

Lassen Community College Course Outline

FS 14 Principles of Fire Safety and Survival

3.0 Units

I. Catalog Description

This course will introduce the student to fundamental issues relating to firefighting safety and survival. Students will evaluate case studies in which firefighters have been killed or injured. In addition, each student will be required to give an oral presentation based on an analysis of a “near miss” fatal fire/rescue scenario. Additionally, this course will introduce the student to the National Firefighter Life Safety initiatives, which focus on the need for both cultural and behavioral change throughout the emergency services disciplines. This course has been approved for online, hybrid and correspondence delivery.

Recommended Preparation: Successful completion of ENGL105 or equivalent multiple measures placement.

Prerequisite: None

Transferable to CSU

51 hours of lecture, 102 expected outside of class hours, 153 Total Hours of Instruction

Scheduled: Spring (odd)

II. Coding Information

Repeatability: Not repeatable

Open Entry/Open Exit: NA

Grading Option: Graded

Credit Type: Credit – Degree Applicable

TOP Code: 2133.10

III. Course Objectives

A. Course Student Learning Outcomes

Upon completion of this course the student will be able to:

1. Analyze in a research paper format the common theme found in various incidents involving firefighter serious injuries or deaths.
2. Describe the importance of public education as a critical component of life safety programs.
3. Evaluate the importance of code enforcement.

B. Course Objectives

1. Define and describe the need to start early the cultural and behavioral changes within the emergency services relating to safety, incorporating leadership, supervision, accountability and personal responsibility.
2. Assess the need for enhancements of personal and organizational accountability for health and safety.
3. Define how the concepts of risk management affect strategic and tactical decision- making.
4. Describe and evaluate circumstances that might constitute an unsafe act.
5. Identify the concepts of empowering all emergency services personnel to stop unsafe acts.
6. Validate the need for national training standards as they 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. Analyze the vital role of local departments in national research and data collection systems.
9. Identify how technological advancements can produce higher levels of emergency services safety and survival.
10. Describe the importance of investigating all near misses, injuries and fatalities.
11. Summarize how incorporating the lessons learned from investigations can support cultural change throughout the emergency services.
12. Evaluate how obtaining grants can support safety and survival initiatives.
13. Demonstrate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near misses, injuries and deaths.
14. Identify how the increase in violent incidents impacts safety for emergency services personnel when responding to emergency scenes.
15. Assess the need for counseling and psychological support for emergency services personnel, their families, as well as identify access to local resources and services.
16. Examine the importance of safety in the design of apparatus and equipment.
17. Analyze wellness/fitness programs for public safety personnel.
18. Compare and contrast the difference between standards and regulations.

IV. Course Content

A. Introduction

1. History of fire service culture
2. Organizational culture
 - a. Career departments
 - b. Volunteer departments
 - c. Training
3. Individual role in culture/behavior
 - a. Medical fitness
 - b. Physical fitness
4. Review of the history of line of duty deaths and injuries statistics
5. Definition of the nature of the problem

B. The National Context; Health and Safety

1. National Fire Protection Association
2. Occupational Safety and Health Administration
3. National Institute of Occupational Safety and Health
4. National Institute of Standards and Technology
5. Medical and fitness standards
6. Data Collection: National Fire Incident Reporting System
7. Research/ Investigation

C. Training, Equipment, Response

1. Training, certification, credentialing
2. Apparatus and equipment
3. Response to emergency scenes
4. Violent incidents
5. Emerging technologies
6. Developing standard operating procedures and safety policies
7. Incident Command System
 - a. Incident management
 - b. Personnel accountability
 - c. Incident planning
 - d. Incident safety officer(s)

D. Organizational Health and Safety Profile

1. Personal and organizational accountability
 2. Present condition/culture
 3. Investigations-internal
 4. Investigations-external
 5. Analyzing your profile
 6. Utilizing grants to meet needs
- E. Risk Management
1. Risk management concepts and practices
 2. Unsafe acts
 3. Empowerment definition
 4. Risk identification
 5. Risk evaluation
 6. Risk control
- F. Illness and Injury Prevention Programs (IIPP)
1. Safety program evaluations
 - a. Responsibility
 - b. Frequency
 2. Statistical data base analysis of internet resources on public safety employee health and safety programs
 3. Education of fire and life safety programs
 4. Counseling and psychological support associated with Critical Incident Stress Debriefing (CISD) programs

V. Assignments

A. Appropriate Readings

NIOSH reports

OSHA reports

Cal-OSHA reports

NIST (National Institute of Standards and Technology) reports and studies

B. Writing Assignments

Students will complete a research paper that includes evaluation of source material and how it relates to major learning concepts of the course.

Written assignments, including reflection papers, essays, and case-study analysis papers.

C. Expected Outside Assignments

Complete assigned readings in preparation for quizzes, midterm and final exam, which is a summative exam of the major learning concepts of the course.

D. Specific Assignments that Demonstrate Critical Thinking

One fifteen minute in-class oral presentation. Homework case study analysis covering such topics as equipment or operational procedures that caused serious injuries to firefighters.

VI. Methods of Evaluation

Traditional Classroom Evaluation

1. Quizzes, midterm and final examinations.
2. Individual projects covering such topics as the causes of serious firefighter injuries and deaths.
3. Group projects covering such topics as an incident(s) that caused multiple injuries or deaths of firefighters.
4. Homework case study analysis covering such topics as equipment or operational procedures that caused serious injuries to firefighters.

Online Evaluation

A variety of methods will be used, such as: research papers, asynchronous and synchronous discussions (chat/forum), exercises/assignments, online quizzes and exams, and postings to online website.

Correspondence Evaluation

Same as traditional classroom with the exception of the desired use of proctored exams. Students will be expected to complete assignments and activities equivalent to traditional classroom assignments and activities. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain effective communication between instructor and student.

Hybrid Evaluation

A combination of traditional classroom and online evaluations will be used. Traditional Classroom: exercises/assignments, mixed format exams and research papers. Online: exercises/assignments, online quizzes and exams, essay forum postings, and chat rooms.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

Traditional Classroom Delivery Correspondence Delivery

Hybrid Delivery

Online Delivery

Traditional Classroom Delivery

Lecture, Demonstration, Discussion and Multi-media.

Online Delivery

Delivery includes the following: online written lectures, forum-based discussions, exercises/assignments contained on website, adding extra resources and other media sources as appropriate.

Correspondence Delivery

Assigned readings, instructor-generated typed handouts, lecture materials, exercises and assignments equal to traditional classroom delivery. Written correspondence and a minimum of six opportunities for feedback will be utilized to maintain communication between student and instructor.

Hybrid Delivery

A combination of traditional classroom and online instruction will be utilized. 26 hours will be taught through traditional classroom delivery by the instructor and the other 25 hours will be instructed online through the technology platform adopted by the District. Traditional class instruction will consist of lecture, demonstration, and discussion. Online delivery will consist of online written lectures, forum-based discussions, exercises/assignments contained on website, adding extra resources and other media sources as appropriate.

VIII. Representative Texts and Supplies

Zimmerman, Don; *Fire fighter Safety and Survival*, 3rd edition, 2021, Jones and Bartlett, ISBN: 9781284180176

IX. Discipline/s Assignment

Fire Technology

X. Course Status

Course Status: Active

Original Approval Date: 03/16/2010

Course Originator: Dan Weaver

Curriculum/Academic Standards Committee Revision Date: 09/20/2022