

# Minnesota State University Moorhead

## **NURS 635: Pathophysiology, Pharmacology, Physical Assessment - Health Professions I**

### **A. COURSE DESCRIPTION**

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course is the first of a two-course series that integrates health histories, research-based biopsychosocial assessments, pharmacology, and physiology/ pathophysiology. Concepts addressed in this course include cellular function, inflammation, immunity, infections, maladaptive processes, genetics, and fluid/electrolyte regulation. The lifespan approach will (a) strengthen the health professional's foundation for practice; (b) facilitate understanding of health-related information to teach students, patients and caregivers; (c) facilitate inter-professional collaboration; and (d) improve health care across a wide variety of settings. Students will complete health histories and physical exams using a variety of methods including digital simulation.

**B. COURSE EFFECTIVE DATES:** 02/02/2023 - Present

### **C. OUTLINE OF MAJOR CONTENT AREAS**

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

1. Analyze assessment findings to identify genetic risk factors and pharmaco-genomic treatment options.
2. Analyze the impact of pharmacogenomics on current and future healthcare.
3. Anticipate potential physiological responses to both pharmacological and non-pharmacologic interventions.
4. Apply concepts of pharmacology and physiology in the critical evaluation of client health and treatment response.
5. Apply scientific assessment, pathophysiology findings, and pharmacologic treatment to conditions affecting cellular function, inflammation, immunity, infections, maladaptive processes, genetics, and fluid-electrolyte regulation.
6. Correlate principles of pharmacokinetics, pharmacodynamics, and drug interactions with body system physiology, pathophysiology, and response.
7. Design course content based on principles of health assessment, physiology/pathophysiology and pharmacology.
8. Formulate client education and teaching plans based on principles of pathophysiology and pharmacology.
9. Perform complete and focused health histories and physical assessments on adult and pediatric clients that reflect lifespan and cultural considerations.
10. Synthesize assessment findings to identify present/potential health problems and develop a culturally sensitive plan of care.
11. Use technology to deliver/enhance/document care and collaborate with an inter-professional team using appropriate terminology while assuming ethical and legal responsibility for professional practice.

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

None

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

As noted on course syllabus

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

None noted