

# EMS 60B: PARAMEDIC COGNITIVE, PSYCHOMOTOR & AFFECTIVE IB

## Foothill College Course Outline of Record

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

## Description

Paramedic skills presented with a focus on unbiased patient care: proper hand washing; personal protective equipment; patient assessment; intravenous access; intraosseous infusion; pharmacology principles and applications; medication administration; airway management: endotracheal intubation, oropharyngeal airway, nasopharyngeal airway, suctioning, dual lumen airways; advanced cardiac life support ambulance 911 call simulations and case studies; synchronized cardioversion; transcutaneous pacing; defibrillation; cardiovascular/chest pain emergency 911 call simulations; end tidal carbon dioxide monitoring; capnography; 12 lead ECG interpretation. 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 Personal Protective Equipment (PPE).
2. Demonstrate the various techniques to establish intravenous routes.
3. Exhibit different basic and advanced airway management techniques.
4. Demonstrate 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 cardiac and airway management.
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. Endotracheal intubation
  - d. Tracheotomy care
  - e. Multi lumen devices
  - f. O2 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
  - d. Five rights of drug administration
6. Simulated scenarios how to manage scenes and provide unbiased patient care
  - a. Cardiac and airway management
  - 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
8. 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 selections
- c. Clinical decision making

## Lab Content

1. Proper hand washing, Personal Protective Equipment
2. Intravenous access, intraosseous infusion
3. Pharmacology, medication administration
4. Airway management, endotracheal intubation, oropharyngeal airway, nasopharyngeal airway, suctioning, dual lumen airways
5. Advanced cardiac life support ambulance
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, matching, essays, fill-in-the-blank, short answer

## Method(s) of Instruction

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

Students will practice skills in preparation for the NREMT skills testing

Students will demonstrate proficiency of knowledge and skill through simulated scenarios

Lecture presentations and classroom discussion

Group presentations on pharmacology topics

## Representative Text(s) and Other Materials

Foothill College Paramedic Program. Student Laboratory Manual. 2021.

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

Weekly reading assignments from program lab manual.

## Discipline(s)

Emergency Medical Technologies