El Camino College

COURSE OUTLINE OF RECORD - Official

I. GENERAL COURSE INFORMATION

Subject and Number: Fire and Emergency Technology 133
Descriptive Title: Basic and Advanced Life Support

Course Disciplines: Emergency Medical Technologies

Division: Industry and Technology

Catalog Description: This course provides students with a review of cardiopulmonary resuscitation (CPR) techniques, and sophisticated forms of airway management. The course presents an introduction and interpretation of electrocardiogram (EKG) rhythms with the use of the oscilloscope. Drugs used in cardiac arrest situations are discussed. Simulation exercises are conducted throughout the course.

Conditions of Enrollment: **Enrollment Limitation**

Admission to Paramedical Technician program

Course Length: ☐ Full Term ☑ Other (Specify number of weeks): 13
Hours Lecture: 9.00 hours per week ☒ TBA
Hours Laboratory: 0 hours per week ☐ TBA
Course Units: 6.50

Grading Method: Letter
Credit Status Associate 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)

1. SLO #1 OBSTRUCTED AIRWAYS Students completing this course will evaluate the most common reasons for an obstructed airway, and will describe the appropriate action(s) to clear the airway.
2. SLO #2 ECG Students will be able to identify and label cardiac dysrhythmias as they relate to the location of the irritability within the myocardium.
3. SLO #3 BLS Students will complete an AHA course in BLS for Healthcare Providers learning the latest methods for administering CPR.

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. Distinguish among the three essential components of cardiopulmonary resuscitation.
   Quizzes
2. Evaluate and explain the most common form of an obstructed airway seen in a patient.
   Oral exams
3. Demonstrate the ability to perform Basic Life Support (BLS) skills.
   Performance exams
4. Choose the appropriate manual maneuvers for opening the obstructed airway in a patient.
   Performance exams
5. Analyze the precautions which should be taken when performing tracheal suctioning.
   Quizzes
6. Judge the purpose of performing an Electrocardiography (EKG) on a patient in the field.
   Oral exams
7. Assess the importance of electromechanical dissociation as it relates to the resuscitation of a cardiac patient in the field.
   Performance exams
8. Compare and contrast the EKG rhythms seen in the field.
   Oral 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	9	I	CARDIOPULMONARY RESUSCITATION (CPR) A. Components of CPR

			B. Proper use of CPR C. Complications of CPR D. Obstructed airway E. Infant/child CPR F. Clinical and biological death
Lecture	27	II	BLS REVIEW A. CPR B. Spinal immobilization C. Treatment of burns D. Treatment of broken extremities E. Allergic reactions F. Near drownings
Lecture	54	III	EKG A. Use of EKG B. Depolarization C. Myocardial tissue D. Pacemaker of the heart E. Definitions F. P-wave, QRS complex G. Refractory period H. EKG assessment criteria I. Circulatory heart rates J. Electromechanical dissociation K. Normal sinus rhythm L. Sinus bradycardia M. Sinus tachycardia N. Sinus arrhythmia O. Sinus arrest P. Premature Atrial Contractions (PAC's) Q. Supraventricular Tachycardia (SVT) R. Paroxysmal Supraventricular Tachycardia (PSVT) S. Atrial flutter T. Atrial fibrillation U. Premature Junctional Contractions (PJC's) V. Junctional rhythm W. 1st, 2nd and 3rd degree blockage X. Premature Ventricular Contractions (PVC's) Y. Cardiac drugs
Lecture	9	IV	EKG TREATMENT

			A. Field treatment for symptomatic bradycardia B. Perfusing Supraventricular Tachycardia (SVT) C. Nonperfusing SVT D. Treatment for perfusing SVT and nonperfusing SVT E. Ventricular fibrillation F. Asystole treatment G. Field treatment for Electro-mechanical Disassociation (EMD)
Lecture	9	V	AIRWAY MANAGEMENT A. Opening the airway B. Oro and nasopharyngeal airways C. Suctioning complications D. Mask, bag-valve mask, cunnulas E. Esophageal Airway (EOA) F. Endotracheal tube G. Intubation techniques H. Laryngoscope
Lecture	9	VI	SIMULATIONS A. Interpreting EKG rhythm B. Treatment protocols C. Base hospital contact
Total Lecture Hours		117	
Total Laboratory Hours		0	
Total Hours		117	

IV. PRIMARY METHOD OF EVALUATION AND SAMPLE ASSIGNMENTS

A. **PRIMARY METHOD OF EVALUATION:**

Skills demonstrations

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

Using an oscilloscope, verbally identify to the instructor the EKG criteria, etiology, hemodynamics, and appropriate field treatment for Premature Ventricular Contractions (PVC's).

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

1. In a classroom setting, after PowerPoint presentations, verbalize to the instructor the difference between clinical and biological death.

2. In a classroom setting, after PowerPoint presentations, discuss with the instructor the advantages and disadvantages of ventilating a patient with a bag-valve-mask resuscitator versus the medical resuscitator.

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

Objective Exams
Quizzes
Class Performance
Homework Problems
Multiple Choice
Completion
Matching Items
True/False
Other (specify):
Simulations

V. INSTRUCTIONAL METHODS

Demonstration
Discussion
Group Activities
Guest Speakers
Lecture
Role Play
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
Skill practice
Required reading
Problem solving activities
Written work

Estimated Independent Study Hours per Week: 18

VII. TEXTS AND MATERIALS

A. **UP-TO-DATE REPRESENTATIVE TEXTBOOKS**
Andrew Pollack, Bob Elling, Mike Smith . Nancy Caroline's EMERGENCY CARE IN THE STREETS . 7th ed. American Academy of Orthopedic Surgeons, 2013.
The County of Los Angeles. ADVANCED PREHOSPITAL CARE CURRICULUM. Department of Health Services, 2004.
Qualifier Text: INDUSTRY STANDARD,

B. **ALTERNATIVE TEXTBOOKS**

C. **REQUIRED SUPPLEMENTARY READINGS**

D. **OTHER REQUIRED MATERIALS**

VIII. CONDITIONS OF ENROLLMENT

A. Requisites (Course and Non-Course Prerequisites)

Requisites	Category and Justification

B. Requisite Skills

Requisite Skills

C. Recommended Preparations (Course and Non-Course)

Recommended Preparation	Category and Justification

D. Recommended Skills

Recommended Skills

E. Enrollment Limitations

Enrollment Limitations and Category	Enrollment Limitations Impact
Admission to Paramedical Technician program	

Course created by Craig Neumann on 02/01/1994.

BOARD APPROVAL DATE: 05/16/1994

LAST BOARD APPROVAL DATE: 01/23/2017

Last Reviewed and/or Revised by Kevin Huben on 09/30/2016

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