

Crafton Hills College Course Outline

1. **Discipline:** Emergency Medical Services
2. **Department:** Emergency Services
3. **Course Title:** Field Externship for the Paramedic
4. **Course I.D:** EMS 157
5. **Prerequisite(s):** EMS 156
Corequisite(s): None
Departmental Recommendation(s): None

6. **Semester Units:** 7.5

7. **Minimum Semester Hours:**

Lecture: 0 Lab: 0 Clinic: 0 Field: 600

8. **Need for the Course:**

The Emergency Medical Technician-Paramedic (EMT-P) provides prehospital care under medical control to acutely ill and injured patients in often uncontrolled and unstable environments. This course provides the students the opportunity to practice the skills and behaviors of an entry-level practitioner. This course fulfills the mandates of the Health and Safety Code for the field externship portion of the paramedic program. Students work under the direct supervision of a paramedic field preceptor before they are eligible for licensure. This is the final course in the paramedic program. EMS 157 is associate degree applicable.

9. **Goals for the Course:**

This course is appropriate to the college's mission in that it is part of a complete vocational education program leading to employment and this course is transferable to many colleges and universities. This is one in a series of courses integral to complete the instruction necessary to be licensed as a paramedic in State of California. Successful completion of this course assures the application of the basic theoretical and scientific knowledge of pre-hospital advanced life support in actual patient care settings. This course provides the student the opportunity to apply their cognitive, psychomotor and affective behaviors while under direct supervision. This course provides the final competency requirements of the paramedic program.

10. **Catalog Description:**

Coordination of advanced paramedic training with a field advanced life support unit. Opportunity to direct and engage in emergency intervention in traumatic and medical emergencies. This portion of the program will be on a paramedic unit in San Bernardino or Riverside County. Fulfills the requirements of Title 22 of the Health and Safety Code for paramedic field externship.

11. **Schedule Description:**

EMS 157

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Semester Effective: Fall 2005

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12. Entrance Skills:

Requisite Skills:

Upon entering this course, students must be able to:

1. During their experience in the Emergency Department, have the opportunity to practice under direct supervision and demonstrate competency for each of the following:
 - a. Perform patient assessment.
 - b. Obtain medical history.
 - c. Perform physical examination.
 - d. Review patient's chart.
 - e. Take vital signs.
 - f. Interpret cardiac rhythms.
 - g. Auscultate chest sounds.
 - h. Perform peripheral intravenous insertion.
 - i. Perform intraosseous insertion.
 - j. Prepare and administer intramuscular, subcutaneous, intravenous, sublingual, transmucosal, oral, rectal, intraosseous and endotracheal medications.
 - k. Monitor and interpret dysrhythmias.
 - l. Place or change monitor leads.
 - m. Draw venous blood samples.
 - n. Perform endotracheal or nasotracheal intubation.
 - o. Perform nasopharyngeal or oropharyngeal suctioning.
 - p. Perform needle thoracostomy.
 - q. Perform needle cricothyrotomy.
 - r. Assist in cases of cardiac arrest, including:
 - i. Performance of cardiopulmonary resuscitation.
 - ii. Emergency drug administration.
 - iii. Airway management
 - s. Defibrillation
 - t. Assist in the care of trauma patients including:
 - i. Chest injuries
 - ii. Abdominal injuries
 - iii. Neurological injuries
 - iv. Pediatric trauma
 - v. Obstetrical trauma
 - vi. Soft tissue injuries
 - vii. Ear-Nose-Throat injuries
 - viii. Orthopedic injuries
 - ix. Shock
 - u. Assist in the care of medical patients including:
 - i. Respiratory
 - ii. Cardiovascular
 - iii. Endocrine
 - iv. Nervous system
 - v. Acute abdomen

- vi. Genitourinary/reproductive system
- vii. Anaphylaxis
- viii. Toxicology
- ix. Alcoholism
- x. Drug abuse
- xi. Infectious diseases
- xii. Environmental injuries
- v. Assist in the care of pediatric patients including:
 - i. Respiratory distress
 - ii. Near drowning
 - iii. Cardiopulmonary arrest
 - iv. Poisoning
 - v. Child abuse/neglect
 - vi. Seizures
 - vii. Meningitis
 - viii. Common communicable diseases
 - ix. Altered level of consciousness
 - x. Trauma
- w. Assist in the care of behavioral patients including:
 - i. Depression
 - ii. Acute anxiety reaction
 - iii. Battered victim
 - iv. Hostile patient
 - v. Rape victim
 - vi. Suicidal patient
 - vii. Suspected substance abuse
- x. Assist in the transport of patients to designated areas.
- y. Monitor communications from field providers to Base Hospitals and/or Receiving Hospitals.
- z. Familiarize themselves with the location and operation of all emergency equipment.
- 2. During their experience in the Intensive Respiratory or Cardiac Care Unit, have the opportunity to practice under direct supervision to practice and demonstrate competency in the following:
 - a. Perform patient assessment.
 - b. Obtain medical history.
 - c. Perform physical examination.
 - d. Review patient's chart.
 - e. Take vital signs.
 - f. Interpret cardiac rhythms.
 - g. Auscultate chest sounds.
 - h. Manage patients with an endotracheal or tracheostomy tube to include:
 - i. Respirators
 - ii. Oral, endotracheal and tracheostomy suctioning.
 - iii. Securing the endotracheal tube.
 - iv. Evaluating the placement of the endotracheal tube.
 - i. Interpret arterial blood gasses.
 - j. Identify possible responses the terminally ill may have.
 - k. Identify possible responses the family may demonstrate to a critically or terminally ill patient.
- 3. During their experience in the Operating Room, have the opportunity to practice under direct supervision and demonstrate competency in the following:
 - a. Demonstrate the management of an airway in an apneic patient.
 - b. Demonstrate proper methods of ventilating an apneic patient.

- c. Demonstrate proper placement of an endotracheal tube.
 - d. Evaluate the placement of an endotracheal tube.
 - e. Evaluate the adequacy of ventilations.
4. During their experience in the Burn Unit, have the opportunity to practice under direct supervision and demonstrate competency in the following:
- a. Assess a burn patient.
 - b. Calculate of the percentage of body surface involved.
 - c. Calculate of the degree of seriousness of the injury.
 - d. Identify the intravenous solutions being used for fluid replacement.
 - e. Record 24 hour intake and output to document fluid loss and replacement.
 - f. Observe tubing and dressing changes.
 - g. Demonstrate proper handling of the following:
 - i. Endotracheal tubes
 - ii. Tracheostomies
 - iii. Nasogastric tubes
 - iv. Foley catheters
 - h. Identify coping mechanisms of the patient, family and staff when dealing with the following:
 - i. Disfiguring injury
 - ii. Long term treatment
 - iii. Long term recovery
 - iv. Poor prognosis
5. During their experience in the Labor Suite, have the opportunity to practice under direct supervision and demonstrate competency in the following:
- a. Identify the three stages of labor.
 - b. Identify the appearance of the perineum as delivery becomes imminent.
 - c. Identify the significance of clear versus meconium fluid during the delivery.
 - d. Identify the signs and symptoms that indicate birth is imminent.
 - e. Identify the pertinent history to obtain from a woman in labor relative to the present labor and past history.
 - f. Identify the differences between the appearances of a patient in early labor versus active labor.
 - g. Demonstrate the appropriate method of obtaining the following information while doing a physical assessment on a pregnant woman:
 - i. Height of fundus
 - ii. Contractions – timing and quality
 - iii. Presence of crowning
 - h. Identify in cubic centimeters the amount of blood loss during a delivery.
 - i. Identify the signs and symptoms of placental separation.
 - j. Demonstrate assisting with a normal childbirth.
 - k. Assist in an abnormal delivery.
 - l. Assist in the management of a newborn.
 - m. Demonstrate the method for determining the APGAR score.
 - n. Identify the importance of drying, wrapping and stimulating the newborn.
 - o. Assist in the cutting of the umbilical cord.
 - p. Assist in suctioning the newborn.
 - q. Demonstrate the management of post partum hemorrhagic bleeding.
6. During their experience at Totally Kids, have the opportunity to practice under direct supervision and demonstrate competency in the following:
- a. Develop a positive rapport with staff, patients and family members.
 - b. Communication techniques.
 - c. Identify possible responses the terminally ill may have.

- d. Identify possible responses the family may demonstrate to a chronically or terminally ill patient.
- e. Perform patient assessment including:
 - i. Taking vital signs.
 - ii. Obtaining medical history.
 - iii. Performing a physical exam.
 - iv. Auscultate chest sounds.
 - v. Interpret cardiac rhythms.
- f. Demonstrate the management of an airway including the following:
 - i. Respirators
 - ii. Oral suctioning
 - iii. Endotracheal suctioning
 - iv. Tracheostomy suctioning
 - v. Securing the endotracheal tube
 - vi. Evaluating the placement of an endotracheal tube
 - vii. Evaluating the effectiveness of airway management and ventilations
 - viii. Demonstrating ventilation techniques using a positive-pressure ventilator (PEEP, CPAP and BIPAP)
 - ix. Demonstrating ventilation techniques using a negative-pressure ventilator
 - x. Demonstrating hand ventilation techniques'
 - xi. Monitoring and using vascular access devices including:
 - 1. Implantable injection devices
 - 2. Central vascular access
 - 3. Surgically implanted medication devices
 - 4. Dialysis shunts.
 - l. Monitoring and using gastrointestinal and genitourinary devices including:
 - 1. Peg tubes
 - 2. Gastrostomy tubes
 - 3. Nasogastric tubes
 - 4. Colostomies
 - 5. Foley catheters
 - m. Assisting in the transport of patients to designated areas.
 - n. Discussing the relationship between local home care treatment protocols and local EMS protocols.
 - o. Discussing transport considerations.

B. Recommended Skills: None

13. Course Objectives:

Upon satisfactory completion of the course, students will be able to:

- A. Assure or procure the safety of the scene, self and other team members, including the use of personal protective gear.
- B. Evaluate and manage scene control.
- C. Manage a multi-casualty incident.
- D. Communicate effectively on scene and with other medical personnel at other facilities.
- E. Perform a systematic patient assessment.
- F. Identify and manage patients who present with:
 - 1. Respiratory emergencies
 - 2. Cardiac emergencies

3. Medical emergencies including:
 - a. Drug overdose
 - b. Diabetes
 - c. Neurovascular
 - d. Seizures
 - e. Abdominal
 - f. Genito-urinary
4. Environmental emergencies including:
 - a. Burns
 - b. Toxic gas inhalations
 - c. Heat related emergencies
 - d. Cold related emergencies
 - e. Bites and stings
 - f. Drowning and near drowning
 - g. Diving injuries
5. Behavioral emergencies
6. Obstetrical emergencies
7. Minor traumatic emergencies
8. Major/multi-system traumatic injuries
9. Pediatric emergencies
- G. Identify those patients who require base station contact.
- H. Present patient conditions in a concise, accurate manner via an accepted field communication system.
- I. Initiate and complete a run report form according to local guidelines.
- J. Use the medications and IV fluids on the standard drug and equipment list correctly.
- K. Administer medication by intramuscular, subcutaneous, intravenous, intravenous piggyback, oral, sublingual, intraosseous, transmucosal and endotracheal routes.
- L. Initiate peripheral intravenous access, including the use of the external jugular vein and intraosseous.
- M. Initiate cardiac monitoring on an adult and pediatric patient.
- N. Identify cardiac rhythms on a cardioscope or a static strip.
- O. Perform synchronized cardioversion and defibrillation.
- P. Insure and maintain an airway using basic and advanced adjuncts in the adult and pediatric patients.
- Q. Apply and use a heparin/saline lock.
- R. Perform vasovagal maneuvers, excluding carotid sinus massage.
- S. Perform oral and nasogastric tube insertion and monitoring.
- T. Perform needle thoracostomy.
- U. Maintain and use the equipment on the standard drug and equipment list, and those on the expanded scope of practice or trial studies.

14. Representative Texts and Instructional Materials:

Bledsoe, B. & Porter, R. (2001). *Paramedic Care Principles & Practices, Introduction to Advanced Pre-Hospital Care*. Upper Saddle River, NJ: Prentice-Hall.

Bledsoe, B. & Porter, R. (2001). *Paramedic Care Principles & Practices, Patient Assessment*. Upper Saddle River, NJ: Prentice-Hall.

Bledsoe, B. & Porter, R. (2000). *Paramedic Care Principles & Practices, Medical Emergencies*. Upper Saddle River, NJ: Prentice-Hall.

Bledsoe, B. & Porter, R. (2000). *Paramedic Care Principles & Practices, Trauma Emergencies*. Upper Saddle River, NJ: Prentice-Hall.

Bledsoe, B. & Porter, R. (2000). *Paramedic Care Principles & Practices, Special Considerations Operations*. Upper Saddle River, NJ: Prentice-Hall.

Campbell, J. (2004). *Basic Trauma Life Support, (5/e)*. Upper Saddle River, NJ: Prentice-Hall.

Crow, K. (2001). *Paramedic Skills Manual*. Yucaipa, CA: Crafton Hills College.

Cummins, R. (2001). *Advanced Cardiac Life Support*. Dallas: American Heart Association.

Cummins, R. (2004). *Handbook of Emergency Cardiac Care*. Dallas: American Heart Association.

Hazinski, M. (2002). *Pediatric Advanced Life Support*. Dallas: American Heart Association.

Ochoa, H. (1995). *Advanced Life Support Protocols*. Riverside, CA: Riverside County Emergency Medical Services Agency.

Salinas, C. (1995). *Advanced Life Support Protocols*. San Bernardino, CA: Inland Counties Emergency Medical Agency.

Saunders, R. (2000). *Manual of Medical Practice*, Philadelphia: W.B. Saunders Co.

Word, D. (2004). *Field Manual for the Paramedic*. Yucaipa, CA: Crafton Hills College.

15. Course Content:

This course content is partially dependent on the types of patients and learning experiences faced by the student. The specific patient types will vary but the skills and procedures will be similar allowing for the successful completion of the course objectives. This will include some combination of the following:

- A.** Administration of medications.
- B.** Cardiac monitoring and interpretation of cardiac rhythms.
- C.** Performing patient assessments on medical and trauma patients.
- D.** Determining medical intervention for patients with:
 - 1.** Respiratory emergencies
 - 2.** Cardiac emergencies
 - 3.** Medical emergencies
 - 4.** Environmental emergencies
 - 5.** Behavioral emergencies
 - 6.** Obstetrical emergencies
 - 7.** Minor traumatic emergencies
 - 8.** Major/multi-system traumatic injuries
 - 9.** Pediatric emergencies
- E.** Documentation of patient information
- F.** Initiating venous access
- G.** Defibrillation and/or synchronized cardioversion.
- H.** Obtaining and maintaining an airway.
- I.** Maintenance of equipment
- J.** Performing needle thoracostomy
- K.** Performing needle cricothyrotomy
- L.** Insertion of oro/nasogastric tube
- M.** Communication, verbal, non-verbal and radio

N. Triage and multi-casualty management

16. Methods of Instruction:

Students will perform on scene under the direction of their preceptor. The calls are retrospectively evaluated. Drills are used as a method for practice of assessment skills or to review weak knowledge base or psychomotor skill areas. Assignments requiring research on certain topics may also be used. Students attend field meetings where they have the opportunity to review calls and ask questions of the faculty. There may also be discussion of calls with the rest of the class.

17. Assignments and Methods of Evaluation:

The student must function within the scope of practice as determined by regulation or protocol. "SCOPE OF PRACTICE 100144. SCOPE OF PRACTICE OF EMERGENCY MEDICAL TECHNICIAN-PARAMEDIC, Title 22, California Code of Regulations An EMT-P student...as part of an organized EMS system, while caring for patients in a hospital as part of his/her training or continuing education under the direct supervision of a physician, registered nurse, physician assistant, or while at the scene of a medical emergency or during transport, or during interfacility transfer, may perform the following procedures or administer the following medications when such are approved by the medical director of the local EMS agency and are included in the written policies and procedures of the local EMS agency."

Methods of evaluation include:

- A.** Maintenance of a field notebook.
- B.** Field care audits
- C.** Professional behaviors

Each student must score a 3 in all categories on the final evaluation. The standard for this evaluation is the California Paramedic Program Director's field evaluation forms and criteria.

18. Distributed Education Methods of Instruction: None