Course Outline for Fire Technology 2

PRINCIPLES OF FIRE AND EMERGENCY SERVICES SAFETY AND SURVIVAL

Catalog Description:

FT 2 - Principles of Fire and Emergency Services Safety and Survival 3.00 units

This course provides students with the basic principles and history related to the national firefighter life safety initiatives, with a focus on the need for cultural and behavioral changes throughout the emergency services. Topics include assessment of fire dangers; common fire situations; risk abatement; personal preparation for unforeseen fire emergencies; roles and responsibilities in educating the public on fire safety; and development of a survival attitude. Students learn problem-solving techniques for increased situational awareness and self-reliance in emergencies. This course is intended for students majoring in Fire Technology; practicing firefighters and other emergency service personnel; or anyone with an interest in fire safety. (May not receive credit if Fire Tech 52 has been completed.)

Strongly Recommended: FT 1 or concurrent enrollment, or , FT 50 (completed with a grade of “C” or higher)

Grading Option: Letter Grade

Discipline:

<table>
<thead>
<tr>
<th>Units</th>
<th>Contact Hours</th>
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<tbody>
<tr>
<td></td>
<td>Week</td>
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<tr>
<td></td>
<td>Term</td>
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<tr>
<td>Lecture</td>
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<tr>
<td>Laboratory</td>
<td>0</td>
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<tr>
<td>Clinical</td>
<td>0.00</td>
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<tr>
<td>Total</td>
<td>3.00</td>
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Prerequisite Skills:

None

Measurable Objectives:

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

1. identify and explain the 16 life safety initiatives;
2. understand the concepts of risk management and mitigation as it pertains to emergency services;
3. define and describe the need for cultural and behavioral change within the emergency services relating to safety, incorporating leadership, supervision, accountability and personal responsibility;
4. explain the need for enhancements of personal and organizational accountability for health and safety;
5. define how the concepts of risk management affect strategic and tactical decision-making;
6. describe and evaluate circumstances that might constitute an unsafe act;
7. explain the concept of empowering all emergency services personnel to stop unsafe acts;
8. validate the need for national training standards as they correlate to professional development inclusive of qualifications, certifications, and re-certifications;
9. defend the need for annual medical evaluations and the establishment of physical fitness criteria for emergency services personnel throughout their careers;
10. explain the vital role of local departments in national research and data collection systems;
11. illustrate how technological advancements can produce higher levels of emergency services safety and survival;
12. explain the importance of investigating all near-misses, injuries, and fatalities;
13. discuss how incorporating the lessons learned from investigations can support cultural change throughout the emergency services;
14. describe how obtaining grants can support safety and survival initiatives;
15. formulate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near-misses, injuries and deaths;
16. explain how the increase in violent incidents impacts safety for emergency services personnel when responding to emergency scenes;
17. recognize the need for counseling and psychological support for emergency services personnel, their families, as well as, identify access to local resources and services;
18. describe the importance of public education as a critical component of life safety programs;
19. discuss the importance of fire sprinklers and code enforcement;
20. explain the importance of safety in the design of apparatus and equipment.

Course Content:

1. Introduction
   A. History of fire service culture
   B. Organizational culture
   C. Individual role in culture/behavior
   D. History of line of duty deaths and injuries statistics
   E. Defining the nature of the problem
2. The national context, health and safety
   A. NFPA, OSHA
   B. Medical and fitness standards
   C. Data collection (NFIRS)
   D. Research/investigation (NIST, NIOSH)
3. Training, equipment, response  
   A. Training, certification, credentialing  
   B. Apparatus and equipment  
   C. Emergency response – response to emergency scenes  
   D. Violent incidents  
   E. Emerging technologies  
4. Organizational health and safety profile  
   A. Personal and organizational accountability  
   B. Present condition/culture  
   C. Investigations - internal  
   D. Analyzing your profile  
   E. Utilizing grants to meet needs  
5. Risk management  
   A. Risk management concepts and practices  
   B. Unsafe acts  
   C. Empowerment definition  
6. Prevention  
   A. Home fire sprinklers  
   B. Code enforcement  
   C. Public education/fire and life safety  
   D. Counseling and psychological support  

Methods of Presentation  
1. Lecture/Discussion  
2. Presentation of audio-visual materials  
3. Diagnostic Quizzes  
4. Problem Solving  
5. Online Assignments  
6. Research project  
7. Group Presentations  

Assignments and Methods of Evaluating Student Progress  
1. Typical Assignments  
   A. As a member of a research group, prepare and deliver a fire service safety resource contact presentation.  
   B. Prepare a written analysis based on research of the 16 Firefighter Life Safety Initiatives.  

2. Methods of Evaluating Student Progress  
   A. Exams/Tests  
   B. Quizzes  
   C. Class Participation  
   D. Homework  
   E. Class Performance  
   F. Attendance  
   G. Group Projects  
   H. Online Assignments  
   I. Assigned activities  
   J. Midterm Examination  
   K. Final Examination  

3. Student Learning Outcomes  
   Upon the completion of this course, the student should be able to:  
   A. Describe and explain the roles, responsibilities, and duties of a firefighter related to safety and survival consistent with the National Fallen Firefighters 16 Firefighter Life Safety Initiatives.  
   B. Identify fire scene hazards and implement appropriate safety and survival actions consistent with the National Fallen Firefighters 16 Firefighter Life Safety Initiatives.  
   C. As a member of a research team, perform and complete the scavenger hunt resource project, and submit the final project following all assessment parameters.  

Textbooks (Typical):  

Special Student Materials  
Abbreviated Class Schedule Description:  
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral changes throughout the emergency services. (May not receive credit if Fire Tech 52 has been completed.)  
Strongly Recommended: FT 1 or concurrent enrollment, or , FT 50 (completed with a grade of "C" or higher)