El Camino College

COURSE OUTLINE OF RECORD - Approved

I. GENERAL COURSE INFORMATION

Subject and Number: Fire and Emergency Technology 71
Descriptive Title: Vehicle Extrication

Course Disciplines: Fire Technology

Division: Industry and Technology

Catalog Description: This course provides the knowledge and skills to prepare a firefighter to extricate victim(s) from a common passenger vehicle in a safe and effective manner in accordance with established policies and procedures.

Conditions of Enrollment:

Prerequisite

Successful completion of a California State Fire Marshal certified Fire Academy

Proof of passing the Emergency Medical Technician (EMT) National Registry Examination.

Course Length: [X] Full Term [ ] Other (Specify number of weeks):
Hours Lecture: 1.50 hours per week [ ] TBA
Hours Laboratory: 0 hours per week [ ] TBA
Course Units: 1.50

Grading Method: Letter
Credit Status Non-Degree Credit

Transfer CSU: [ ] No
Transfer UC: [ ] No

General Education:
El Camino College: _____
CSU GE: _____
IGETC: _____

II. OUTCOMES AND OBJECTIVES

A. COURSE STUDENT LEARNING OUTCOMES (The course student learning outcomes are listed below, along with a representative assessment method for each. Student learning outcomes are not subject to review, revision or approval by the College Curriculum Committee)

Given lecture and related instructional material the student will:

1. Select the appropriate safety measures to employ when performing a vehicle extrication.
2. Examine the techniques to use when removing a patient from a damaged vehicle.
3. Choose the proper stabilization method to secure a vehicle before removing a patient from the vehicle.

The above SLOs were the most recent available SLOs at the time of course review. For the most current SLO statements, visit the El Camino College SLO webpage at http://www.elcamino.edu/academics/slo/.

B. Course Student Learning Objectives (The major learning objective for students enrolled in this course are listed below, along with a representative assessment method for each)

1. Assess the types of vehicle stabilization equipment.
   Performance exams
2. Compare various forms of vehicle extrication safety zones.
   Essay exams
3. Examine appropriate fire protection resources when performing vehicle extrications.
   Objective Exams
4. Evaluate common vehicle stabilization practices.
   Objective Exams
5. Choose the proper method for removing an injured victim from a damaged vehicle.
   Performance exams

III. OUTLINE OF SUBJECT MATTER (Topics are detailed enough to enable a qualified instructor to determine the major areas that should be covered as well as ensure consistency from instructor to instructor and semester to semester.)

Lecture or Lab	Approximate Hours	Topic Number	Major Topic
Lecture	3	I	Safety Zones A. Establish safety zones B. Weather considerations C. Personal protective equipment

			D. Traffic control measures
Lecture	3	II	Fire Protection Requirements A. Placing appropriate protective hose lines B. Apply fire control strategies C. Identify fire and explosion hazards D. Assess potential ignition sources
Lecture	9	III	Vehicle Stabilization Techniques A. Evaluate types of stabilization equipment B. Assess vehicle stabilization points C. Determine vehicle access and egress locations D. Creating access and egress openings
Lecture	6	IV	Vehicle Stabilization Equipment A. Hand tools B. Pneumatic powered tools C. Electric powered tools D. Specialized tools
Lecture	3	V	Removing Trapped Occupants A. Activating the Incident Command System B. Apply correct immobilization techniques C. Select appropriate medical protocols and safety measures to immobilize, package, and transfer a patient
Lecture	3	VI	Terminating a Vehicle Extrication Incident A. Transfer scene control to the appropriate agency B. Select the proper method for disposing medical wastes C. Notify responsible parties for vehicle removal
Total Lecture Hours		27	
Total Laboratory Hours		0	
Total Hours		27	

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. **PRIMARY METHOD OF EVALUATION:**

Problem solving demonstrations (computational or non-computational)

B. **TYPICAL ASSIGNMENT USING PRIMARY METHOD OF EVALUATION:**

Given a vehicle extrication scenario, develop an Incident Action Plan for the safe removal of a trapped occupant. Prepare a two-page written report outlining your recommendations.

C. **COLLEGE-LEVEL CRITICAL THINKING ASSIGNMENTS:**

1. Determine the correct extinguishing agent to use when assessing the safe removal of a trapped vehicle occupant in a hazardous environment. Prepare a one-page written report discussing your findings.

2. Compare the advantages and disadvantages of pneumatic powered extrication equipment versus electric powered equipment. Prepare a one to two page written report summarizing your conclusions.

D. **OTHER TYPICAL ASSESSMENT AND EVALUATION METHODS:**

Essay exams
Performance exams
Objective Exams
Quizzes
Field work

V. INSTRUCTIONAL METHODS

Demonstration
Discussion
Group Activities
Lecture
Simulation

Note: In compliance with Board Policies 1600 and 3410, Title 5 California Code of Regulations, the Rehabilitation Act of 1973, and Sections 504 and 508 of the Americans with Disabilities Act, instruction delivery shall provide access, full inclusion, and effective communication for students with disabilities.

VI. WORK OUTSIDE OF CLASS

Study
Answer questions
Written work

Estimated Independent Study Hours per Week: 3

VII. TEXTS AND MATERIALS

A. **UP-TO-DATE REPRESENTATIVE TEXTBOOKS**
David Sweet. Vehicle Extrication Levels I and II. Principles and Practices. 1 st ed. Jones and Bartlett, 2015.

B. **ALTERNATIVE TEXTBOOKS**

C. **REQUIRED SUPPLEMENTARY READINGS**

D. **OTHER REQUIRED MATERIALS**

VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites and Corequisites)

Requisites	Category and Justification
Non-Course Prerequisite	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.
Non-Course Prerequisite	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.

B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification

D. Recommended Skills

Recommended Skills
Ability to operate basic fire fighter rescue equipment FTEC 1 - Discuss the types of common fire department apparatus, equipment, and personal safety equipment used for firefighting.

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact

Course created by Craig Neumann on 05/11/2016.

BOARD APPROVAL DATE:

LAST BOARD APPROVAL DATE:

Last Reviewed and/or Revised by Craig Neumann on 05/11/2016

19579