## 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

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#### **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

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