Las Positas College 3000 Campus Hill Drive Livermore, CA 94551-7650 (925) 424-1000 (925) 443-0742 (Fax)

Course Outline for EMS 15

PARAMEDIC FIELD INTERNSHIP

Effective: Fall 2016

I. CATALOG DESCRIPTION:

EMS 15 — PARAMEDIC FIELD INTERNSHIP — 10.00 - 13.00 units

Provides practicum experience for paramedic students to observe and participate in emergency medical care supervised by a preceptor in an emergency response vehicle. Requires a minimum of 480 hours, and students must document at least 40 advanced life support (ALS) patient contacts. Student will provide the full continuum of care from initial contact to transfer of care at the receiving facility for half of all ALS contacts. Students must obtain minimum competency as a Team Leader. The field internship provides the student with an opportunity to serve as team leader in a variety of pre-hospital advanced life support emergency medical situations.

10.00 - 13.00 Units Lab

<u>Prerequisite</u>

EMS 10 - Paramedic Theory 1 with a minimum grade of C

EMS 11 - Paramedic Theory 2 with a minimum grade of C

EMS 12 - Paramedic Laboratory 1 with a minimum grade of C

EMS 13 - Paramedic Laboratory 2 with a minimum grade of C

EMS 14 - Paramedic Clinical Practicum with a minimum grade of PASS

Grading Methods:

Pass/No Pass

Discipline:

MIN MAX 540.00 702.00 Lab Hours: **Total Hours:** 540.00 702.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

Before entering the course a student should be able to:

A. EMS10

- Integrate comprehensive knowledge of EMS systems, the safety/well-being of the paramedic, and medical/legal and ethical issues which is intended to improve the health of EMS personnel, patients, and the community.
 Integrate a complex depth and comprehensive breadth of knowledge of the anatomy and physiology of all human systems
- 3. Integrate comprehensive anatomical and medical terminology and abbreviations into the written and oral communication with
- colleagues and other health care professionals.

 4. Integrate comprehensive knowledge of pathophysiology of major human systems

 5. Integrate comprehensive knowledge of life span development.
- 6. Apply fundamental knowledge of principles of public health and epidemiology including public health emergencies, health promotion, and illness and injury prevention.

 Integrate comprehensive knowledge of pharmacology to formulate a treatment plan intended to mitigate emergencies and
- improve the overall health of the patient.
- Integrate complex knowledge of anatomy, physiology, and pathophysiology into the assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all
- Integrate scene and patient assessment findings with knowledge of epidemiology and pathophysiology to form a field impression. This includes developing a list of differential diagnoses through clinical reasoning to modify the assessment and formulate a treatment plan.

- 10. Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression to implement a comprehensive treatment/disposition plan for an acutely injured patient
- Integrate comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest
- Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.

B. EMS11

- 1. Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and

- Integrate assessment findings with principles of epidemiology and pathophysiology to formulate a field impression and implement a comprehensive treatment/disposition plan for a patient with a medical complaint
 Integrate assessment findings with principles of epidemiology and pathophysiology to formulatIntegrate comprehensive knowledge of causes and pathophysiology into the management of cardiac arrest and peri-arrest states.
 Integrate a comprehensive knowledge of the causes and pathophysiology into the management of shock, respiratory failure or arrest with an emphasis on early intervention to prevent arrest.
 Integrate assessment findings with principles of pathophysiology and knowledge of psychosocial needs to formulate a field impression and implement a comprehensive treatment/disposition plan for patients with special needs.
 Demonstrate knowledge of operational roles and responsibilities to ensure safe patient, public, and personnel safety.

C. EMS12

- Relate assessment findings to underlying pathological and physiological changes in the patient's condition.
 Integrate and synthesize the multiple determinants of health and clinical care.
 Perform psychomotor skills within the National EMS Scope of Practice Model and state scope of practice including: airway and breathing, patient assessment, pharmacologic interventions, and trauma patient management. Formulate a field impression based on an analysis of comprehensive assessment findings, anatomy, physiology,
- pathophysiology, and epidemiology
- 5. Perform a comprehensive history and physical examination to identify factors affecting the health and health needs of a patient.
- Communicate in a manner that is culturally sensitive and intended to improve the patient outcome.
- Compare and contrast the names, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose, and any specific administration considerations, for all of the emergency medications and intravenous fluids utilized by the local training institution. Individual training programs have the authority to add any medication used locally by paramedic providers.
- Apply to patient assessment and management, a fundamental knowledge of the medications carried by paramedics that may
- be administered to a patient during an emergency.

 Demonstrate knowledge of the following topics:, Medication safety, medication legislation, medication naming, classifications and schedules; give various examples of medication interactions and medication toxicity.
- 10. Identify medication routes of administration.
- Calculate and regulate the flow rate for an IV infusion given the volume, drop factor, and time frame.
 Perform the following tasks according to the NREMT ALS Psychomotor Skill Sheet Standards: withdraw solutions from ampoules and vials with an appropriately sized syringe, assemble a preloaded syringe (e.g., Bristoject, Abbojet, preload cartridges, etc.), administer an IV push medication, administer IM injections via the: dorsogluteal, ventrogluteal, vastus lateralis, and deltoid sites, administer subcutaneous injections, calculate, mix, and administer an IV medication infusion using microdrip Tubing.
- Using a comprehensive knowledge of anatomy, physiologies, and pathophysiology of the respiratory system, construct an assessment to develop and implement a treatment plan with the goal of assuring a patent airway, adequate mechanical ventilation, and respiration for patients of all ages.

- ventilation, and respiration for patients of all ages.
 14. Demonstrate knowledge of the following topics: Anatomy of the respiratory system, physiology, and pathophysiology of respiration of pulmonary ventilation, oxygenation and respiration, assessment and management of adequate and inadequate respiration, supplemental oxygen therapy.
 15. Discuss the assessment and management of adequate and inadequate ventilation.
 16. Describe In step-by-step fashion, the generic procedure of rapid sequence intubation.
 17. Perform the suctioning technique in the following situations: Oropharyngeal, Endotracheal, Nasopharyngeal, Tracheotomy.
 18. Secure a patent airway using an endotracheal tube, King LT airway or other supraglottic airway device.
 19. Perform the following procedures under the guidance of a clinical laboratory instructor Intraosseous insertion of an IO needle, enteral and parenteral administration of approved prescription medications, Access indwelling catheters and implanted central IV ports, administer medications by IV infusion, Maintain infusion of blood or blood products, perform blood sampling, thrombolytic initiation, administer physician approved medications, place a Morgan Lens.
 20. Identify assessment findings of a simulated patient presentation and formulate a field treatment plan for a patient with a major traumatic systems and minor traumatic injuries.
- major traumatic systems and minor traumatic injuries.
- 21. Formulate a comprehensive treatment/disposition plan for an acutely injured patient.

D. EMS13

- 1. Perform a comprehensive history and physical examination to identify factors affecting the health and health needs of a
- Formulate a field diagnosis based on an analysis of comprehensive assessment findings, anatomy, physiology,
- pathophysiology, and epidemiology Relate assessment findings to underlying pathological and physiological changes in the patient's condition.
- Integrate and synthesize the multiple determinants of health and clinical care.
- Perform all psychomotor skills within the National EMS Scope of Practice Model and state scope of practice including: medical patient management, cardiac patient management, special population patients, and simulated patient encounters.
- 6. Communicate in a manner that is culturally sensitive and intended to improve the patient outcome.

E. EMS14

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- Understand the roles and responsibilities of a Paramedic within an EMS system.
 Emphasize the importance of professionalism in paramedic practices and the importance of ethical behavior, appearance, and patient advocacy
- Value the importance of a variety of EMS systems designs and the role of medical direction in prehospital care.
- Recognize the role of evidence-based medicine.
- Perform a comprehensive history and physical examination to identify factors affecting the health and health needs of patients.
- Formulate a field diagnosis based on an analysis of comprehensive assessment findings, anatomy, physiology, pathophysiology, and epidemiology.
- Differentiate the multiple determinants of health and clinical care.
- Effectively communicate in a manner that is culturally relevant.
- Perform competently all psychomotor skills within the National EMS Scope of Practice Model and state scope of practice at paramedic level.
- Demonstrate exemplary professional behavior including but not limited to: integrity, empathy, self-motivation, appearance/personal hygiene, self-confidence, communications, scene management, teamwork/ diplomacy, respect, patient advocacy, and careful delivery of emergency care, feed-back and guidance.

- 11. Report and document assessment findings and interventions.
- 12. Collect and report data to be used for epidemiological and research purposes.
- 13. Consistently initiate or delegate scene control and effective management of bystanders.
- 14. Demonstrate leadership functions as required by the Team Leader

V. CONTENT:

- A. Safety and Work Environment B. Universal Precautions
- Crowd Control
- D. Additional Assistance and Equipment
- Primary Assessment and Intervention Patient Information
- G. Physical Examination
- H. Assessment Interpretation
- Chest Auscultation
- J. Cardiac Rhythm Recognition
- K. Patient Management
- Patient Response to Therapy
- M. Rapport with patient, family and bystanders
 N. Rapport with Team Members from ambulance
- Radio Report
- Documentation
- Working relationship with Team Members from allied agencies
 R. Leadership
- Professionalism
- Feedback and Guidance Inventory Maintenance Equipment/Operation

- W. Airway Management & Oxygen Therapy

- X. Advanced Airways
 Y. Pleural Decompression
 A@. Defibrillation/Cardioversion
 AA. Intravenous Access

- AB. Bandaging/Splinting
 AC. Extrication/Patient Positioning
- AD. Spinal Immobilization
- AE. Drug Administration Technique
- AF. Drug Knowledge

VI. METHODS OF INSTRUCTION:

- A. Written exercises and case studies B. Observation and Demonstration -
- Individualized Instruction
- E. Internships -

VII. TYPICAL ASSIGNMENTS:

- A. Textbook readings
- B. Written reports
- Oral presentations
- D. Manipulative demonstrations

VIII. EVALUATION:

A. Methods

- 1. Simulation
- 2. Home Work
- Other:

Students shall be evaluated daily on a standardized report form developed by the California Paramedic Program Directors.

- a. Formative Assessment
- b. Summative Assessment
- c. Affective Assessment
 d. Psychomotor Assessment
- Student shall be assigned simulations as required by paramedic field preceptor. Student shall be assigned homework as required by paramedic field preceptor.

B Frequency

Students shall be evaluated daily on the CPPD form.

Students shall be summatively evaluated at

120 hours

240 hours

360 hours

480 hours

in a formative assessment of their progress.

Students shall receive a final summative assessment at the conclusion of their internship when the paramedic field preceptor identifies that the student has achieved the ability to function safely as a beginner.

IX. TYPICAL TEXTS:

- Caroline M. D., Nancy, and Andrew Pollak MD FAAOS Series Editor. Emergency Care in the Streets. Seventh Ed. ed., Jones and Bartlett Learning, 2013.

- Bledsoe MD, Bryan. Paramedic Care, Principles & Practice. 4th ed., Pearson Education, 2012.
 Derr RN, Paula, Jon Tardiff, and Mike McEvoy EMT-P RN. Emergency & Critical Care Pocket Guide. 8th ed., JB Learning, 2014.
 LPC Faculty. Las Positas College Paramedic Program Field Training Manual. Faculty of Las Positas College Paramedic Program ,

2015. 5. <u>FISDAP.</u> Headwaters Software Inc., (2.0).

X. OTHER MATERIALS REQUIRED OF STUDENTS:

 A. Stethoscope and Sphygmomanometer
 B. Access to a computer with an internet connection.
 C. Personal protetive equipment including proper footwear, pants, and shirt (scrubs).