

**Course Outline**

**COURSE:** JFT 11                      **DIVISION:** 50                      **ALSO LISTED AS:** JFT 214

**TERM EFFECTIVE:** Spring 2018                      **Inactive Course**

**SHORT TITLE:** RESCUE SYSTEMS I

**LONG TITLE:** Rescue Systems I Basic Rescue Skills

Units	Number of Weeks		Contact Hours/Week		Total Contact Hours
1	18	Lecture:	.45	Lecture:	8.1
		Lab:	1.82	Lab:	32.76
		Other:	0	Other:	0
		Total:	2.27	Total:	40.86

**COURSE DESCRIPTION:**

This course familiarizes the student with the requirements for the California Urban Search and Rescue (US and R) Basic and Light Operational Levels. The manipulative portion of the course concentrates on techniques to operate safely and effectively at structural collapse incidents involving the collapse or failure of light-frame construction and basic rope rescue operations. The Urban Search and Rescue Operational System Description includes four different levels of operational capability, training and equipment. The course uses the Incident Command System (ICS) to apply common terminology and resource management practices to provide supervision and control of essential functions at incidents that involve technically demanding rescue operations. This course is now listed as JFT 214. **PREREQUISITE:** Fire Fighter Certification **ADVISORY:** Eligible for English 250 and English 420.

**PREREQUISITES:**

**COREQUISITES:**

**CREDIT STATUS:** D - Credit - Degree Applicable

**GRADING MODES**

L - Standard Letter Grade

**REPEATABILITY:** N - Course may not be repeated

**SCHEDULE TYPES:**

02 - Lecture and/or discussion

03 - Lecture/Laboratory

04 - Laboratory/Studio/Activity

## **STUDENT LEARNING OUTCOMES:**

1. Apply the California Urban search and Rescue System, rescue capabilities training, building construction, collapse, and hazards during scenario training.

Measure: demonstration, skills exam

ILO: 2, 3, 7

2. Demonstrate tying all rescue knots and hitches discussed during class.

Measure: skills exam

ILO: 3, 2

3. Apply size-up techniques, and safety considerations when attempting to lift, roll or move heavy objects.

Measure: demonstration

ILO: 3,2,7

4. Demonstrate skills and techniques necessary to move patients between low and high places and across uneven terrain.

Measure: demonstration, skills exam

ILO: 3, 2,7

5. Identify and apply structural shoring systems, tools/equipment for emergency shoring and timber spot shores.

Measure: skills exam

ILO: 3,2, 7

## **CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS**

Inactive Course: 11/13/2017

4 Hours

### **CONTENT:**

#### **1. INTRODUCTION**

##### **A. The California Urban Search & Rescue System**

1. Four levels of operational capability

2. Training

3. Five general construction categories

##### **B. Rescue Operations**

1. Four phases of structural collapse

2. Checklist for the management of a structural collapse rescue

3. US&R search described

4. The search marking system

##### **C. US&R Safety and Medical Care for Victims**

1. General hazards of a structural collapse

2. Four general types of building construction hazards

3. Four types of collapse patterns

4. Necessary personal protective equipment to use during an incident

5. Safety and medical considerations to take during an incident

6. Injuries associated with a structural collapse

7. Basic infectious disease precautions to take during an incident

##### **D. US&R Planning and Preparation**

1. Legal authority and responsibility for US&R
2. Development of a vulnerability and hazard assessment
3. Resources for a US&R incident
4. Effective response coordination
5. Training needed for local resources
6. Budgetary needs during a US&R incident
7. ICS, SEMS, and NIMS as they relate to a US&R incident
8. Communications necessary for a US&R incident
9. Scene control
10. Federal and State resources

STUDENT PERFORMANCE OBJECTIVES (SPO): Identify the requirements for the California Urban Search and Rescue Basic and Light operational levels.

OUT-OF-CLASS ASSIGNMENTS: Reading Assignment

8 Hours

CONTENT:

2. RESCUE KNOTS AND HITCHES
  - A. Rescue knots and hitches
    1. How to tie the six required knots
    2. How to tie the four RSI required knots
  - B. Anchor systems
    1. Considerations when selecting anchors
    2. Types of anchors
  - C. Rescuer and ambulatory victim packaging
    1. Rescue harnesses and rescuer packaging
    2. Donning class III harnesses
    3. Packaging a victim
  - D. System attachments and fall restraint
    1. System attachments
    2. Attaching a rescuer
    3. Attaching an ambulatory
    4. Attaching a rescue litter to a rope rescue system
  - E. Belay/Safety Line Systems
    1. Key points regarding the operation of a belay/safety line system
    2. Belay/safety line configurations
    3. Lowering operations-basic configuration
    4. Retrieval operations-basic configuration
    5. System variations
  - F. Rappelling/Descending
    1. Descending techniques
    2. Rappelling techniques

SPO: Demonstrate how to tie each of the required knots and hitches

OUT-OF-CLASS ASSIGNMENTS: Review lecture and demonstrations of proficiencies

8 Hours

CONTENT:

3. Introduction to lifting and moving heavy objects
  - A. Heavy objects
    1. Tools types, capabilities, and safety considerations
    2. Types of jacks, operating principles, and safety precautions

3. Personal protective equipment, safety precautions and medical precautions
4. Rescue team positions
5. Raising, stabilizing, rotating, and lowering a heavy object
6. Extricating a victim from under the object.

SPO: Identify safety considerations associated with lifting and moving heavy objects.

OUT-OF-CLASS ASSIGNMENTS: Reading Assignment

4 Hours

CONTENT:

4. Breaking and Breaching
  - A. Introduction to breaking and breaching
    1. Tool types, capabilities, and safety considerations when breaking and breaching.
    2. Light-frame structure design
    3. Appropriate personal protective equipment, safety precautions, and medical precautions.
    4. Breaking and breaching operations

SPO: Apply skills by demonstrating breaching and breaking operations to gain access to victims during scenario training exercise.

OUT-OF-CLASS ASSIGNMENTS: Review lecture material on breaching and breaking.

8 Hours

CONTENT:

5. Ladder Rescue Systems
  - A. Components and operational functions
    1. Ladder slide
    2. Exterior leaning ladder
    3. Interior leaning ladder
    4. Cantilever ladder
    5. Ladder gin
    6. Ladder "A" frame

SPO: Demonstrate manipulative skills by utilizing fire service ladders to rescue patients during scenarios.

OUT-OF-CLASS ASSIGNMENTS: Review lecture material

4 Hours

CONTENT:

6. Shoring systems
  - A. Introduction to structure shoring systems
    1. Techniques to mitigate structure collapse hazards
    2. Steps involved during shoring size-up
    3. Positions, roles, and responsibilities of the shoring team
    4. Types of shoring systems
    5. Basic tools and equipment for emergency shoring operations

SPO: Identify the components of structural, emergency shoring systems and timber spot shores.

OUT-OF-CLASS ASSIGNMENTS: Review the components and safety considerations associated with shoring systems

4 Hours

CONTENT: Test and Skill Evaluation

SPO: Students must complete each skill as demonstrated in class.

### **METHODS OF INSTRUCTION:**

Lecture, discussion and demonstration will serve as the medium of instruction. Regular assignments will be made for out-of-class study and research. Quizzes and a final exam as well as individual guidance will be provided as required.

**METHODS OF EVALUATION:**

CATEGORY 1 - The types of writing assignments required:

Percent range of total grade: 10 % to 20 %

Reading Reports

Course primarily involves skill demonstration or problem solving

CATEGORY 2 -The problem-solving assignments required:

Percent range of total grade: 10 % to 20 %

Quizzes

CATEGORY 3 -The types of skill demonstrations required:

Percent range of total grade: 40 % to 60 %

Class Performance/s

Performance Exams

CATEGORY 4 - The types of objective examinations used in the course:

Percent range of total grade: 10 % to 20 %

Multiple Choice

True/False

**REPRESENTATIVE TEXTBOOKS:**

Required:

California Department of Forestry and Fire Protection, Rescue Systems 1 - Basic Rescue Skills , CAL Fire, 2009

**ARTICULATION and CERTIFICATE INFORMATION**

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 199870

UC TRANSFER:

Not Transferable

**SUPPLEMENTAL DATA:**

Basic Skills: N

Classification: Y

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: JFT  
CSU Crosswalk Course Number: 11  
Prior to College Level: Y  
Non Credit Enhanced Funding: N  
Funding Agency Code: Y  
In-Service: N  
Occupational Course: C  
Maximum Hours: 1  
Minimum Hours: 1  
Course Control Number: CCC000330747  
Sports/Physical Education Course: N  
Taxonomy of Program: 213300