

FIRE-1100: PRINCIPLES OF EMERGENCY SERVICES

Cuyahoga Community College

Viewing: FIRE-1100 : Principles of Emergency Services

Board of Trustees:

2012-03-22

Academic Term:

Spring 2020

Subject Code

FIRE - Fire Technology

Course Number:

1100

Title:

Principles of Emergency Services

Catalog Description:

Provides an overview to fire protection including history, organization of services, local and state laws in addition to nomenclature, chemistry and physics of fire protection systems, strategy and tactics.

Credit Hour(s):

3

Lecture Hour(s):

3

Requisites

Prerequisite and Corequisite

Departmental approval: Admission to or completion of accredited Fire Academy.

Outcomes

Course Outcome(s):

Discuss and describe the scope, purpose, and organizational structure of fire and emergency services.

Objective(s):

1. Illustrate and explain the history and culture of the fire service.
2. List and describe the major organizations that provide emergency response service and illustrate how they interrelate.
3. Define the role of national, state and local support organizations in fire and emergency services.
4. Describe the common types of fire and emergency service facilities, equipment, and apparatus.
5. Compare and contrast effective management concepts for various emergency situations.

Course Outcome(s):

Recognize the components of career preparation and goal setting.

Objective(s):

1. Differentiate between fire service training and education and explain the value of higher education to the professionalization of the fire service.
2. Identify fire protection and emergency-service careers in both the public and private sector.

Course Outcome(s):

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.

Objective(s):

1. Illustrate the four methods of heat transfer.

2. Differentiate heat and temperature.
3. Describe the properties affecting gas fuels.
4. Describe the properties affecting liquid fuels.
5. Describe the properties affecting solid fuels.
6. Describe the three phases of fire.
7. Illustrate the four classifications of fire.

Course Outcome(s):

Identify and explain the components of fire prevention including code enforcement, public information, and public and private fire protection systems.

Objective(s):

1. Describe the importance of fire prevention.
2. Describe the activities performed by a fire prevention bureau
3. List the methods of public education as it relates to fire prevention
4. Explain how the authority to enforce fire prevention regulations is derived.
5. Describe a typical fire prevention bureau organization.
6. Describe the importance of fire information reporting.
7. List the uses of fire-related statistics.

Methods of Evaluation:

1. Objective examination
2. Practical hands-on exercises

Course Content Outline:

1. Principles of emergency services
 - a. Careers in the fire protection/emergency services
 - i. Opportunities/private, industrial, local, municipal, state and federal
 - ii. Pay, hours of duty, benefits, promotion and retirement qualifications
 - iii. Work ethics and human relations education and training
 1. Certificates
 2. Degrees
 - iv. Selection process
2. History
 - a. Evolution of the fire protection
 - b. The U.S. fire problem: life and property
3. Fire prevention and public fire education
 - a. Fire investigation
 - b. Code enforcement
 - c. Public education
4. Scientific terminology
 - a. Fire behavior
 - b. Flammability and characteristics of solids, liquids and gases.
5. Building design and construction
 - a. Loads and forces
 - b. Structural components
 - c. Construction types
6. Fire detection and suppression systems
 - a. Components of water supply system
 - b. Fire department water supply program
 - c. Fire detection systems and components
 - d. Extinguishing systems and their components
7. The Role of public and private support organizations
 - a. Local
 - b. State
 - c. Federal and National
 - d. International
8. Fire and emergency services equipment and facilities

- a. Fire department facilities
 - b. Fire apparatus
 - c. Specialized apparatus
 - d. Personal protective equipment
 - e. Tools and other equipment
9. Management
- a. Emergency operations
 - b. Organizational structure of fire and emergency services

Resources

Klinoff, Robert. *Introduction to Fire Protection*. 4th. Delmar; Cengage, 2009.

Lloyd, Jason. *Fundamentals of Fire Emergency Services*. Upper Saddle River, NJ: Pearson, 2010.

IFSTA. *Fire Emergency Services Orientation and Terminology*. 5th edition. IFSTA, 2009.

LeBaudour, Chris. *Emergency Medical Responder: 1st on Scene and Resource Central EMS Student Access Code*. 9th ed. Upper Saddle River, NJ: Prentice Hall, 2011.

Michael, Alexander. *Foundations of EMS Education*. Upper Saddle River, NJ: Prentice Hall, 2009.

Limmer, Daniel. *EMR Complete: A Worktext*. Upper Saddle River, NJ: Prentice Hall, 2010.

Instructional Services

OAN Number:

Transfer Assurance Guide OFS004 and Career Technical Assurance Guide CTFF002 (1 of 3 courses, all must be taken) and CTFF003 (1 of 5 courses, all must be taken)

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