



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	FTEC
Course Number:	72
Descriptive Title:	Trench Rescue Technician
Division:	Health Sciences and Athletics
Department:	Fire and Emergency Technology
Course Disciplines:	Fire Technology
Catalog Description:	This course covers all aspects of working safely and efficiently in a trench rescue environment. Topics include trench and excavation regulations, soil conditions, trench configurations, trench hazards, rescue team preparation, incident response, initial on-scene and pre-entry operations, shoring systems and components, installation of shoring systems, victim rescue and recover, and incident termination.
Prerequisite:	Successful completion of a California State Fire Marshal certified Fire Academy Proof of passing the Emergency Medical Technician (EMT) National Registry Examination
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	1.5
Hours Laboratory (per week):	0
Outside Study Hours:	3
Total Course Hours:	27
Course Units:	1.5
Grading Method:	Letter Grade only
Credit Status:	Credit, non degree applicable
Transfer CSU:	No
Effective Date:	
Transfer UC:	No
Effective Date:	
General Education:	ECC
Term:	
Other:	
CSU GE:	

Term:	
Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	<p>SLO #1 Trench Rescue</p> <p>Given lecture and related instructional material the student will prepare a "Trench Rescue Incident Action Plan".</p> <p>SLO #2 PPE</p> <p>Describe the appropriate personal protective equipment required for a typical trench rescue operation.</p> <p>SLO #3 Soils and Collapse Hazards</p> <p>Differentiate the types of soils and their potential collapse hazards.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Categorize federal, state, and local regulations that impact trench rescue incidents 2. Compare soil conditions as they relate to safe trench rescue operations. 3. Analyze the different types of trenches, and their respective collapse hazards. 4. Assess trench rescue operational priorities. 5. Describe the appropriate trench rescue pre-entry responsibilities.
Major Topics:	<p>I. Pre-Entry Priorities (9 hours, lecture)</p> <ol style="list-style-type: none"> A. Trench rescue regulations B. Soil considerations C. Collapse hazards D. Scene assessment <p>II. Trench Rescue Operations (9 hours, lecture)</p> <ol style="list-style-type: none"> A. Developing the Incident Action Plan B. Equipment selection C. Safety concerns D. Shoring placement <p>III. Victim Care (5 hours, lecture)</p>

	<p>A. Assessing the victim's physical condition</p> <p>B. Treating the victim's injuries</p> <p>C. Packaging the victim for extraction</p> <p>D. Removing the victim from the trench</p> <p>IV. Post-Incident Considerations (4 hours, lecture)</p> <p>A. Site security</p> <p>B. Incident reports</p> <p>C. After action activities with related agencies</p> <p>D. Returning the property to the owner</p>
Total Lecture Hours:	27
Total Laboratory Hours:	0
Total Hours:	27
Primary Method of Evaluation:	2) Problem solving demonstrations (computational or non-computational)
Typical Assignment Using Primary Method of Evaluation:	Construct a two-page Trench Rescue Incident Action Plan for a simulated collapse of a "T" trench, involving a single victim and submit to the instructor.
Critical Thinking Assignment 1:	Compare the advantages and disadvantages of speed-shoring versus conventional shoring. Outline your conclusions in a one to two page report and submit to the instructor.
Critical Thinking Assignment 2:	List the items that must be considered when functioning as a Safety Officer at a trench rescue incident. Describe your findings in a one-page report and submit to the instructor.
Other Evaluation Methods:	Essay Exams, Homework Problems, Objective Exam, Performance Exams
Instructional Methods:	Demonstration, Discussion, Group Activities, Role play/simulation
If other:	
Work Outside of Class:	Answer questions, Required reading, Study, Written work (such as essay/composition/report/analysis/research)
If Other:	
Up-To-Date Representative Textbooks:	California Mountain Company (CMC). <u>Trench Rescue Technician</u> . 1st. ed. CMC, 2014. (Discipline Standard)
Alternative Textbooks:	
Required Supplementary Readings:	

Other Required Materials:	
Requisite:	
Category:	
Requisite course(s): List both prerequisites and corequisites in this box.	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite Skill:	Successful completion of a California State Fire Marshal certified Fire Academy Proof of passing the Emergency Medical Technician (EMT) National Registry Examination
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	
Requisite course:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	A student would have extreme difficulty passing this course without the benefit of completing a State Fire Marshal approved Fire Academy. A Fire Academy acquaints the student with firefighting tools and equipment; industry terminology; procedures for combating Class A, Class B, Class C, and Class D fires; utility emergencies; vehicle extrication; and a myriad of other subjects a fire fighter must accomplish before entering this field. Without this knowledge, it is highly likely the student will suffer serious injury, or perhaps death, while performing the duties of a fire fighter. A student taking this class must have the knowledge to pass the Emergency Medical Technician (EMT) National Registry Exam. This requirement is necessary because the majority of emergency incidents the students will respond to in the field are medical in nature. For example, a student may be confronted with diagnosis of an unconscious patient. Failure to have the correct EMT skills to diagnose the patient may result in providing inappropriate treatment further complicating the patient's condition.
Requisite Skill:	
Requisite Skill and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable	
Enrollment Limitations and Category:	

Enrollment Limitations Impact:	
Course Created by:	
Date:	05/11/2016
Original Board Approval Date:	
Last Reviewed and/or Revised by:	Jeff Baumunk
Date:	05/02/2019
Last Board Approval Date:	12/19/2022