



El Camino College  
**COURSE OUTLINE OF RECORD – Official**

<b>Course Acronym:</b>	FTEC
<b>Course Number:</b>	133
<b>Descriptive Title:</b>	Basic and Advanced Life Support
<b>Division:</b>	Health Sciences and Athletics
<b>Department:</b>	Fire and Emergency Technology
<b>Course Disciplines:</b>	Emergency Medical Technologies
<b>Catalog Description:</b>	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.
<b>Prerequisite:</b>	
<b>Co-requisite:</b>	
<b>Recommended Preparation:</b>	
<b>Enrollment Limitation:</b>	Admission to Paramedical Technician Program
<b>Hours Lecture (per week):</b>	9
<b>Hours Laboratory (per week):</b>	0
<b>Outside Study Hours:</b>	18
<b>Total Course Hours:</b>	117
<b>Course Units:</b>	6.5
<b>Grading Method:</b>	Letter Grade only
<b>Credit Status:</b>	Credit, degree applicable
<b>Transfer CSU:</b>	No
<b>Effective Date:</b>	
<b>Transfer UC:</b>	No
<b>Effective Date:</b>	
<b>General Education: ECC</b>	
<b>Term:</b>	
<b>Other:</b>	
<b>CSU GE:</b>	
<b>Term:</b>	
<b>Other:</b>	

<b>IGETC:</b>	
<b>Term:</b>	
<b>Other:</b>	
<b>Student Learning Outcomes:</b>	<p><b>SLO #1 Obstructed Airways</b></p> <p>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</p> <p><b>SLO #2 ECG</b></p> <p>Students will be able to identify and label cardiac dysrhythmias as they relate to the location of the irritability within the myocardium.</p> <p><b>SLO #3 BLS</b></p> <p>Students will complete an AHA course in BLS for Healthcare Providers learning the latest methods for administering CPR.</p>
<b>Course Objectives:</b>	<ol style="list-style-type: none"> <li>1. Distinguish among the three essential components of cardiopulmonary resuscitation.</li> <li>2. Evaluate and explain the most common form of an obstructed airway seen in a patient.</li> <li>3. Demonstrate the ability to perform Basic Life Support (BLS) skills.</li> <li>4. Choose the appropriate manual maneuvers for opening the obstructed airway in a patient.</li> <li>5. Analyze the precautions which should be taken when performing tracheal suctioning.</li> <li>6. Judge the purpose of performing an Electrocardiography (EKG) on a patient in the field.</li> <li>7. Assess the importance of electromechanical dissociation as it relates to the resuscitation of a cardiac patient in the field.</li> <li>8. Compare and contrast the EKG rhythms seen in the field.</li> </ol>
<b>Major Topics:</b>	<p><b>I. CARDIOPULMONARY RESUSCITATION (CPR) (9 hours, lecture)</b></p> <ol style="list-style-type: none"> <li>A. Components of CPR</li> <li>B. Proper use of CPR</li> <li>C. Complications of CPR</li> <li>D. Obstructed airway</li> <li>E. Infant/child CPR</li> <li>F. Clinical and biological death</li> </ol> <p><b>II. BLS REVIEW (27 hours, lecture)</b></p> <ol style="list-style-type: none"> <li>A. CPR</li> <li>B. Spinal immobilization</li> <li>C. Treatment of burns</li> <li>D. Treatment of broken extremities</li> <li>E. Allergic reactions</li> </ol>

- F. Near drownings

### **III. EKG (54 hours, lecture)**

- 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

### **IV. EKG TREATMENT (9 hours, lecture)**

- 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)

### **V. AIRWAY MANAGEMENT (9 hours, lecture)**

- 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

	<b>VI. SIMULATIONS (9 hours, lecture)</b>  A. Interpreting EKG rhythm B. Treatment protocols C. Base hospital contact
<b>Total Lecture Hours:</b>	117
<b>Total Laboratory Hours:</b>	0
<b>Total Hours:</b>	117
<b>Primary Method of Evaluation:</b>	3) Skills demonstration
<b>Typical Assignment Using Primary Method of Evaluation:</b>	Using an oscilloscope, verbally identify to the instructor the EKG criteria, etiology, hemodynamics, and appropriate field treatment for Premature Ventricular Contractions (PVC's).
<b>Critical Thinking Assignment 1:</b>	In a classroom setting, after PowerPoint presentations, verbalize to the instructor the difference between clinical and biological death.
<b>Critical Thinking Assignment 2:</b>	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.
<b>Other Evaluation Methods:</b>	Class Performance, Completion, Homework Problems, Matching Items, Multiple Choice, Objective Exam, Other (specify), Quizzes, True/False
<b>Instructional Methods:</b>	Demonstration, Discussion, Group Activities, Guest Speakers, Lecture, Role play/simulation
<b>If other:</b>	
<b>Work Outside of Class:</b>	Answer questions, Problem solving activity, Required reading, Skill practice, Study, Written work (such as essay/composition/report/analysis/research)
<b>If Other:</b>	
<b>Up-To-Date Representative Textbooks:</b>	Andrew Pollack, Bob Elling, Mike Smith. <u>Nancy Caroline's EMERGENCY CARE IN THE STREETS</u> . 8th ed. American Academy of Orthopedic Surgeons, 2018.  The County of Los Angeles. <u>ADVANCED PREHOSPITAL CARE CURRICULUM</u> . Department of Health Services, 2004. (Discipline Standard)
<b>Alternative Textbooks:</b>	
<b>Required Supplementary Readings:</b>	
<b>Other Required Materials:</b>	
<b>Requisite:</b>	
<b>Category:</b>	
<b>Requisite course(s): List both prerequisites and corequisites in this box.</b>	

<b>Requisite and Matching skill(s):</b> Bold the requisite skill. List the corresponding course objective under each skill(s).	
<b>Requisite Skill:</b>	
<b>Requisite Skill and Matching Skill(s):</b> Bold the requisite skill(s). If applicable	
<b>Requisite course:</b>	
<b>Requisite and Matching skill(s):</b> Bold the requisite skill. List the corresponding course objective under each skill(s).	
<b>Requisite Skill:</b>	
<b>Requisite Skill and Matching skill(s):</b> Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable	
<b>Enrollment Limitations and Category:</b>	Admission to Paramedical Technician Program
<b>Enrollment Limitations Impact:</b>	
<b>Course Created by:</b>	Craig Neumann
<b>Date:</b>	02/01/1994
<b>Original Board Approval Date:</b>	05/16/1994
<b>Last Reviewed and/or Revised by:</b>	Kevin Huben
<b>Date:</b>	03/13/2023
<b>Last Board Approval Date:</b>	07/17/2023 effective FALL 2024