

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: FST 220 Credits: 3

Course Title: Building Construction for Fire Protection

Course Description:

Provides the component Purpose :

Introduces students to the way buildings are constructed so that they will better understand the forces, including fire, that tend to destroy buildings and the results of these forces.

Course Prerequisites and Co-requisites:

Describe building construction and its relationship to fire protection and safety.

code; None

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Student Learning Outcomes:

Upon completion of this course, you will be able to:

x Describe building construction as it relates to onecs1<</MCID 21 >>BDC (onecsgTc 0.00

Topics to Be Included:

1. Introduction

- a. History of Building Construction
- b. Governmental Functions, Building and Fire Codes
- c. Fire Risks and Fire Protection
- d. Fire Loss Management and Life Safety
- e. Pre-Fire Planning and Fire Suppression Strategies

- 2. Principles of Construction
 - a. Terminology and Definitions
 - b. Building and Occupancy Classifications
 - c. Characteristics of Building Materials
 - d. Types and Characteristics of Fire Loads
 - e. Effects of Energy Conservation

3. Building Construction

- a. Structural Members
 - i. Definitions, Descriptions and Carrying Capacities
 - ii. Effects of Loads

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- a. Early Versus Modern Construction
- b. Vertical and Horizontal Extension of Fire and Smoke
- c. Fire Protection and Suppression
- d. Elevators
- e. Atriums/Lobbies
- f. Modifications/Code Compliance

14. Collapse

15. Ventilation

Effective Date/Updated: September 11, 2023