

# Inver Hills Community College

## EMS 2460: Medical Emergencies I

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Reviews in detail patient assessment and management of medical emergencies likely to be encountered in the pre-hospital environment. Emphasis is placed upon initial management of life-threatening emergencies, information gathering, review of body systems while prioritizing field care. Medical emergencies studied will include respiratory, cerebrovascular accidents and cardiovascular problems. Basic and advanced concepts of EKG monitoring techniques and interpretation are also included as they pertain to the topics mentioned. Prerequisites: Acceptance into the Paramedic Core Program or permission of instructor.

### B. COURSE EFFECTIVE DATES: 08/26/2013 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to medical emergencies - 2%
2. Anatomy and Physiology of Respiration - 10%
3. Pathology of the airway - 20%
4. Assessment of the medical Patient - 10%
5. Anatomy and physiology of the cardiovascular system - 20%
6. Fundamental and advanced concepts of EKG monitoring and analysis 10%
7. Cardiovascular Pathology - 10%
8. Neurologic Disorders - 8%
9. Cerebrovascular accidents - 10%

#### **D. LEARNING OUTCOMES (General)**

1. Justify the importance of gathering a thorough and pertinent history.
2. Demonstrate knowledge of a systematic approach to patient assessment.
3. Describe the need to continually re-assess a patient.
4. Describe steps in the assessment of a medical emergency patient.
5. Describe the physiology of respiration.
6. Differentiate between the pathophysiologies of airway diseases such as asthma, pneumonia, COPD, toxic inhalation, spontaneous pneumothorax and hyperventilation.
7. Describe the physiology of the cardiovascular system.
8. Describe the pathophysiology of the myocardium and how it effects the rest of the body.
9. Discuss the fundamentals of EKG monitoring as it pertains to respiratory, cardiology and other medical emergencies.
10. Appreciate the pathophysiology of disease processes such as: AMI, sudden death, CHF, ventricular aneurysms, cardiogenic shock, thoracic aneurysms and hypertension and describe treatment based on AHA ACLS and local standards of care.
11. Compare and contrast the signs and symptoms of various Cerebrovascular emergencies.
12. Discuss recognition and treatment of Neurologic disorders such as seizures and headaches.

#### **E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted