# EMS 60A: PARAMEDIC COGNITIVE & AFFECTIVE IA

### **Foothill College Course Outline of Record**

Heading	Value
Effective Term:	Summer 2022
Units:	9
Hours:	9 lecture per week (108 total per quarter)
Prerequisite:	BIOL 40A or equivalent (with laboratory).
Corequisite:	EMS 60B.
Advisory:	Not open to students with credit in EMTP 60A or 100A.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

### **Description**

First of a three course lecture series in which paramedic students will learn the EMS system, anatomy and physiology of the human body, life span of the patient, cellular function and disease, medical terminology, and pharmacology related to patient care. Intended for students in the Paramedic Program; enrollment is limited to students accepted in the program.

### **Course Objectives**

The student will be able to:

- 1. Demonstrate an understanding of the EMS system and the paramedic role and an understanding of their responsibility.
- 2. Exhibit knowledge, understanding, and application of the human anatomy.
- 3. Discuss ways that they can improve the EMS system through education.
- 4. Demonstrate an understanding of the legal system and how it protects them and what laws govern them.
- 5. Demonstrate and present themselves throughout the program in a professional manner.
- 6. Discuss proper terminology and incorporate medical language in labs and when performing documentation.
- Demonstrate an understanding of the human anatomy with an understanding of the inter-relationships of each system with each other.
- 8. Demonstrate an understanding of the pathophysiology of injuries and diseases at a cellular level.
- 9. Discuss the various age groups that the paramedic will come in contact with and how this will affect their assessment and treatment.
- 10. Demonstrate an understanding of the pharmacology that is in the scope of practice and expected understanding for paramedic.

#### **Course Content**

- 1. EMS system and paramedic roles and responsibilities
  - a. EMS systems
  - b. Professionalism
  - c. Attributes and responsibilities of a paramedic
  - d. Medical direction
  - e. Improving system accountability
- 2. Body systems: anatomy and physiology
  - a. Review of anatomy and physiology
  - b. Organizational structure
  - c. Cell structure
  - d. Tissues
  - e. Organ systems
  - f. Systems
- 3. EMS system improvement and education
  - a. The cost of injuries
  - b. Reason for EMS involvement
  - c. A successful drowning prevention program
- 4. Legal and regulatory issues
  - a. The legal system
    - b. Legal accountability for the paramedic
    - c. Paramedic patient relationships
  - d. Resuscitation issues
- 5. Ethics and professional behavior
  - a. Code of ethics
  - b. Common dilemmas for paramedics
  - c. Patients rights
  - d. Professional accountability
- 6. Medical terminology review
  - a. Origins of medical words
  - b. Using a medical dictionary
  - c. Abbreviations
- 7. Review anatomical system functions
  - a. How various system interact with other
  - b. System compromise and the results on other systems
  - c. Signs and symptoms of system compromise
- 8. Review pathophysiology
  - a. Alterations in cells and tissues
  - b. Cellular injury
  - c. Cellular environment
  - d. How each system works with each other
- 9. Life span development
  - a. Infants
  - b. Toddlers and preschoolers
  - c. School age children and young adults
- 10. Basic principles of pharmacology
  - a. Drug names
  - b. Drug classifications
  - c. Routes of medication
  - d. Medication administration

#### Lab Content

Not applicable.

# **Special Facilities and/or Equipment**

1. Access to a cadaver lab

- 2. Smart classroom, with audio visual equipment
- 3. Access to a fully stocked ambulance
- 4. Emergency medical equipment

5. When portions of the course offered online, students need on-going access to computer with email and internet access

# Method(s) of Evaluation

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

Written tests: multiple choice, matching, essays, fill-in-the-blank, short answer

Assignments: workbooks that accompany texts, matching, multiple choice, fill-in-the-blank, identify, ambulance calls, true/false, short answer, word find, place photos in order, fill-in-the-table, problem solving, labeling diagram

Written research paper

National-style paramedic affective evaluation: observe student behavior, document, and counsel student

# Method(s) of Instruction

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

Lecture presentations and classroom discussion on related subject during lecture

In-class reading assignments, including but not limited to handout material relative to class lecture

Textbook assignments, reading about 1-5 chapters a week on paramedic care and treatment

In-class projects, e.g., scenarios for critical thinking, and a research paper to assess student capability in patient care and treatment modalities

## **Representative Text(s) and Other Materials**

Caroline, L. Nancy. Emergency Care in the Streets. 2018.

American Heart Association. BLS for the Healthcare Provider. 2020.

American Heart Association. <u>Pediatric Life Support (PALS) Provider</u> <u>Manual</u>. 2020.

American Heart Association. <u>Advanced Cardiac Life Support (ACLS)</u> <u>Provider Manual</u>. 2020.

NAEMT. Pre-Hospital Trauma Life Support. 2020.

NAEMT. Advanced Medical Life Support. 2019.

Foothill College Paramedic Program. <u>Student Policy Handbook.</u> 2021. Foothill College Paramedic Program. <u>Student Lab Manual.</u> 2021.

### Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- 1. Read 1-6 chapters per week throughout the quarter on paramedic: anatomy and physiology, cardiology, electrocardiogram, electrophysiology, etc. Weekly reading assignments 60-100 pages
- 2. Writing assignments: weekly essays are assigned relative to different patient medical and traumatic situations
- 3. Workbook/writing assignments are given each week, e.g., matching, multiple choice, fill-in-the-blank

# **Discipline(s)**

**Emergency Medical Technologies**