Inver Hills Community College

EMS 2420: Pathophysiology for EMS

A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Applies anatomy and physiology to common diseases and injuries encountered by EMS personnel. Students develop an understanding of how different disease processes interrupt normal bodily functions. Prerequisites: Acceptance to the Paramedic program or instructor permission.

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

C. OUTLINE OF MAJOR CONTENT AREAS

1. The human cell and their functions
   The immune system
   Physiology of breathing
   Electrophysiology and anatomy of the heart
   Pathology of the heart
   Function and pathology of the renal system
   Pathology and components of blood
   Pain origin and effect on the body
   Pathology of endocrine emergencies

D. LEARNING OUTCOMES (General)

1. Integrate knowledge of cellular function in conditions commonly encountered in pre-hospital environment.
   Apply proper anatomical sites and terms in oral and written communication.
   Explain the normal function of the major body systems.
   Identify abnormalities associated with the major body systems.
   Describe the organization of the body at both the atomic and chemical levels.
2. Categorize diseases based upon the signs and symptoms of physiological alteration and the system affected.
   Hypothesize how a dysfunction in one body system may affect the proper function of another.
   Discuss the pathology of the respiratory system, cardiovascular system, renal system, venous system, and the immune system.
   Discuss pain and its effect on a patient.
   Describe the pathophysiology of Shock.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted