ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Health Professions (HP)

COURSE: PMD 2230 Paramedic II

Effective Date: Fall 2025

Submitted Date: Jan-25

Credit Hours: 8.5 **IAI Number (if applicable): N/A**

Complete all that apply or mark "None" where appropriate:

Prerequisite(s): Completion of PMD 2220 with a "C" or better, PMD 2221

Enrollment by assessment or other measure? ☐Yes ☒No

If yes, please describe:

Corequisite(s): PMD 2231

Pre- or Corequisite(s): None.

Consent of Instructor: ☐Yes ☒No

Delivery Method:	☒**Lecture**	**7.5**	**Contact Hours** (1 contact = 1 credit hour)
	☐**Seminar**	**0**	**Contact Hours** (1 contact = 1 credit hour)
	☒**Lab**	**2**	**Contact Hours** (2-3 contact = 1 credit hour)
	☐**Clinical**	**0**	**Contact Hours** (3 contact = 1 credit hour)
	☐**Practicum**	**0**	**Contact Hours** (5 contact = 1 credit hour)
	☐**Internship**	**0**	**Contact Hours** (5 contact = 1 credit hour)

Offered: ☒**Fall** ☒**Spring** ☒**Summer**

CATALOG DESCRIPTION:

This course is designed to build upon the knowledge and skills of the Emergency Medical Technician in advanced emergency care of the sick or injured person. Areas of instruction include, but are not limited to: medical and traumatic emergencies along with patients with special considerations and EMS operations.

ACCREDITATION STATEMENTS AND COURSE NOTES:
The goal of the paramedic program is to prepare Paramedics who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

COURSE TOPICS AND CONTENT REQUIREMENTS:

I. Medical Emergencies – Part 2
   a. Pulmonology
   b. Neurology
   c. Endocrinology
   d. Immunology
   e. Gastroenterology
   f. Urology & Nephrology
   g. Toxicology
   h. Mental health disorders
   i. Hematology
   j. Infectious disease
   k. Diseases of the Eyes, Ears, Nose and Throat
   l. Non-traumatic musculoskeletal disorders.

II. Traumatic Emergencies
   a. Trauma Systems of Care
   b. Mechanism of Injury
   c. Hemorrhage and Shock
   d. Soft Tissue Trauma
   e. Burns
   f. Head, Neck, and Spinal Trauma
   g. Chest Trauma
   h. Abdominal and Pelvic Trauma
   i. Orthopedic Trauma
   j. Environmental Trauma
   k. Special Considerations in Trauma

III. Special Considerations and Operations
   a. Geriatrics
   b. Abuse, Neglect, and Assault
   c. The Challenged Patient
   d. Acute Interventions for the Chronic Care Patient
   e. Ground Ambulance Operations
   f. Multiple-Casualty Incidents
   g. Rescue Awareness and Operations
   h. Hazardous Materials
   i. Crime Scene Awareness
   j. Rural EMS
   k. Responding to Terrorist Acts

INSTRUCTIONAL METHODS:
Lecture
Demonstrations
Small group projects
Skills lab hands-on practice
Homework assignments and exams

EVALUATION OF STUDENT ACHIEVEMENT:
Written exams and quizzes are used to evaluate student progress for each module.
Skills will be evaluated by peers and instructors using skill sheets developed by the National Registry of EMTs.

INSTRUCTIONAL MATERIALS:
Textbooks
American Academy of Orthopaedic Surgeons. (2023). *Nancy Caroline's Emergency Care in the Streets* (9th ed.). Burlington, MA: Jones & Bartlett Learning.

Resources
Platinum Planner
EMS Testing

LEARNING OUTCOMES AND GOALS:
Institutional Learning Outcomes
☒1) Communication – to communicate effectively.
☒2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion.
☐3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally.
☐4) Responsibility – to recognize how personal choices affect self and society.

Course Outcomes and Competencies

Upon completion of the course, the student will be able to:

1. Demonstrate an understanding of selected medical emergencies.
    - 1.1 Compare various airway and ventilation techniques used in the management of pulmonary diseases.
    - 1.2 Discuss the pathophysiology of non-traumatic neurologic emergencies.
    - 1.3 Discuss the general assessment findings associated with endocrinologic emergencies.
    - 1.4 Discuss the anatomy and physiology of the organs and structures related to anaphylaxis.
    - 1.5 Based on assessment findings, differentiate between local, peritoneal and general inflammation as they relate to acute abdominal pain.
    - 1.6 Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with acute or chronic renal failure.
    - 1.7 Discuss the assessment findings associated with various toxidromes.
    - 1.8 Identify techniques for physical assessment in a patient with behavioral problems.
    - 1.9 Describe the pathology and clinical manifestations and prognosis associated with: Anemia, Leukemia, Lymphomas, Polycythemia, Disseminated intravascular coagulopathy, Hemophilia, Sickle cell disease, Multiple myeloma.
    - 1.10 Discuss public health principles relevant to infectious/ communicable disease.
    - 1.11 Discuss the pathophysiology and assessment findings that would be present in a patient experiencing specific eye, ears, nose, and throat emergencies in the prehospital environment.
    - 1.12 Given a variety of scenarios, discuss the integration of assessment and management guidelines as they relate to non-traumatic musculoskeletal disorder emergencies.
2. Demonstrate an understanding of traumatic emergencies.
    - 2.1 Describe the role of and differences between levels of trauma centers.
    - 2.2 Define energy and force as they relate to trauma.
    - 2.3 Discuss the pathophysiology of hemorrhage and shock.
    - 2.4 Discuss the pathophysiology of soft tissue injuries.
    - 2.5 Identify and describe types of burn injuries, including a thermal burn, an inhalation burns, a chemical burn, an electrical burn, and a radiation exposure.

2.6 Classify head injuries (mild, moderate, severe) according to assessment findings.
2.7 Explain traumatic and non-traumatic spinal injuries.
2.8 Discuss the management of thoracic injuries.
2.9 Identify the need for rapid intervention and transport of the patient with abdominal injuries based on assessment findings.
2.10 Discuss the management of musculoskeletal injuries.
2.11 Identify factors that place patients at particular risk for environmental emergencies.
2.12 Discuss the steps of the secondary assessment as it relates to traumatically injured patients.

3. State methods for dealing with specialty patients.
   3.1 Apply the pathophysiology of multi-system failure to the assessment and management of medical conditions in the elderly patient.
   3.2 Discuss the assessment and management of the abused patient.
   3.3 Anticipate accommodations that may be needed in order to properly manage the patient with a developmental disability.
   3.4 Compare and contrast the primary objectives of acute care, home care and hospice care.
4. Discuss response and safety considerations to be taken when responding to an emergency.
   4.1 Identify current local and state standards which influence ambulance design, equipment requirements and staffing of ambulances.
   4.2 Identify the conditions/ situations in which air medical transport should be considered.
   4.3 Explain the need for the incident management system (IMS)/ incident command system (ICS) in managing emergency medical services incidents.
   4.4 Explain the medical and mechanical aspects of rescue situations.
   4.5 Explain the role of the paramedic/ EMS responder in terms of the following: Incident size-up, Assessment of toxicologic risk, Appropriate decontamination methods, Treatment of semi-decontaminated patients, Transportation of semi-decontaminated patients.
   4.6 Explain EMS considerations for the following types of violent or potentially violent situations: Gangs and gang violence, Hostage/ sniper situations, Clandestine drug labs, Domestic violence, emotionally disturbed people, Hostage/ sniper situations.

4.7 List and describe the special challenges faced by rural EMS systems.

4.8 Describe the precautions EMS Should take in responding to a known or suspected terrorist attack.