J. Sargeant Reynolds Community College  
Course Content Summary

Course Prefix and Number: FST 121  
Credits: 3

Course Title: Principles of Fire and Emergency Services Safety and Survival

Course Description: Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services. (This course has replaced FST 120 in the curriculum.) Lecture 3 hours per week.

General Course Purpose: This course is required for the Fire Science AAS degree program. The course is included in the curriculum so that students will understand the following key concepts related to firefighter safety:

a. Fire service cultural change needed for improving firefighter safety;
b. Accountability for organizations and individuals;
c. Risk management concepts and applying to strategy and tactics;
d. The needs and roles of standards, certifications, policies for training, fitness, operations (emergency and non-emergency) for improving safety and survival;
e. Concepts of empowering personnel to stop unsafe acts;
f. The need for investigations, data collection, and research in fatalities, injuries, and near-misses; and
g. The role of fire prevention, technology, apparatus, equipment, and sprinklers in enhancing firefighter safety.

Course Prerequisites and Co-requisites:
None

Course Objectives:
Upon completing the course, the student will be able to

a. Define and describe the need for cultural and behavioral change within emergency services relating to safety, incorporating leadership, supervision, accountability, and personal responsibility;
b. Explain the need for enhancements of personal and organizational accountability for health and safety;
c. Define how the concepts of risk management affect strategic and tactical decision-making;
d. Describe and evaluate circumstances that might constitute an unsafe act;
e. Explain the concept of empowering all emergency services personnel to stop unsafe acts;
f. Validate the need for national training standards as they correlate to professional development inclusive of qualifications, certifications, and re-certifications;
g. Defend the need for annual medical evaluations and the establishment of physical fitness criteria for emergency services personnel throughout their careers;
h. Explain the vital role of local departments in national research and data collection systems;
i. Illustrate how technological advancements can produce higher levels of emergency services safety and survival;
j. Explain the importance of investigating all near-misses, injuries, and fatalities;
k. Discuss how incorporating the lessons learned from investigations can support cultural change throughout the emergency services;
l. Describe how obtaining grants can support safety and survival initiatives;
m. Formulate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near-misses, injuries, and deaths;

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

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

p. Discuss the importance of fire sprinklers and code enforcement; and

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

**Major Topics to Be Included:**

a. Cultural change

b. Accountability

c. Risk analysis and management

d. Unsafe acts, near misses, fatalities, injuries

e. Safety standards, certification, policy and procedures, laws relating to safety

f. Safety investigations

g. Fire safety technology, fire prevention, sprinklers, and code enforcement

h. Application of safety in fire and emergency services operations, emergency and non-emergency

**Effective Date of Course Content Summary:** August, 16, 2010