

NorthWest Arkansas Community College

Standard Course Outline

EMTP 1233 Medical Emergencies II

Prerequisite: Admission into the paramedic program and enrolled as a student at NWACC

Course Description: This course covers the pathophysiology and appropriate prehospital management of selected medical emergencies to include Infectious disease, toxicological, geriatric, pediatric, and obstetrical emergencies. Emphasis is on effective, advanced prehospital care of the emergent patient.

Target Audience: Students admitted to the Paramedic Program

Credit Hours: 3 credit hour / non-transferable

Instructional Material: Current edition of selected paramedic text and workbook
ALS Field Guide
Selected citations from the current literature base in emergency medicine (from instructors library)
Paramedic Care, Mosby 2nd Edition
On-Line Searches of Current Scientific Literature
Audio visual tapes in EMS library

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

Module 1: Toxicology

1. Describe general principles of patient assessment and management of ingested, inhaled, absorbed, or injected poisons.
2. Perform effective patient assessment and history taking on patients with toxic exposure.
3. Describe the common causative agents involved with ingested, inhaled, absorbed, and injected toxic substances.
4. List the typical signs and symptoms associated with common toxicological agent exposure
5. Demonstrate effective treatment modalities for management of toxicological emergencies.
6. Demonstrate the correct methodology gastric tube placement and lavage.
7. Explain the rationale and procedure for effective airway management while performing gastric lavage and charcoal administration.
8. Given a selected drug overdose scenario, explain the specific appropriate management of the patient.

Module 2: Infectious Disease

1. Describe the chain of elements necessary for development of infectious diseases.

2. Identify and outline the 4 stages of infectious disease development
3. List those infectious diseases that pose the greatest of life threat to EMS personnel
4. Explain effective measures for personal protection against infectious disease exposure.
5. Indicate the typical mode of transmission involved with common and life threatening forms of infectious disease posing risks to EMS personnel.
6. Demonstrate ongoing, effective personal protective measures while working in the assigned clinical settings.

Module 3: Geriatric Emergencies

1. Identify common physiological body processes as related to normal aging.
2. Demonstrate effective history taking and assessment on older patients.
3. Describe common chronic disease entities common to many elder patients
4. Understand the problems with “poly-pharmacy” common in elderly patients.
5. Distinguish between delirium and dementia
6. Discuss the effects of trauma on the elderly patient
7. Describe the incidence and symptomology associated with depression in older patients
8. Perform appropriate treatment modalities including IV initiation, ECG interpretation, Drug Administration on elderly patients.
9. Identify common characteristics of elder abuse

Module 4: Pediatric Emergencies

1. Identify common age-related illness in pediatric patients
2. Describe those signs and symptoms that indicate a deteriorating status in pediatric patients
3. Describe appropriate treatment modalities and drug dosages for pediatric patients with selected medical and traumatic emergencies.
4. Demonstrate effective resuscitation management for pediatric patients of different ages.
5. Indicate common signs and symptoms of child abuse and appropriate reporting.
6. Understand the etiological factors involved with SIDS.
7. List appropriate normal vital signs for different ages of children.
8. Explain the differences between the adult and pediatric physiological response to hypovolemic shock
9. Perform effective immobilization of pediatric patients of different ages and sizes.
10. Discuss effective strategies for obtaining a history and assessment from pediatric patients of different ages.
11. Demonstrate effective pediatric IV initiation utilizing both peripheral and intraosseous routes.
12. Successfully complete all modules of the AHA Pediatric Advanced Life Support course.

Module 5: Obstetric Emergencies

1. Outline the events of normal fetal development
2. Explain normal maternal physiological changes during pregnancy
3. Describe and perform effective history taking and assessment of expectant female patients.
4. Identify the maternal physiological response to blood loss as it relates to the fetus
5. Describe common causes and appropriate management of vaginal bleeding in expectant patients.
6. Demonstrate appropriate management techniques involving both normal and abnormal deliveries.
7. Describe APGAR scoring
8. Identify potentially life-threatening conditions that can develop in the mother during pregnancy.
9. Demonstrate correct management techniques of neonatal resuscitation.
10. List the stages of labor and the physiological and chronological events associated with each stage
11. Demonstrate correct management techniques in caring for a newborn infant.
12. Discuss the special concerns in the management of a new-born premature infant
13. Describe and demonstrate the proper technique for suctioning a meconium stained neonate.
14. Demonstrate appropriate cannulation of the umbilical vein.
15. Successfully complete this portion of Pediatric Advanced Life Support.