

# Minnesota State University Moorhead

## **NURS 462: 3 P's for the BSN: Pathophysiology, Pharmacology, & Physical Assessment**

### **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 integrates pathophysiology, pharmacology, and physical assessment using a concept-based framework. Select disease processes will be considered focusing on a basic understanding of cellular function, pathophysiology, pharmacologic mechanism of action, and corresponding physical assessment findings. Concepts addressed in this course include: health assessment, pharmacology principles; pharmacogenomics; altered cellular response & cellular proliferation; altered ventilation & perfusion; altered nutrition, fluids & elimination; altered metabolic & hormonal regulation; and altered neuro-sensory regulation. A lifespan approach will strengthen the nurses understanding of health-related information, focus on evidence-based practice guidelines, facilitate inter-professional collaboration, and improve nursing care across a wide variety of settings.

**B. COURSE EFFECTIVE DATES:** 02/01/2020 - Present

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

1. Health Assessment Overview
2. Pharmacology Principles & Cellular Physiology
3. Variation in Drug Response & Pharmacogenomics
4. Altered Cellular Response & Cellular Proliferation
5. Altered Ventilation & Perfusion
6. Altered Nutrition, Fluids, & Elimination
7. Altered Metabolic- Hormonal Regulation
8. Altered Neuro-Sensory Regulation

**D. LEARNING OUTCOMES (General)**

1. Identify normal and abnormal findings on focused and comprehensive health assessments.
2. Apply general principles of pharmacokinetics and pharmacodynamics in the application of drug therapy.
3. Describe variations of pathophysiology and pharmacology across the lifespan.
4. Explain pharmacogenomics treatment options for a variety of disease processes.
5. Describe the principles of homeostasis, compensation, and adaptation manifest in various body systems and disease processes.
6. Recognize the link between clinical signs and symptoms of common diseases and the underlying pathophysiological processes.
7. Demonstrate critical thinking in the application of pathophysiological and pharmacologic principles.
8. Demonstrate ability to retrieve evidence-based treatment guidelines for management of disease processes.
9. Discuss legal, ethical, and economic aspects of pharmacology.

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

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted