

**Mt. San Jacinto College
Integrated Course Outline of Record**

Form B

Submitted by:	Fabian Lopez	Date:	11/14/2019
----------------------	--------------	--------------	------------

Department	Subject	Course Number	Title
Emergency Medical Services	Emergency Medical Services EMS	501	Emergency Medical Technician (formerly EMS-090)

Units/Hours

Each lecture unit requires 1 hour per week of class time, and 2 hours per week of study outside of class.

Each laboratory unit requires 3 hours per week of class time.

Each activity unit requires 2 hours per week of class time and 1 hour per week of study outside of class.

<u>Lecture Units</u>	<u>Lab Units</u>	<u>Total Units</u>
4.00	2.00	6.00
<u>Lecture Contact Hours</u>	<u>Lab Contact Hours</u>	<u>Total Contact Hours</u>
64.00 - 72.00	96.00 - 108.00	160.00 - 180.00
<u>Lecture Homework Hours</u>	<u>Lab Homework Hours</u>	
128.00 - 144.00	0	

Stand Alone:

Program Applicable

AA/AS Degree General Ed Breadth Area(s):

-none-

General Education Justification:

Maximum Enrollment:

32

Maximum Enrollment Justification:

Justification:

Grading Method:

Letter Grade or P/NP

TOP code:

1250.00*

**Can be
Taken**

1

time(s) for credit (max 4)

- Visual or Performing Arts course that is required to meet major requirements for UC/CSU
- Intercollegiate athletics course
- Academic/vocational competition course

Catalog Description:

(Please do not refer to transferability or degree, certificate, or employment concentration applicability. Please only describe the course). (75 words or less in gray box below).

This course provides the student with the knowledge to assess, treat and care for the ill or injured public. This course also provides the student with an opportunity to do a short field and hospital internship. Background check, TB test, immunization titers, physical and AHA Healthcare Provider level CPR certification are required prior to registration.

Schedule Description:

(Please do not refer to transferability or degree, certificate, or employment concentration applicability. Please only describe the course). (25 words or less in gray box below).

This course provides students with the knowledge to assess and treat the ill/injured public. Background, TB test, immunization titers and physical required prior to registration.

Need for the course:

This course is offered to meet the high demand for local, state and national emergency care workers. Employment opportunities within fire service, ambulance service and hospital emergency room technician work sites are still in demand. This course is an elective in the Fire certificate and degree. This course is needed for the Emergency Medical Technician ECC and the AS in Fire Technology.

Prerequisite(s):

Prerequisites go through a separate approval process. See Forms E1-E6 for details.
(For further clarification, contact the Prerequisite Subcommittee)

-none-

Corequisite(s):

Corequisites go through a separate approval process. See Forms E1-E6 for details.

-none-

Recommend Preparation:

Recommended Preparation goes through a separate approval process. See Forms E1-E6 for details.

-none-

Other Enrollment Criteria:

- Immunizations or blood titers, TB clearance and physical exam. Background check required. Packet available online. and
- Be at least 18 years of age. and
- AHA Healthcare Provider CPR Certification.

Learning Objectives:

(please number each objective and express in behavioral terms)

Upon the completion of the course the student will be able to do the following:

1. Compare the role of the Emergency Medical Technician to the role of the paramedic.
2. Examine critical thinking skills for directing and managing the care of patients who sustain a traumatic injury or have a medical emergency.
3. Analyze and distinguish the different theoretical principles of kinematics and mechanism of injury.
4. Assess the three stages of labor in a full term pregnant female and decide on a medically appropriate plan of action.
5. Analyze and evaluate the relationship between the patient's pharmacological treatment in relationship to their potential physiological disease processes.
6. Evaluate and compare the fundamental components of the EMS system, safety/well-being of the EMT, medical/legal topics and ethical issues to the provision of emergency care in a field setting.
7. Analyze, categorize and apply the appropriate safe lifting techniques to be used in each skills simulation.

Course Content:

(please number the outline of main topics and subtopics)

- I. Analyze/Assess and Application of:
 1. The well-being of the EMT and scene safety procedures
 2. Medical legal, ethical Issues and the role of the EMT versus the paramedic role
 3. The Human Body
 4. Baseline vital signs
 5. Preparing to Lift and move the patient safely
 6. Evaluation: Preparatory Module
- II. Analysis/Assessment of:
 1. Airway management, Ventilation and Oxygen therapy
 2. Practical Skills Lab
 3. Evaluation: Airway Module
- III. Assess and Application of:
 1. Scene size-up
 2. Initial Assessment
 3. Focused History, Physical Exam–Trauma Patients and application of mechanism of injury/kinematics
 4. Focused History and Physical Exam–Medical Patients
 5. Detailed Physical Exam
 6. On-Going Assessment
 7. Communications
 8. Documentation
 9. Practical Skills Lab: Patient Assessment and Management
 10. Evaluation: Patient Assessment Module
- IV. Analyze/Assess and Application of:
 1. General Pharmacology related to a patient's disease process
 2. Respiratory Emergencies with appropriate use of airway devices
 3. Cardiovascular Emergencies
 4. Diabetes/Altered Mental Status
 5. Allergies
 6. Poisoning/Overdose and Pharmacological Implications
 7. Environmental Emergencies
 8. Behavioral Emergencies
 9. Obstetrics/Gynecology
 10. Practical Skills Lab: Medical/Behavioral Emergencies and Obstetrics/Gynecology
 11. Evaluation: Medical/Behavioral Emergencies and Obstetrics/Gynecology
 1. Stages of Labor (dilation, expulsion, placental)
 12. Evaluation of Special Patient Populations (Pediatrics, Geriatrics, Combat Veteran)

- V. Analyze/Assess and Application of:
 - 1. Bleeding and shock
 - 2. Soft tissue Injuries
 - 3. Musculoskeletal Injuries
 - 4. Injuries to the Head and Spine
 - 5. Practical Skills Lab Trauma
 - 6. Evaluation: Trauma Module
- VI. Infants and Children
 - 1. Infant & Childhood Emergencies
 - 2. Practical Skills Lab: Infants and Children
 - 3. Evaluation: Infants and Children
- VII. Operations
 - 1. Ambulance Operations
 - 2. Gaining access & Extrication
 - 3. Hazardous materials emergencies, Multiple-Casualty Incidents
 - 4. Weapons of Mass Destruction
- VIII. Assessment and Application of:
 - 1. Advanced Airway Devices
 - 2. Practical Skills Lab: Advanced Airway
 - 3. Evaluation: Advanced Airway

Lab Content:

(please number the outline of main topics and subtopics)

- I. Preparatory Skills lab
 - 1. Baseline vital signs
 - 2. Lifting and moving patients
 - 3. Demonstrate and return demonstrate
- II. Airway
 - 1. Airway management, Ventilation and oxygen therapy devices
 - 2. Airway Adjuncts
 - 3. Intermediate (Rescue) Airways
 - 4. Demonstrate and return demonstrate
- III. Patient Assessment
 - 1. Scene size-up
 - 2. Primary Assessment
 - 3. Secondary Assessment –Trauma Patients
 - 4. Secondary Assessment –Medical Patients
 - 5. Detailed Physical Exam
 - 6. On-Going Assessment
 - 7. Communications using radio devices
 - 8. Demonstrate and return demonstrate
- IV. Medical/ Behavioral, and Obstetrics/Gynecology
 - 1. Medication administration and devices
 - 2. Respiratory Emergencies - Albuteral administration
 - 3. Cardiovascular Emergencies - Administering Nitroglycerin
 - 4. Diabetes/Altered Mental Status - Checking blood sugar and administration of oral glucose.
 - 5. Allergies - Administration of epinephrine injection
 - 6. Poisoning /Overdose - administration of charcoal
 - 7. Obstetrics/Gynecology - Use of the Obstetrical kit

8. Demostarte and return demonstrate
- V. Trauma
 1. Bleeding and shock - Shock position and tourniquite application
 2. Soft tissue Injuries - Bandaging wounds
 3. Musculoskeletal Injuries - Applying splints
 4. Injuries to the Head and Spine - Cervical collar application and techniques spinal Immobilization.
 5. Demostarte and return demonstrate
- VI. Infants and Children
 1. Infant & Childhood emergencies - Airway specific adjuncts
 2. Demostarte and return demonstrate
- VII. Operations
 1. Ambulance operations - Ambulance
 2. Gaining access & Extrication - basic tools for extrication
 3. Hazardous materials emergencies, Multiple-Casualty Incidents, Bio Terrorism using triage tags and protective clothing.
- VIII. Advanced Airway
 1. Advanced Airway Types and practice
 2. Practice Advanced Airway skills
 3. Demostarte and return demonstrate practice

Methods of Instruction:

Methods of instruction may include, but are not limited to the following:

- **Method:** Lecture
Integration: Nationally required curriculum will be covered to include EMS Operations, Basic Anatomy and Physiology, Airway Management, Hypoperfusion, Medications and the administration of; Cardiac, Respiratory, Endocrine, Environmental, Gynecologic, Behavioral, Toxicological, and Traumatic emergencies. Lecture will introduce the fundamental principles and supported by class discussion of recent real world incidents or events.
- **Method:** Lab Activities
Integration: Students will participate in hands on activities during lab. Information presented in the lecture will be applied and integrated into specific skills associated with the appropriate content. Students will piece together individual skills into a cohesive patient assessment in an effort to assess and provide care for an ill or injured person.
- **Method:** Film/video Viewing and Discussion
Integration: Students will be afforded with the opportunity to view, and later discuss, EMS topics on video. Things that are difficult to accurately portray in the classroom setting, HazMat Emergencies, WMD attacks and Childbirth are examples.
- **Method:** Role Playing/Simulation
Integration: Using the advanced simulation manikin students will participate in small groups to assess, treat and transport a victim of a traumatic accident.

Methods of Evaluation:

A student's grade shall be determined by the instructor using multiple measures of performance related to the course objectives.

Methods of evaluation may include but are not limited to the following:

- **Method:** Quizzes
Integration: Students will take multiple choice quizzes with representative questions from every chapter throughout the course. Students will receive one point for each correct answer.
- **Method:** Exams/Tests
Integration: Students will take one midterm exam and one course completion exam. Students will receive 2

points for every correct answer on the midterm. Students must answer more than 80% of the course completion exam questions correctly to successfully complete the course.

- **Method:** Homework

Integration: Students will complete a workbook, or online work, that corresponded to the text book.

Workbooks, or online work, will be graded at set points throughout the course. Students will be given points for all work completed.

- **Method:** Class Performance

Integration: Students will be tested on the national registry skills needed to complete the EMT-Basic course.

Students will receive one point for each item completed on the standardized test sheet for each skill. Students must achieve a minimum score without missing any critical items.

Examples of Assignments:

Students will be expected to understand and critique college level texts or the equivalent. Reading and writing, as well as out of class assignments are required. These assignments may include but are not limited to the following:

- 1 .Using a simulated patient, be able to complete a medical assessment for the complaint of Chest Pain, Shortness of Breath, Abdominal Pain, Anaphylaxis or Hypoglycemia. Completion of the care may include other skills learned throughout the class, oxygen therapy for hypoxia, airway management for an unconscious patients, administration of medications appropriate for the patient's condition and safe and biomechanically correct lifting and moving of the patient to a gurney.
2. Choose a patient you cared for in the pre-hospital or hospital setting during your internship. Summarize in a one page paper how you first interacted with the patient, a history of the present illness or traumatic event, pertinent medical history (conditions, medications and allergies), physical findings and any treatment you provided. Conclude with diagnosis and discharge information if available.

Textbooks:

- Joseph J. Mistovich, Brent Q. Hafen, Keith J. Karren (2017). *Prehospital Emergency Care Textbook/Workbook pack 11th* Prentice Hall. ISBN: 978-0134862798

Other Resources:

- Carpenter,G.. Student Resource Manual 2019. MSJC Bookstore , 01-10-2019.
- MyBradyLab - Student Access Code. Pearson, (11th ed./e).

Minimum Qualification

- Emergency Medical Technologies