



El Camino College
COURSE OUTLINE OF RECORD – Official

Course Acronym:	FTEC
Course Number:	144
Descriptive Title:	Emergency Medical Technician (EMT)
Division:	Health Sciences and Athletics
Department:	Fire and Emergency Technology
Course Disciplines:	Fire Technology
Catalog Description:	<p>Emergency Medical Technicians are professional medical responders that work to help and transport ill and injured patients in various emergency field and clinical settings. Principles that are covered throughout this course include, but are not limited to: leadership, followership, communication, safety, situational awareness, decision making, patient assessment and professionalism. EMT students will be trained to recognize and treat medical illnesses and traumatic injuries through facilitated discussion, skills lab, simulations, scenarios, role-play, tactical decision games and field experience.</p> <p>Note: Students successfully completing this course with an average grade of B or above will be eligible to take the National Registry of Emergency Medical Technicians (NREMT) written exam.</p> <p>Note: Students are required to pay for a background check and additional material fees. Proof of immunizations is required to complete hospital and ambulance field work and must include: Measles-Mumps-Rubella (MMR), Tetanus-Diphtheria-Pertussis (Tdap), Varicella, and Tuberculosis results.</p> <p>Note: This course is repeatable</p>
Prerequisite:	Possession of a current Basic Life Support (BLS) for Healthcare Providers (HCP) certification or BLS for Prehospital Providers (PHP) certification. Must be issued by the American Heart Association or American Red Cross and not expire less than six months from the start date of class.
Co-requisite:	
Recommended Preparation:	Fire and Emergency Technology 120
Enrollment Limitation:	
Hours Lecture (per week):	5.5
Hours Laboratory (per week):	3
Outside Study Hours:	11
Total Course Hours:	153
Course Units:	6.50
Grading Method:	Letter Grade only
Credit Status:	Credit, degree applicable

Transfer CSU:	Yes
Effective Date:	12/17/2012
Transfer UC:	No
Effective Date:	
General Education: ECC	
Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	<p>SLO #1 Skeletal System</p> <p>Students will be able to identify the 32 major bones of the skeletal system.</p> <p>SLO #2 Cardiovascular System</p> <p>Students will be able to identify the 19 major components of the cardiovascular system.</p> <p>SLO #3 Respiratory System</p> <p>Students will be able to identify the 17 major components of the respiratory system.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Measure human vital signs in accordance with National Registry EMT standards. 2. Analyze the function of the cardiovascular system. 3. Outline the problems posed by pre-hospital childbirth. 4. Describe the special circumstances associated with treating persons with contagious diseases. 5. Identify the components and basic physiology of the major systems of the human body. 6. Enumerate the conditions leading to shock. 7. Compare and contrast the procedures used to assess and treat medical and trauma patients. 8. Compare the physiology of various human organs.
Major Topics:	<p>I. EMERGENCY MEDICAL SERVICES (EMS) SYSTEM (4 hours, lecture)</p> <p>A. EMS history</p> <p>B. Workforce safety and wellness</p> <p>II. COMMUNICATION AND DOCUMENTATION (6 hours, lecture)</p> <p>A. Medical/legal and ethical issues</p>

- B. Medical terminology
- C. Human anatomy/physiology
- D. EMS system communication
- E. Therapeutic communication

III. PATIENT ASSESSMENT OVERVIEW (6 hours, lab)

- A. Scene Safety
- B. Body substance isolation
- C. Personal protective equipment
- D. Mechanism of injuries for trauma assessments
- E. Nature of illnesses for medical assessments

IV. AIRWAY EMERGENCIES (8 hours, lecture)

- A. Choking
- B. Basic Life Support (BLS)
- C. Foreign body airway obstructions
- D. Basic airway opening techniques

V. BREATHING EMERGENCIES (6 hours, lecture)

- A. Ventilation
- B. Respiration
- C. Supplemental oxygen

VI. AIRWAY MANAGEMENT (12 hours, lab)

- A. Foreign body airway obstruction removal
- B. Oxygen administration and suctioning
- C. Airway opening techniques
- D. Airway equipment

VII. MEDICAL BLOCK 1 (6 hours, lecture)

- A. Respiratory emergencies

B. Cardiovascular emergencies

C. Neurological emergencies

VIII. MEDICAL BLOCK 2 (6 hours, lecture)

A. Gastrointestinal and urology emergencies

B. Endocrine and hematological emergencies

IX. MEDICAL PATIENT ASSESSMENTS (9 hours, lab)

A. Scene safety

B. Primary assessment

C. Secondary assessment

D. Focus physical exam

X. MEDICAL BLOCK 3 (6 hours, lecture)

A. Immunological emergencies

B. Toxicology

C. Environmental emergencies

XI. MEDICAL BLOCK 4 (6 hours, lecture)

A. Psychiatric emergencies

B. Gynecological emergencies

XII. EMERGENCY MEDICATIONS (6 hours, lab)

A. Albuterol

B. Aspirin

C. Epinephrine

D. Glucose

E. Narcan

F. Nitroglycerin

XIII. TRAUMA BLOCK 1 (6 hours, lecture)

A. Bleeding

B. Burns

C. Soft tissue injuries

D. Inhalation injuries

XIV. TRAUMA BLOCK 2 (6 hours, lecture)

A. Face and neck injuries

B. Head and spine injuries

C. Orthopedic injuries

XV. TRAUMA ASSESSMENT (3 hours, lab)

A. Scene safety

B. Primary assessment

C. Secondary assessment

D. Rapid head-to-toe assessment

XVI. TRAUMA BLOCK 3 (6 hours, lecture)

A. Chest injuries

B. Abdominal injuries

C. Multi-system trauma

XVII. PEDIATRIC AND NEONATAL (6 hours, lecture)

A. Obstetrics and neonatal care

B. Pediatric emergencies

XVIII. TRAUMA SKILLS (6 hours, lab)

A. Bleeding control

B. Splinting, slings, swaths

C. Spinal Motion Restriction (SMR)

XIX. SPECIAL POPULATIONS (4 hours, lecture)

A. Geriatric patients

B. Bariatric patients

C. Patients with special challenges

XX. TRANSPORT OPERATIONS (4 hours, lecture)

- A. Gurneys and stair chairs
- B. Extrication
- C. Special rescue
- D. Air operations

XXI. EMERGENCY CHILDBIRTH (6 hours, lab)

- A. Pregnancy and child birth
- B. Neonatal assessment

XXII. EMERGENCY MANAGEMENT (6 hours, lecture)

- A. Incident Command System (ICS)
- B. National Incident Management System (NIMS)
- C. Hazardous Materials incidents

XXIII. TACTICAL EMERGENCY MEDICAL SUPPORT (TEMS) (4 hours, lecture)

- A. Tactical Casualty Care (TCC)
- B. History of TCC
- C. TEMS Terminology
- D. Tactical Operations
- E. Rescue Operations
- F. Evacuation

XXIV. LARGE SCALE RESPONSE (5 hours, lecture)

- A. Terrorism response
- B. Disaster management
- C. Active shooter response

XXV. FINAL SKILLS TESTING (6 hours, lab)

- A. BLS
- B. Airway management
- C. Oxygen administration

	<p>D. Medical assessment</p> <p>E. Trauma assessment</p> <p>F. Pediatric assessment</p> <p>G. Neonatal assessment</p> <p>XXVI. EMT QUALIFICATIONS (4 hours, lecture)</p> <p>A. NREMT certification overview</p> <p>B. LA County scope of practice</p> <p>C. Course completion certifications</p>
Total Lecture Hours:	99
Total Laboratory Hours:	54
Total Hours:	153
Primary Method of Evaluation:	2) Problem solving demonstrations (computational or non-computational)
Typical Assignment Using Primary Method of Evaluation:	Within a ten-minute time period, demonstrate proficiency conducting a scene size up, primary patient assessment, and secondary patient assessment on a simulated patient.
Critical Thinking Assignment 1:	Within a ten-minute time period, deliver an oral patient assessment presentation on a simulated chest trauma patient, comparing and contrasting the signs and symptoms between cardiac tamponade and tension pneumothorax and determine proper and appropriate interventions and treatments throughout the presentation.
Critical Thinking Assignment 2:	Within a ten-minute time period, deliver an oral patient assessment presentation on a diabetic patient, comparing and contrasting the differences between hyperglycemia and hypoglycemia and determine proper and appropriate interventions and treatments throughout the presentation.
Other Evaluation Methods:	Class Performance, Clinical Evaluation, Completion, Fieldwork, Homework Problems, Multiple Choice, Oral Exams, Performance Exams, Presentation, Quizzes
Instructional Methods:	Demonstration, Discussion, Group Activities, Guest Speakers, Lab, Lecture, Multimedia presentations, Other (specify), Role play/simulation
If other:	
Work Outside of Class:	Answer questions, Observation of or participation in an activity related to course content (such as theatre event, museum, concert, debate, meeting), Problem solving activity, Required reading, Skill practice, Study, Written work (such as essay/composition/report/analysis/research)
If Other:	
Up-To-Date Representative Texts:	Pollack, Andrew, <u>Emergency Care and Transportation of the Sick and Injured</u> , 11th ed., Jones & Bartlett, 2017. (Discipline Standard)

	Carey, Ryan, <u>El Camino College EMT Program Skills Workbook</u> , 1st ed., El Camino College, 2017. (Discipline Standard)
Alternative Texts:	
Required Supplementary Readings:	
Other Required Materials:	Student EMT uniforms and equipment are required and must be worn/brought to every class starting week two. Students will wear navy blue pants, a white uniform shirt with a name tag, black belt, black boots and a black wristwatch. Each student is required to have their own box of nitrile medical gloves, a stethoscope and sphygmomanometer (blood pressure cuff).
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:	Possession of a current Basic Life Support (BLS) for Healthcare Providers (HCP) certification or BLS for Prehospital Providers (PHP) certification. Must be issued by the American Heart Association or American Red Cross and not expire less than six months from the start date of class.
Requisite Skill and Matching Skill(s): Bold the requisite skill(s). If applicable	
Requisite course:	Fire and Emergency Technology 120
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	<p>This course was created to help prepare and increase student success in FTEC-144.</p> <p>Demonstrate how to prevent infectious disease from airborne and bloodborne pathogens.</p> <p>FTEC 120 - Describe the standard precautions for preventing infectious diseases from airborne and bloodborne pathogens.</p> <p>Understand the respiratory system.</p> <p>FTEC 120 - Identify the anatomy and function of the respiratory system.</p> <p>Understand the circulatory system.</p> <p>FTEC 120 - Identify the anatomy and function of the circulatory system.</p>

	Understand the nervous system. FTEC 120 - Identify the anatomy and function of the nervous system.
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:	Kevin Coffelt
Date:	07/23/2012
Original Board Approval Date:	12/17/2012
Last Reviewed and/or Revised by:	Marvin Chang
Date:	09/13/2023
Last Board Approval Date:	12/18/2023
Effective Term:	FALL 2024