**Principles of Fire and Emergency Services Safety and Survival**

**Course Description:** This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

**Prerequisite:** None

**Outcomes**

1. Define and describe the need for cultural and behavioral change within the emergency services relating to safety, incorporating leadership, supervision, accountability and personal responsibility.

2. Explain the need for enhancements of personal and organizational accountability for health and safety.

3. Define how the concepts of risk management affect strategies and tactical decision-making.

4. Describe and evaluate circumstances that might constitute an unsafe act.

5. Explain the concept of empowering all emergency services personnel to stop unsafe acts.

6. Validate the need for national training standards as the correlate to professional development inclusive of qualifications, certifications, and re-certifications.

7. Defend the need for annual medical evaluations and the establishment of physical fitness criteria for emergency services personnel throughout their careers.

8. Explain the vital role of local departments in national research and data collection systems.

9. Illustrate how technological advancements can produce higher levels of emergency services safety and survival.

10. Explain the importance of investigating all near-misses, injuries and fatalities.
11. Discuss how incorporating the lessons learned from investigations can support cultural change throughout the emergency services.

12. Describe how obtaining grants can support safety and survival initiatives.

13. Formulate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near-misses, injuries and deaths.

14. Explain how the increase in violent incidents impacts safety for emergency services personnel when responding to emergency scenes.

15. Recognize the need for counseling and psychological support for emergency services personnel, their families, as well as, identify access to local resources and services.

16. Describe the importance of public education as a critical component of life safety programs.

17. Discuss the importance of fire sprinklers and code enforcement.

18. Explain the importance of safety in the design of apparatus and equipment.

Available Text: 16 Firefighter Life Safety Initiatives
(www.everyonegoeshome.com)

Supporting References/Research for Faculty and Students:
Firefighter Life Safety Summit Initial Report and additional summit reports (Wildland firefighting, Health—Wellness—Fitness, Structural Firefighting, Emergency Vehicles and Roadway Safety, Culture Change) at www.everyonegoeshome.com

Assessment: Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Points of Contact: Travis Ford, Volunteer State Community College, Program Director/Assistant Professor of Fire Science Technology, (615) 230-3354
Course Outline

*Principles of Fire and Emergency Services Safety and Survival*

I. 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

II. The national context, health and safety
   A. NFPA, OSHA
   B. Medical and fitness standards
      1. Substance abuse
      2. Suicide prevention
      3. Physical screening
   C. Data Collection (NFIRS)
   D. Research/Investigation NIST, NIOSH

III. Training, equipment, response
   A. Training, certification, credentialing
   B. Apparatus and equipment
   C. Emergency response - response to emergency scenes
   D. Violent incidents
   E. Emerging technologies

IV. 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

V. Risk Management
   A. Risk management concepts and practices
      1. Incident scene rehabilitation
   B. Unsafe acts
   C. Empowerment definitions
VI. Prevention

A. Home fire sprinklers
B. Code enforcement
C. Public education/fire and life safety
D. Counseling and psychological support
Advanced Principles in Firefighter Safety and Survival

Course Description: This course broadens the scope of the national firefighter life safety initiative and emphasizes their importance at the supervisory and managerial levels.

Prerequisite: Principles of Firefighter Health and Safety

Outcomes

2. Demonstrate methodologies for advocating and implementing cultural change in the fire service.

3. Compare and contrast how both personal and organizational accountability can influence health and safety in the fire service.

4. Apply risk management principles to scenarios involving incident management at all levels, including strategic, tactical and planning responsibilities.

5. Design a policy by which all firefighters can initiate termination of unsafe conditions or practices.

6. Initiate the adoption of applicable national standards for training, qualifications, certifications and recertifications at the local level.

7. Initiate the adoption of national medical and physical fitness standards for all firefighters at the local level.

8. Develop a local process to support a national research agenda and data collection system.

9. Develop a local action plan for the utilization of available and emerging technologies to enhance firefighter safety and survival.

10. Formulate a process for investigation of all firefighter fatalities, injuries, and near-misses.

11. Initiate the utilization of lessons learned from firefighter investigations in trainings, procedures and policies.

12. Demonstrate, in the grant-writing process, the importance of including firefighter health and safety.
13. Evaluate how the development and implementation of national standards for response to emergency scenes can affect firefighter safety and survival.

14. Develop a local plan for implementation of national standard response to violent incidents.

15. Design a local plan for counseling and psychological support services for firefighters and their families.

16. Create a public education initiative for enhancing fire and life safety programs in your community.

17. Defend the benefits of residential fire sprinklers in fire stations and code enforcement.

18. Construct a plan for the assessment of safety in the design and acquisition of apparatus and equipment.

Available Text: 16 Firefighter Life Safety Initiatives (www.everyonegoeshome.com)

Supporting References/Research for Faculty and Students: Firefighter Life Safety Summit Initial Report and additional summit reports (Wildland firefighting, Health—Wellness—Fitness, Structural Firefighting, Emergency Vehicles and Roadway Safety, Culture Change) at www.everyonegoeshome.com

Assessment: Students will be evaluated for mastery of learning objectives by methods of evaluation to be determined by the instructor.

Points of Contact: John F. Sullivan, Professor of Fire Science, Anna Maria College, (508) 414-1786, Sullivanj27@charter.net
Course Outline

Advanced Principles in Firefighter Safety and Survival

I. Introduction
   A. History – case studies (mix)
   B. Change model
   C. LODD, LODI – case studies

II. The national context, health and safety
   A. Shaping/implementing public policy model
   B. IAFF initiative – case study

III. Training, equipment, response
   F. ProBoard, IFSAC accreditation process
   G. Developing apparatus specs
   H. Emergency response – vehicle crash statistical analysis
   I. Violent incidents – case study Fire/EMS
   J. AVL’s, opticons, TIC’s, GIS – case studies

IV. Organizational health and safety profile
   A. Investigation case studies – Technical report series
   B. SWOT/COWS organizational analysis
   C. Grant writing techniques
   D. SAFER, Assistance to Firefighter, F,P&S, Homeland security- national/regional

V. Risk Management
   A. Risk-benefit analysis – RHAVE, etc.
   B. The cockpit model of empowerment

VI. Prevention
   A. Home sprinklers – case studies Carroll Valley
   B. Code enforcement – case studies Triangle Shirtwaist, Cocoanut Grove, Station nightclub, etc.
   C. Public education – Hagerstown model
   D. Counseling/ psych – FDNY pre/post 911, CISM, PTSD