



EL CAMINO COLLEGE
COURSE OUTLINE OF RECORD – Approved

I. Course Information

Subject: FTEC
Course Number: 144
Descriptive Title: Emergency Medical Technician (EMT)
Division: Health Science and Athletics
Department: Fire and Emergency Technology
Course Disciplines: Fire Technology

Catalog Description:

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.

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.

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.

Note: This course is repeatable

Conditions of Enrollment:

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.

Recommended Preparation: Fire and Emergency Technology 120

Course Length: Full Term

Hours Lecture (per week): 5.5
Hours Laboratory (per week): 3
Outside Study Hours: 11
Total 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:****II. Outcomes and Objectives****A. Student Learning Outcomes (SLOs) (The course student learning outcomes are listed below.)**

SLO #1 Skeletal System

Students will be able to identify the 32 major bones of the skeletal system.

SLO #2 Cardiovascular System

Students will be able to identify the 19 major components of the cardiovascular system.

SLO #3 Respiratory System

Students will be able to identify the 17 major components of the respiratory system.

B. Course Objectives (The major learning objective for in this course are listed below)

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.

III. Outline of Subject Matter

(Topics should be detailed enough to enable an instructor to determine the major areas that should be covered to ensure consistency from instructor to instructor and semester to semester.)

Major Topics**I. EMERGENCY MEDICAL SERVICES (EMS) SYSTEM (4 hours, lecture)**

- A. EMS history
- B. Workforce safety and wellness

II. COMMUNICATION AND DOCUMENTATION (6 hours, lecture)

- A. Medical/legal and ethical issues
- 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
- D. Medical assessment
- E. Trauma assessment
- F. Pediatric assessment
- G. Neonatal assessment

XXVI. EMT QUALIFICATIONS (4 hours, lecture)

- A. NREMT certification overview
- B. LA County scope of practice
- C. Course completion certifications

Total Lecture Hours:	99
Total Laboratory Hours:	54
Total Hours:	153

IV. Primary Method of Evaluation and Sample Assignments

A. Primary Method of Evaluation (choose one):

- 2) Problem solving demonstrations (computational or non-computational)

B. Typical Assignment Using Primary Method of Evaluation

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.

C. College-level Critical Thinking Assignments

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.

D. Other Typical Assessment and Evaluation Methods

Class Performance, Clinical Evaluation, Completion, Fieldwork, Homework Problems, Multiple Choice, Oral Exams, Performance Exams, Presentation, Quizzes

V. Instructional Methods

Instructional Methods:

Demonstration, Discussion, Group Activities, Guest Speakers, Lab, Lecture, Multimedia presentations, Other (specify), Role play/simulation

If other:

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

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:

VII. Texts and Materials

A. Up-to-date Representative Textbooks: (Please use the following format: Author, Title, Edition, Publisher, Year. If you wish to list a text that is more than 5 years old, please annotate it as a “discipline standard”.)

Pollack, Andrew, Emergency Care and Transportation of the Sick and Injured, 11th ed., Jones & Bartlett, 2017.

Carey, Ryan, El Camino College EMT Program Skills Workbook, 1st ed., El Camino College, 2017.

B. Alternative Textbooks: (Please use the following format: Author, Title, Edition, Publisher, Year. If you wish to list a text that is more than 5 years old, please annotate it as a “discipline standard”.)

C. Required Supplementary Readings

D. Other Required Materials

VIII. Conditions of Enrollment

A. Requisites (Course Prerequisites and Corequisites) Skills needed without which a student would be highly unlikely to succeed.

Requisite: Prerequisite

Prerequisite 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).

B. Requisite Skills: (Non-Course Prerequisite and Corequisites) Skills needed without which a student would be highly unlikely to succeed.

Requisite: 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 and Matching Skill(s): Bold the requisite skill(s). If applicable

C. Recommended Preparations (Course) (Skills with which a student's ability to succeed will be strongly enhanced.)

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).

Demonstrate how to prevent infectious disease from airborne and bloodborne pathogens.

FTEC 120 - Describe the standard precautions for preventing infectious diseases from airborne and bloodborne pathogens.

Understand the respiratory system.

FTEC 120 - Identify the anatomy and function of the respiratory system.

Understand the circulatory system.

FTEC 120 - Identify the anatomy and function of the circulatory system.

Understand the nervous system.

FTEC 120 - Identify the anatomy and function of the nervous system.

D. Recommended Preparation (Non-Course) (Skills with which a student's ability to succeed will be strongly enhanced.)

Requisite:

Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable

E. Enrollment Limitations

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: Ryan Carey

Date: 05/09/2021

Last Board Approval Date: 06/21/2021