

Course Code: EMS 114

Course Title: Paramedic II

Department: Allied Health

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 51.0904

Repeatability: 0

Credit Hours

Catalog Notation: 7-8.5-9.5

Credit Hour Distribution:

Lecture: 7

Lab: 3

Clinical: 5.5

Total: 9.5

General Course Information

Catalog Description

Advanced expertise in patient assessment, critical thinking, and clinical decision-making in high-acuity situations. Proficiency in the advanced pathophysiological understanding of medical emergencies across the lifespan, from neonatal to geriatric populations, with an emphasis on pulmonary and cardiac systems. Skills in electrocardiogram (EKG) rhythm interpretation and the application of appropriate treatment modalities in emergent settings.

General Course Objectives

Advanced patient assessment, critical thinking, and decision making skills in critical patient situations. Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Pediatric Education for Prehospital Providers (PEPP), and Neonatal Resuscitation Program (NRP) certifications are included with this course.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 060

Prerequisites

Credit in EMS 113

Methods of Evaluation

20-30 quizzes; 8-10 exams; 2-4 practical exams; 2-4 scenario exams.

Instructional Materials and Additional Supplies

Current edition of assigned textbook with online platform.

Course Content

General Learning Outcomes (GLOs)

- Communication: Students will demonstrate the ability to read, write, listen, and speak effectively.
- Critical Thinking and Information Literacy: Students will demonstrate the ability to evaluate perspectives, evidence, and implications, and to locate, assess, and use information effectively.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Pulmonary Emergencies	1. Describe the anatomy, physiology, and pathophysiology of the respiratory system. 2. Demonstrate good technique for auscultation of the lungs, identifying normal and abnormal sounds. 3. Discuss signs and symptoms of pulmonary diseases commonly encountered by EMS. 4. Describe the treatments available for common pulmonary diseases using protocols.	3	1	6
Cardiac Anatomy and Physiology	1. Describe the normal anatomy and physiology of the cardiovascular system. 2. Discuss the electrophysiology of the heart. 3. Demonstrate the basic principles of EKG rhythm interpretation.	3	2	0
Sinus Rhythms	1. Describe the recognition patterns for rhythms originating in the sinoatrial node. 2. Discuss the management of sinus rhythms based on protocols and standard practice. 3. Outline the medications appropriate for management of sinus rhythms. 4. Demonstrate techniques and procedures required for managing prehospital care of acute angina.	3	1	2
Atrial and Junctional Rhythms	1. Describe the recognition patterns for rhythms originating in the atria and AV node. 2. Discuss the management of atrial and junctional rhythms based on protocols and standard practice. 3. Outline the medications appropriate for management of atrial and junctional rhythms. 4. Demonstrate the prehospital use of pacing and synchronized cardioversion.	3	1	3
Ventricular Rhythms	1. Describe the recognition patterns for rhythms originating in the ventricles. 2. Discuss the management of ventricular rhythms based on protocols and standard practice. 3. Outline the medications appropriate for management of ventricular rhythms. 4. Demonstrate the steps of prehospital cardiac arrest management.	3	2	6
AV Blocks	1. Describe the recognition patterns for rhythms resulting from blocks at the AV node. 2. Discuss the management of AV Blocks based on protocols and standard practice. 3. Outline the medications and procedures appropriate for management of AV Blocks.	3	1	2

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Dysrhythmia Review	1. Recognize a variety of cardiac dysrhythmias. 2. Discuss the management of a variety of cardiac dysrhythmias. 3. Demonstrate techniques and procedures required for managing prehospital cardiac patients.	3	3	2
Cardiac Assessment and Management	1. Discuss the patient presentation of patients with cardiac chest pain, unstable angina, acute myocardial infarction, and congestive heart failure. 2. Identify appropriate treatment modalities for patients with cardiac conditions. 3. Demonstrate good assessment and monitoring techniques for patients with cardiac emergencies.	3	4	6
12-Lead EKG Recognition	1. Outline the steps required to interpret 12 lead EKGs. 2. Discuss the grouping of patterns in 12 lead EKGs that translate into acute cardiac conditions. 3. Demonstrate the assessment and management of the patient with acute coronary syndromes.	3	2	4
Advanced Cardiac Life Support (ACLS)	1. Outline the treatment modalities for patients with acute cardiac dysrhythmias following the American Heart Association Guidelines. 2. Demonstrate the care required for patients experiencing acute lethal dysrhythmias. 3. Demonstrate the care required for patients in acute cardiac arrest.	6	6	0
Peripheral Vascular Emergencies	1. Discuss the anatomy, physiology, and pathophysiology of the vascular system. 2. Outline patient assessments related to the vascular system. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with vascular emergencies.	2	1	1
Neurological Emergencies	1. Discuss the anatomy, physiology, and pathophysiology of the central and peripheral nervous system. 2. Outline patient assessments related to the neurological system. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with neurological emergencies.	3	1	2
Endocrine Emergencies	1. Discuss the anatomy, physiology, and pathophysiology of the endocrine system. 2. Outline patient assessments related to the endocrine system. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with endocrine emergencies.	3	0	2
Substance Abuse, Toxicology, and Overdose	1. Discuss the anatomy, physiology, and pathophysiology of substance abuse, toxicology, and overdoses. 2. Outline patient assessments related to substance abuse, toxicology, and overdose. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with substance abuse, toxicology, and overdose.	3	0	3
Gastrointestinal Emergencies	1. Discuss the anatomy, physiology, and pathophysiology of the gastrointestinal system. 2. Outline patient assessments related to the gastrointestinal system. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with gastrointestinal emergencies.	3	1	3

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Hematological Emergencies	1. Discuss the anatomy, physiology, and pathophysiology of the hematological system. 2. Outline patient assessments related to the hematological system. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with hematological emergencies.	3	0	1
Introduction to the Immune System	1. Discuss the anatomy, physiology, and pathophysiology of the immune system. 2. Outline patient assessments related to the immune system.	3	0	0
Allergic Reactions and Anaphylaxis	1. Discuss the anatomy, physiology, and pathophysiology of allergic reactions. 2. Outline patient assessments related to allergic reactions. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with allergic reactions.	3	0	1
Infectious Diseases	1. Discuss the anatomy, physiology, and pathophysiology of infectious diseases. 2. Outline patient assessments related to infectious diseases. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with infectious diseases.	3	0	1
Environmental Emergencies	1. Discuss the anatomy, physiology, and pathophysiology of environmental emergencies. 2. Outline patient assessments related to environmental emergencies. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with environmental emergencies.	3	0	1
GU and Renal	1. Describe the anatomy, physiology, and pathophysiology of the renal and male reproductive systems. 2. Outline patient assessments related to the renal and male reproductive systems. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with renal and male reproductive systems emergencies.	3	0	2
Gynecological Emergencies	1. Describe the anatomy, physiology, and pathophysiology of the female reproductive system. 2. Outline patient assessments related to the female reproductive system. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with female reproductive emergencies.	3	0	2
The Pregnant Patient	1. Describe the anatomy, physiology, and pathophysiology of the pregnant female. 2. Outline patient assessments related to the pregnant female. 3. Demonstrate techniques and procedures required for managing prehospital care of pregnant females.	3	0	2
Normal Delivery and Abnormal Delivery	1. Describe the anatomy, physiology, and pathophysiology of pregnancy and delivery. 2. Outline patient assessments related to imminent delivery. 3. Identify treatment modalities for prehospital care of females who are about to deliver. 4. Demonstrate techniques of assisting with normal and abnormal deliveries using the Noelle simulator.	3	1	4

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Assessment and Resuscitation of the Newborn - Neonatal Resuscitation Program (NRP)	1. Describe the anatomy, physiology, and pathophysiology of the newborn. 2. Outline patient assessments related to the newborn. 3. Identify and treat different modalities and resuscitation techniques for the normal and abnormal newborn.	4	1	3
Pediatrics	1. Describe the anatomy, physiology, and pathophysiology of children of all ages. 2. Outline patient assessments related to children. 3. Demonstrate techniques and procedures required for managing prehospital care of children with a variety of emergencies.	4	1	10
Pediatric Education for Prehospital Professionals (PEPP)	1. Describe and demonstrate the use of the pediatric assessment triangle in the treatment of prehospital pediatric patients. 2. Discuss the assessment and treatment of children using a variety of scenarios. 3. Outline the skills necessary to treat critically ill and injured children in the prehospital setting.	6	6	0
Pediatric Advanced Life Support (PALS)	1. Determine the importance of prevention of cardiopulmonary arrest in children. 2. Utilize knowledge of pediatric basic life support (BLS) principles and their role in PALS. 3. Integrate the concepts of the Pediatric Chain of Survival in resuscitation scenarios. 4. Recognize the algorithms for specific PALS cases.	6	6	0
Summary and Review of Pediatric Care	1. Demonstrate knowledge and skills of all previous content during oral scenarios.	2	0	0
Geriatrics	1. Describe the anatomy, physiology, and pathophysiology of the geriatric patient. 2. Outline patient assessments related to the geriatric patient. 3. Demonstrate techniques and procedures required for managing prehospital care of geriatric patients.	3	1	10
Patients with Special Needs	1. Describe the anatomy, physiology, and pathophysiology of patients with special needs. 2. Outline patient assessments related to patients with special needs. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with special needs.	3	0	1
Psychological Disorders	1. Describe the anatomy, physiology, and pathophysiology of the psychiatric patient. 2. Outline patient assessments related to the psychiatric patient. 3. Demonstrate techniques and procedures required for managing prehospital care of patients with behavioral health emergencies.	3	0	3
Critical Thinking and Case Review	1. Using a variety of scenarios based on material presented over the semester, identify the emergency, outline the patient assessment, and discuss the treatment modalities of prehospital care.	0	3	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
105	45	83