire Science

FIRE 2033 Building Construction for the Fire Service

Catalog Description

This course covers the advantages and disadvantages of major structural materials, wood, masonry, steel and concrete. Fire problems of nonstructural elements with emphasis on fire characteristics and safety factors, as well as liabilities of code enforcement.

Credit Hours/Contact Hours/Load Hours

3/3/3

Required Methods of Instruction

Majority of instruction will utilize classroom lecture. Selected videos and pictures will reinforce the curriculum.

Target Audience and Transfer

This course is designed for students desiring a career in the fire service or related areas, and for those already in a fire related profession seeking an overview of the field of building construction. 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.

Essential Course Outcomes

Knowledge:

1. Recall facts concerning building construction types and principles of construction.

Skills:

2. Identify building construction types based on appearance, materials, and methods of construction.

Attitudes:

3. Recognize the importance of understanding the types of building construction as they relate to safety based upon hazards of each to occupants and Firefighters, and strategy and tactics to be considered for the various types of buildings.

Required Text

International Fire Service Training Association, Building Construction Related to the Fire Service, 2nd Ed., 1999.

Topics

- A. Building Construction and the Fire Service
- B. Design Principles
- C. Building Classifications
- D. Structural Principles
- E. Building Materials
- F. Structural Foundations
- G. Structural Systems
- H. Floors and Ceilings
- I. Walls
- J. Roofs
- K. Door and Window Assemblies
- L. Interior Finishes
- M. Building Services and Subsystems
- N. Underground Facilities
- O. Building Fire Protection Systems
- P. Buildings Under Construction

Resources

<u>Item</u>	<u>Description</u>	<u>Location</u>
Video Tapes	Describes Types of Building Construction, and Associated Hazards	NWACC