

# FT R158: PRINCIPLES OF FIRE AND EMERGENCY SERVICES; SAFETY AND SURVIVAL

---

**Originator**

michael\_ketaily

**College**

Oxnard College

**Discipline (CB01A)**

FT - Fire Technology

**Course Number (CB01B)**

R158

**Course Title (CB02)**

Principles of Fire and Emergency Services; Safety and Survival

**Banner/Short Title**

Prin of Fire Safety/Survival

**Credit Type**

Credit

**Start Term**

Fall 2021

**Catalog 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.

**Taxonomy of Programs (TOP) Code (CB03)**

2133.00 - \*Fire Technology

**Course Credit Status (CB04)**

D (Credit - Degree Applicable)

**Course Transfer Status (CB05) (select one only)**

B (Transferable to CSU only)

**Course Basic Skills Status (CB08)**

N - The Course is Not a Basic Skills Course

**SAM Priority Code (CB09)**

C - Clearly Occupational

**Course Cooperative Work Experience Education Status (CB10)**

N - Is Not Part of a Cooperative Work Experience Education Program

**Course Classification Status (CB11)**

Y - Credit Course

**Educational Assistance Class Instruction (Approved Special Class) (CB13)**

N - The Course is Not an Approved Special Class

**Course Prior to Transfer Level (CB21)**

Y - Not Applicable

**Course Noncredit Category (CB22)**

Y - Credit Course

**Funding Agency Category (CB23)**

Y - Not Applicable (Funding Not Used)

**Course Program Status (CB24)**

2 - Not Program Applicable

**General Education Status (CB25)**

Y - Not Applicable

**Support Course Status (CB26)**

N - Course is not a support course

**Field trips**

May be required

**Grading method**

Letter Graded

**Does this course require an instructional materials fee?**

No

**Repeatable for Credit**

No

**Units and Hours**

**Carnegie Unit Override**

No

**In-Class**

**Lecture**

**Minimum Contact/In-Class Lecture Hours**

52.5

**Maximum Contact/In-Class Lecture Hours**

52.5

**Activity**

**Laboratory**

**Total in-Class**

**Total in-Class**

**Total Minimum Contact/In-Class Hours**

52.5

**Total Maximum Contact/In-Class Hours**

52.5

**Outside-of-Class**

**Internship/Cooperative Work Experience**

**Paid**

**Unpaid**

### **Total Outside-of-Class**

**Total Outside-of-Class**

**Minimum Outside-of-Class Hours**

105

**Maximum Outside-of-Class Hours**

105

### **Total Student Learning**

**Total Student Learning**

**Total Minimum Student Learning Hours**

157.5

**Total Maximum Student Learning Hours**

157.5

**Minimum Units (CB07)**

3

**Maximum Units (CB06)**

3

**Prerequisites**

FT R151 or concurrent enrollment

### **Entrance Skills**

**Entrance Skills**

Students must possess a basic understanding of FD apparatus, equipment and personal safety equipment in order to enhance firefighter safety and survival and focus on wellness.

**Prerequisite Course Objectives**

FT R151-Explain the types of common fire department fire fighting apparatus, equipment, and personal safety equipment used for fire fighting.

FT R151-Describe the basic elements of fire fighter safety and survival.

FT R151-Describe the importance of wellness and fitness as it relates to emergency fitness.

---

### **Requisite Justification**

**Requisite Type**

Prerequisite

**Requisite**

FTR151

**Requisite Description**

Course in a sequence

**Level of Scrutiny/Justification**

Content review

---

**Requisite Type**

Concurrent

**Requisite**

FTR151

**Requisite Description**

Course in a sequence

**Level of Scrutiny/Justification**

Content review

**Student Learning Outcomes (CSLOs)****Upon satisfactory completion of the course, students will be able to:**

- |   |  |
|---|--|
| 1 | The student will be able to identify safety hazards at an incident that jeopardize FF Safety.                            |
| 2 | The student will be able to identify internal and external risk factors that jeopardize firefighter health and wellness. |
| 3 | The student will be able to identify the 16 National Fallen Firefighter Life Safety Initiatives.                         |

**Course Objectives****Upon satisfactory completion of the course, students will be able to:**

- |    |  |
|----|--|
| 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  | Identify and explain the 16 life safety initiatives.   |
| 3  | Understand the concepts of risk management and mitigation as it pertains to emergency services.  |
| 4  | Validate the need for national training standards as they correlate to professional development inclusive of qualifications, certifications, and re-certifications.  |
| 5  | Defend the need for annual medical evaluations and the establishment of physical fitness criteria for emergency services personnel throughout their careers.   |
| 6  | Identify how technological advancements can produce higher levels of emergency services safety and survival.   |
| 7  | Summarize how incorporating the lessons learned from investigations can support cultural change throughout the emergency services.   |
| 8  | Demonstrate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near misses, injuries and deaths.   |
| 9  | Identify how the increase in violent incidents impacts safety for emergency services personnel when responding to emergency scenes   |
| 10 | Examine the importance of safety in the design of apparatus and equipment  |
| 11 | Analyze wellness/fitness programs for public safety personnel.   |
| 12 | Explain the need for enhancements of personal and organizational accountability for health and safety.   |
| 13 | Define how the concepts of risk management affect strategic and tactical decision-making.  |
| 14 | Describe and evaluate circumstances that might constitute and unsafe act   |
| 15 | Explain the concept of empowering all emergency services personnel to stop unsafe acts   |
| 16 | Validate the need for national training standards as they correlate to professional development inclusive of qualifications, certifications, and re-certifications   |
| 17 | Explain the vital role of local departments in national research and data collection systems   |
| 18 | Illustrate how technological advancements can produce higher levels or emergency services safety and survival  |
| 19 | Explain the importance of investigating all near-misses, injuries and fatalities   |
| 20 | Discuss how incorporating the lessons learned from investigations can support cultural change throughout the emergency services  |
| 21 | Describe how obtaining grants can support safety and survival initiatives  |
| 22 | Formulate an awareness of how adopting standardized policies for responding to emergency scenes can minimize near-misses, injuries and deaths  |
| 23 | Explain how the increase in violent incidents impacts safety for emergency services personnel when responding to emergency scenes  |
| 24 | Recognize the need for counseling and psychological support for emergency services personnel, their families, as well as, identify access to local resources and services  |
| 25 | Describe the importance of public education as a critical component of life safety programs  |

- |    |   |
|----|---|
| 26 | Discuss the importance of fire sprinklers and code enforcement            |
| 27 | Explain the importance of safety in the design of apparatus and equipment |

## Course Content

### Lecture/Course Content

1. Introduction
  - a. History of fire service culture
  - b. Organizational culture
    - i. Career departments
    - ii. Volunteer departments
    - iii. Training
  - c. Individual role in culture/behavior
    - i. Medical fitness
    - ii. Physical fitness
  - d. Review of the history of line of duty deaths and injuries statistics
  - e. Definition of the nature of the problem
2. The National Context; Health and Safety
  - a. National Fire Protection Association
  - b. Occupational Safety and Health Administration
  - c. National Institute of Occupational Safety and Health
  - d. National Institute of Standards and Technology
  - e. Medical and fitness standards
  - f. Data Collection: National Fire Incident Reporting System
  - g. Research/Investigation
3. Training, Equipment, Response
  - a. Training, certification, credentialing
  - b. Apparatus and equipment
  - c. Response to emergency scenes
  - d. Violent incidents
  - e. Emerging technologies
  - f. Developing standard operating procedures and safety policies
  - g. Incident Command System
    - i. Incident management
    - ii. Personnel accountability
    - iii. Incident planning
    - iv. Incident safety officer(s)
4. Organizational Health and Safety Profile
  - a. Personal and organizational accountability
  - b. Present condition/culture
  - c. Investigations-internal
  - d. Investigations-external
  - e. Analyzing your profile
  - f. Utilizing grants to meet needs
5. Risk Management
  - a. Risk management concepts and practices
  - b. Unsafe acts
  - c. Empowerment definition
  - d. Risk identification
  - e. Risk evaluation
  - f. Risk control
6. Illness and Injury Prevention Programs (IIPP)
  - a. Safety programs evaluation
    - i. Responsibility
    - ii. Frequency
  - b. Statistical data base analysis of internet resources on public safety employee health and safety programs

- c. Education of fire and life safety programs
- d. Counseling and psychological support associated with Critical Incident Stress Debriefing (CISD) programs

### Laboratory or Activity Content

none

## Methods of Evaluation

**Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):**

Problem solving exercises  
Written expression

**Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):**

Computational homework  
Essays  
Group projects  
Individual projects  
Objective exams  
Oral presentations  
Problem-solving exams  
Quizzes  
Role playing  
Reports/papers  
Research papers  
Simulations

## Instructional Methodology

**Specify the methods of instruction that may be employed in this course**

Audio-visual presentations  
Class activities  
Class discussions  
Case studies  
Distance Education  
Group discussions  
Instructor-guided use of technology  
Internet research  
Lecture  
Role-playing

**Describe specific examples of the methods the instructor will use:**

1. Instructor will direct interactive instructional activities asking students to research requirements of firefighter personal protective equipment.
2. Instructor will present information on the different types of incidents resulting in firefighter death and injury and how it motivated cultural changes.
3. Instructor will identify incidents where firefighters committed unsafe acts.
4. Instructor will present information on how fire apparatus safety has evolved.
5. Instructor will develop small group exercises in which the students will identify different type of occupancies and the specific hazards to firefighter in these occupancies..
6. Instructor will lead guided and focused discussions on the history of significant fires and their impact on cultural awareness, situational awareness and firefighter safety/survival.

## Representative Course Assignments

### Writing Assignments

1. Students will complete a research project on firefighter near misses that led to injury.
2. Students will complete writing assignments required for the Certifications for the Fire Hero Learning Network, "My Last Dying Breath".
3. Students will complete a writing assignment on technological changes to fire apparatus to improve Firefighter Safety
4. Students will complete a group writing assignment on the 16 safety initiatives.

**Critical Thinking Assignments**

1. Participate in small group discussions focusing on methods of FF safety in public assemblage occupancies
2. Participate in online discussions concerning the history of significant incidents on firefighter safety.
3. Participate in focus groups concentrating on the cultural shift in the fire service regarding firefighter safety.
4. Participate in group activities and develop training exercises to make firefighters safer.
5. View the Fire Hero Learning Network series, "My Last Dying Breath" and complete the certification process.

**Reading Assignments**

1. NIOSH (National Institute for Occupational Safety and Health) Reports
2. Federal and California OSHA (Occupational Safety and Health Administration) Reports
3. Internet interactive training programs such as FEMA, United States Fire Administration, Firehouse.com, FireEngineering.com, FireNuggets.com, Firefighterclosecalls.com

**Other assignments (if applicable)**

-

**Outside Assignments****Representative Outside Assignments**

1. Students will read one chapter per week from assigned book.
2. Students will prepare and deliver presentations on significant incidents resulting in firefighter death and injury.
3. Weekly short assignments related to class delivery and current fire activities.
4. Internet inquiry activities relating to current fire incidents.
5. Complete a model predicting current fire behavior on weather conditions.
6. Complete all modules in the Fire Service Hero Learning Network and receive certification.

## District General Education

### A. Natural Sciences

### B. Social and Behavioral Sciences

### C. Humanities

### D. Language and Rationality

### E. Health and Physical Education/Kinesiology

### F. Ethnic Studies/Gender Studies

## CSU GE-Breadth

### Area A: English Language Communication and Critical Thinking

### Area B: Scientific Inquiry and Quantitative Reasoning

### Area C: Arts and Humanities

### Area D: Social Sciences

### Area E: Lifelong Learning and Self-Development

## CSU Graduation Requirement in U.S. History, Constitution and American Ideals:

### IGETC

### Area 1: English Communication

### Area 2A: Mathematical Concepts & Quantitative Reasoning

### Area 3: Arts and Humanities

### Area 4: Social and Behavioral Sciences

### Area 5: Physical and Biological Sciences

### Area 6: Languages Other than English (LOTE)

## Textbooks and Lab Manuals

### Resource Type

Textbook

### Description

Ford, Travis, M. and National Fallen Firefighters (2016). *Fire and Emergency Services Safety Survival with MyFireKit* (1st). Prentice Hall .

---

### Resource Type

Other Resource Type

### Description

Firefighter Life Safety Summit initial report and additional summit reports (wildland firefighting, health, wellness and fitness, structural firefighting, emergency vehicles and roadway safety, culture change) at: [www.everyonegoeshome.com](http://www.everyonegoeshome.com).

---

## Distance Education Addendum

### Definitions

#### Distance Education Modalities

Hybrid (51%–99% online)  
 Hybrid (1%–50% online)  
 100% online

### Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes

### Regular Effective/Substantive Contact

#### Hybrid (1%–50% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post a discussion board topic such as factors impacting Firefighter Wellness and Safety.

#### Hybrid (51%–99% online) Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post a discussion board topic such as factors impacting Firefighter Wellness and Safety.
Synchronous Dialog (e.g., online chat)	Students will share their thoughts of the online lecture in an online chat with their classmates.

#### 100% online Modality:

Method of Instruction	Document typical activities or assignments for each method of instruction
Asynchronous Dialog (e.g., discussion board)	Students will post a discussion board topic such as factors impacting Firefighter Wellness and Safety.
Synchronous Dialog (e.g., online chat)	Students will share their thoughts of the online lecture in an online chat with their classmates.
Other DE (e.g., recorded lectures)	Students will meet online with Instructor via Zoom and this will be recorded.

### Examinations

#### Hybrid (1%–50% online) Modality

Online  
 On campus

#### Hybrid (51%–99% online) Modality

Online  
 On campus

**Primary Minimum Qualification**

FIRE TECHNOLOGY

**Review and Approval Dates**

**Department Chair**

05/26/2020

**Dean**

05/26/2020

**Technical Review**

08/26/2020

**Curriculum Committee**

08/26/2020

**Curriculum Committee**

11/25/2020

**CCCCO**

MM/DD/YYYY

**Control Number**

CCC000532914

**DOE/accreditation approval date**

MM/DD/YYYY