EMS 61B: PARAMEDIC COGNITIVE, AFFECTIVE & PSYCHOMOTOR IIB

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2024
Units:	4
Hours:	2 lecture, 6.5 laboratory per week (102 total per quarter)
Prerequisite:	EMS 60A and 60B.
Corequisite:	EMS 61A.
Advisory:	Not open to students with credit in EMTP 61B or 100B.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Description

Paramedic skills presented with a focus on unbiased patient care. Patient assessment and medication administration for respiratory, neurological, endocrine, overdose and poisonings, and gastrointestinal conditions for 911 call simulations and case studies. Pharmacology principles and applications. Additional skills include nebulizer/BVM set-up; digital intubation; foreign body airway obstruction; 12 lead ECG interpretation; blood glucose analysis; advanced cardiac life support; pressure infusers; intravenous access. 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 proper hygiene techniques and the use of Personal Protective Equipment.
- 2. Demonstrate the various techniques to establishing intravenous routes.
- 3. Exhibit different basic and advanced airway management techniques.
- 4. Demonstrate an understanding of different components of cardiac monitor devices.
- 5. Demonstrate the different techniques of medication administration.
- 6. Demonstrate through simulated scenarios how to manage scenes and patient care focusing on various ACLS, respiratory, and medical conditions.
- 7. Demonstrate the proper techniques for transferring patient care.
- 8. Analyze the pharmacokinetics of prehospital medications.
- 9. Apply an in-depth understanding of the pharmacodynamics of prehospital medications.
- 10. Select the appropriate pharmacological intervention based on the patient's needs.

Course Content

- 1. Proper hygiene techniques
 - a. Hand washing techniques
 - b. Proper use of Personal Protective Equipment
 - c. N-95 mask
 - d. P-100 mask
 - e. Donning and doffing medical gloves
- 2. Establishing intravenous routes
 - a. IV techniques
 - b. IO techniques
 - c. Setting up, starting IVs
- 3. Basic and advanced airway management techniques
 - a. NPAs, OPAs
 - b. Suctioning
 - c. Endotrachel intubation
 - d. Tracheotomy care
 - e. Multi lumen devices
 - f. 02 therapy
- 4. Cardiac monitor devices
 - a. 4 lead
 - b. 12 lead
 - c. Cardioversion
- d. Pacing
 - e. Defibrillation
 - f. EtCO2
 - g. Pulse Ox
- 5. Medication administration
 - a. Medication packaging
 - b. Routes of administration
 - c. Medication calculations
- 6. Simulated scenarios how to manage scenes and provide unbiased patient care
 - a. Various medical conditions
 - b. Scene approach and control
 - c. General impression
 - d. History and physical
 - e. Working diagnosis
 - f. Appropriate treatment
- 7. Transferring patient care
 - a. Documentation
 - b. Radio report
 - c. Verbal report
- Pharmacokinetics of prehospital medications

 a. Drug absorption and distribution

 - b. Metabolism and elimination
 - c. Influencing factors in drug action
- 9. Pharmacodynamics of prehospital medications
 - a. Mechanism of action
 - b. Drug dose relationships
 - c. Drug classes and therapeutic applications
- 10. Pharmacological intervention selection based on patient need

- a. Patient assessment
- b. Drug indications and selection
- c. Clinical decision making

Lab Content

The paramedic labs consist of the following but are not limited to:

- 1. Proper hand washing, Personal Protective Equipment
- 2. Intravenous access, intraosseous infusion
- 3. Pharmacology, medication administration
- Airway management, endotracheal intubation, oropharygeal airway, nasopharyngeal airway, suctioning, dual lumen airways
- 5. Advanced cardiac life support simulations
- 6. 911 call simulations and case studies
- 7. Adult patient assessment

Special Facilities and/or Equipment

1. Paramedic lab facilities

2. Paramedic ambulance equipment: mannikin (that allows cricothyrotomy, pleural decompression, intubation, intraosseous infusion, intravenous access, intramuscular injection and subcutaneous injection); medication box with all paramedic medications; respiratory bag with airway management equipment; ECG monitor/defibrillator/pacer; suction; immobilization equipment

- 3. Ambulance simulator
- 4. Base station simulator 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:

Laboratory psychomotor skill test

National-style oral examinations of 911 call simulations National-style paramedic affective evaluation: observe student behavior, document, and counsel student Written assignments including prehospital patient care report forms

Written tests: multiple choice, fill in the blank, short answer, essay

Method(s) of Instruction

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

Discussion Cooperative learning exercises, group presentations Demonstration Skills testing Lecture presentations and class discussions

Representative Text(s) and Other Materials

Caroline, L. Nancy. Emergency Care in the Streets. 2022.

Foothill College Paramedic Program. <u>Student Policy Handbook.</u> 2023. Foothill College Paramedic Program. <u>Student Laboratory Manual.</u> 2021.

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

- 1. Read 1-6 books throughout the quarter on paramedic: anatomy and physiology, pediatric advanced life support, respiratory emergencies, etc. Weekly reading assignments 60-100 pages
- 2. Writing assignments: weekly essays are assigned; for example, compare and contrast pulmonary edema secondary to left heart failure and cardiogenic shock
- 3. Workbook/writing assignments are given each week and include: matching, multiple choice, fill-in-the-blank, identify, ambulance calls, true/false, short answer, word find, place photos in order, fill-in-thetable, problem solving, labeling diagram
- 4. Medical research
- 5. Write prehospital patient care report form

Discipline(s)

Emergency Medical Technologies