



ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: EMS 2230 Paramedic II

Date: Spring 2020

Credit Hours: 8.5

Prerequisite(s):

1. Completion of EMS 2220 with a "C" or better
2. Completion of EMS 2221
3. Concurrent enrollment in EMS 2231

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)
 Online
 Blended

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

IAI Equivalent – **Only for Transfer Courses**-go to <http://www.itransfer.org>:

CATALOG DESCRIPTION:

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

GENERAL EDUCATION GOALS ADDRESSED

[See last page for Course Competency/Assessment Methods Matrix.]

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

[Choose up to three goals that will be formally assessed in this course.]

- To apply analytical and problem-solving skills to personal, social, and professional issues and situations.
- To communicate successfully, both orally and in writing, to a variety of audiences.
- To construct a critical awareness of and appreciate diversity.
- To understand and use technology effectively and to understand its impact on the individual and society.
- To develop interpersonal capacity.
- To recognize what it means to act ethically and responsibly as an individual and as a member of society.
- To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
- To connect learning to life.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals. See last page for more information.]

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.

MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

[For each of the goals selected above, indicate which outcomes align with the goal.]

Goals	Outcomes
First Goal	
To apply analytical and problem-solving skills to personal, social, and professional issues and situations.	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.8, 1.9, 1.10, 1.12, 2.2, 2.3, 2.4, 2.6, 2.8, 2.9, 2.11, 3.1, 3.2, 3.3, 3.4, 4.2, 4.6, 4.7, 4.8
Second Goal	
To communicate successfully, both orally and in writing, to a variety of audiences	1.2, 1.4, 1.7, 1.8, 1.9, 1.10, 1.11, 1.12, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 2.12, 3.2, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8

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. Air Medical Operations
 - g. Multiple-Casualty Incidents
 - h. Rescue Awareness and Operations
 - i. Hazardous Materials
 - j. Crime Scene Awareness
 - k. Rural EMS
 - l. Responding to Terrorist Acts

INSTRUCTIONAL METHODS:

- Lecture
- Demonstrations
- Skills lab hands on practice
- Scenarios
- Homework assignments and exams

INSTRUCTIONAL MATERIALS:

Text: *Paramedic Care: Principles and Practice* by Bledsoe, Porter, and Cherry 5th Edition, Volumes 3, 4, & 5

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

- Lecture: Reading assigned materials, preparation, and participation in classroom activities is expected.
- Written exams are used to evaluate student progress for each module. A comprehensive final exam will also be given at the end of the semester.
- Skills/Scenario Laboratory: Students will be evaluated by peers and instructors using skill sheets developed by the National Registry of EMT

- The student's final grade will be calculated: 20% Anatomy & Physiology, 20% reading assignments and homework, 20% affective grade, 20% module exams, and 20% final exam.
- The student must pass the course with a grade of "C" or better to continue and graduate from the paramedic program.

The following grading scale will be used in determining the grade for this course.

A= 90-100

B= 80-89

C= 76-79

D= 66-75

F= 0-65

Course Competency/Assessment Methods Matrix

(Dept/# Course Name)	Assessment Options																															
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	Direct/ Indirect	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	I	I	I	I	D	D							
Demonstrate an understanding of selected medical emergencies.				X		X	X	X			X			X						X		X	X	X	X		X	X	X			
Demonstrate an understanding of traumatic emergencies.				X		X	X	X			X			X						X		X	X	X	X		X	X	X			
State methods for dealing with specialty patients.						X	X	X			X			X						X		X	X	X	X		X	X	X			
Discuss response and safety considerations to be taken when responding to an emergency.						X	X	X			X			X						X		X	X	X	X		X	X	X			