



FSC 2 - Introduction to Fire Science

Catalog Description

Transfer Status: CSU

Unit(s): 3.00

Lecture: 51.00 Contact hours/102.00 Out of class hours/153.00 Total hours/3.00 Unit(s)

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Course Description: This course provides an overview of fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of 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; life safety initiatives. (C-ID FIRE 100X).

Objectives

Upon successful completion of this course, the student should be able to:

1. Describe the components and development of the fire and emergency services.
2. Illustrate the history of the fire service.
3. Recognize careers in fire and emergency services.
4. Illustrate and explain the history and culture of the fire service.
5. 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.
6. Differentiate between fire service training and education, and explain the value of higher education to the professionalization of the fire service.
7. List and describe the major organizations that provide emergency response service and illustrate how they interrelate.
8. Identify fire protection and emergency service careers in both the public and private sectors.
9. Define the role of national, state and local support organizations in fire and emergency services.
10. Discuss and describe the scope, purpose, and organizational structure of fire and emergency services.
11. Describe the common types of fire and emergency services facilities, equipment and apparatus.
12. Compare and contrast effective management concepts for various emergency situations.
13. Identify the primary responsibilities of fire prevention personnel including, code enforcement, public information, and public and private protection systems.
14. Recognize the components of career preparation and goal setting.
15. Describe the importance of wellness and fitness as it relates to emergency services.

Course Content

Topic Titles / Suggested Time Topic	
<u>Lecture</u>	
<u>Topics</u>	<u>Lec Hrs</u>
Careers in the Fire Protection/Emergency Services	7.00
History	6.00
Fire Prevention and Public Fire Education	6.00
Scientific Terminology	3.00
Building Design and Construction	3.00
Fire Detection and Suppression Systems	4.00
The Role of Public and Private Support Organizations	8.00
Fire and Emergency Equipment and Facilities	8.00
Management	6.00
Total Hours: 51.00	

Methods of Instruction

- A. Demonstrations
- B. Discussion
- C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- D. Lecture

- E. Multimedia Presentations
- F. Reading Assignments
- G. Handouts

Methods of Evaluation

- A. Quizzes
- B. Projects
- C. Class participation
- D. Written Examinations

Examples of Assignments

Reading Assignments

1. Read an instructor provided article on the history of the fire service, and be prepared to discuss in class.
2. Read a textbook chapter on organizations related to the fire service, and successfully pass a quiz on the chapter.

Writing Assignments

1. Write a minimum one page autobiography which describes your interest in the study of fire technology.
2. Prepare a minimum two page formatted report describing an early tradition in the fire service which is still in practice today.

Out-of-Class Assignments

1. Arrange and participate in a tour of a local fire department, and be prepared to discuss in class.
2. Prepare a PowerPoint presentation which overviews a local fire service agency.

Recommended Materials of Instruction

IFSTA. (2011). Fire Service Orientation and Terminology. *IFSTA, 5th*.

Minimum Qualifications

Fire Technology

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