



**St. Luke's Hospital School of Nursing  
at Moravian College  
Bethlehem, PA**



**COURSE NO:** NURS205

**COURSE TITLE:** Pathophysiology

**SEMESTER:** Fall, 2010

**INSTRUCTOR:** Jennifer A. Specht, MSN, RN, Assistant Professor  
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Office Hours: Mondays: 12n – 1p; 230p – 330p  
Wednesdays: 12n – 1p; 230p – 430p

**TEXTBOOKS:**

Required:

Porth, C.M. (2007). *Essentials of pathophysiology: concepts of altered health states* (2<sup>nd</sup> ed). Philadelphia, PA: Lippincott, Williams, & Wilkins.

**PREREQUISITES:**

Biology 103 and 104

**COURSE DESCRIPTION:**

Mechanisms of disease in humans. Emphasis is on dysfunction at cellular, tissue, and organ levels. Chemical, physical, and genetic stress factors are examined to understand how they affect human systems.

**COURSE OBJECTIVES:**

By the conclusion of this course, the student will be able to:

1. Understand genetic, cellular, and tissue adaptive responses to stress and injury.
2. Recognize the etiology and pathogenesis of common diseases.
3. Discuss the natural history and clinical manifestation of common diseases.
4. Describe the relationship between pathophysiological processes and alterations in body structure and/or function.

**TEACHING METHODS:**

Lecture, discussion, select audiovisuals.

**EVALUATION:**

Course grades are based on the following numerical equivalencies:

A	=	93-100
A-	=	90-92.99
B+	=	87-89.99
B	=	83-86.99
B-	=	80-82.99
C+	=	77-79.99
C	=	73-76.99
C-	=	70-72.99
D+	=	67-69.99
D	=	64-66.99
D-	=	60-63.99
F	=	Below 60

**Examinations**

All examinations will utilize items with four multiple choice responses. Only one response will be correct. Examination dates are noted on the course outline. Examinations include quizzes, a mid-term examination, and a final examination.

The mid-term examination will test all course content covered from the beginning of the term, and the final examination will test all course content covered since the mid-term examination. The mid-term and final exams will be given on BlackBoard. Students will be expected to access BlackBoard during the specified time period to complete each examination. Exams will have a three (3) hour time limit. In addition, the entire examination must be completed once accessed.

Quizzes will be given at the beginning of class, and will include 20 items. ALL students will be allotted 30 minutes to take the quizzes, beginning with the first minute of class. Lateness to class for ANY reason will not merit extra testing time. A total of seven quizzes will be administered, and the student may drop the lowest quiz grade. There will be no quiz make-ups. Absence during a quiz for any reason, even verifiable illness or family emergency, will not merit a make-up.

**Short Papers on Diseases**

Students will each submit two short papers over the course of the semester on diseases of their own choosing. These papers will focus on a disease, which may be either a common disease or an obscure disease, as long as the disease is not discussed in advance of paper submission in classroom lectures (refer to topical content to determine which diseases should be excluded). Any student who wishes to discuss selection of a disease with the course faculty is welcome to do so.

These papers should follow the standard stylistic requirements for nursing majors, which utilizes style elements from the *American Psychological Association Manual (APA)* (5<sup>th</sup> edition). Group papers are not acceptable.

Papers must be submitted by the due date or the student will receive a zero for the assignment. Early submissions are very welcome.

Required elements of these papers include the following:

- 2-4 pages in length (standard 8.5" x 11" paper), not including the title page and references, using one inch margins, double-spaced, 12 point, Times New Roman font. Do not include an abstract. Papers that do not adhere to these requirements will not be reviewed nor accepted.
- Writing style and grammar (please utilize full sentences and paragraphs) 15%
- References: 2-4 peer-reviewed citations, not including sources that include *Wikipedia* and other non-reviewed sources. Citing web-sites from seemingly credible sources, such as the *Mayo Clinic* or *MedScape*, are not acceptable sources for citations. One source may be the textbook for this course. Textbooks and articles from peer-reviewed journals are the only acceptable sources for citations. 10%

Sections:

- General Characteristics 15%
- Risk Factors: if relevant, please include the following: 15%
  - Discussion of Genetic Transmission
  - Discussion of Disease Transmission
- Clinical Manifestations 15%
- Natural Course of Disease 15%
- Levels of Prevention/Treatment 15%

**Course Grades**

Disease Papers (10% each)	20%
Quizzes (best six out of seven)	20%
Mid-Term Examination	30%
Final Examination	30%

**COURSE ATTENDANCE POLICY:**

Students are expected to attend class but will not merit extra points for class attendance, nor have points deducted for lack of attendance. Students are expected to read assigned textbook readings prior to class, and review relevant concepts from Anatomy and Physiology prior to class lectures. Students who are experiencing course-related difficulty should consult the course faculty in a timely and constructive manner.

**ACADEMIC HONESTY:**

Academic honesty in all course-related assignments is an expectation of this course faculty. Students who plagiarize on presentations will receive a zero for the presentation assignment. Students who cheat on quizzes or other examinations will receive a zero for that assignment. Students who plagiarize or cheat will be prosecuted in accordance with policies outlined in the *Moravian College Student Handbook*.

## COURSE OUTLINE

<b><u>Date:</u></b>	<b><u>Lecture Content and Student Assignments</u></b>
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Sept 1	Overview of Course Introduction of Key Terms Cellular adaptation, injury, & healing <u>Readings:</u> Porth, Chapter 2  Genes, gene-environment interaction, genetic anomalies <u>Readings:</u> Porth, Chapter 3  Genetic anomalies <u>Readings:</u> Porth, Chapter 4  Oncogenesis, cancer clinical manifestations & treatment <u>Readings:</u> Porth, Chapter 5
Sept 8	<b>Quiz #1</b> Leukocytic and lymphoid disorders <u>Readings:</u> Porth, Chapter 9  Hematopoiesis Hemostasis Coagulopathies <u>Readings:</u> Porth, Chapter 10  Anemias <u>Readings:</u> Porth, Chapter 11
Sept 15	<b>Quiz #2</b> Immune responses <u>Readings:</u> Porth, Chapter 13  Immune disorders <u>Readings:</u> Porth, Chapter 15
Sept 22	Clinical manifestations of infectious diseases and their treatment <u>Readings:</u> Porth, Chapter 12  Inflammatory responses <u>Readings:</u> Porth, Chapter 14
Sept 29	<b>Quiz #3</b> Cardiovascular disorders <u>Readings:</u> Porth, Chapter 16  Hypertension <u>Readings:</u> Porth, Chapter 17

<b><u>Date:</u></b>	<b><u>Lecture Content and Student Assignments</u></b>
Oct 6	<p>Coronary artery disease  <u>Readings:</u> Porth, Chapter 18</p> <p>Heart failure  <u>Readings:</u> Porth, Chapter 19</p>
Oct 13	<p><b>First Disease Paper Due</b>  Male reproductive disorders  Testicular and prostatic disorders  <u>Readings:</u> Porth, Chapter 38</p> <p><i><u>Guest Lecturer:</u> Dr. Lori Hoffman, Associate Professor</i>  Female reproductive disorders  Menstrual disorders  Breast disorders  <u>Readings:</u> Porth, Chapter 39</p>
Oct 20 (**Room 102)	<p>Pulmonary disorders  <u>Readings:</u> Porth, Chapter 20</p> <p>Ventilation-perfusion mismatch  Restrictive pulmonary diseases  <u>Readings:</u> Porth, Chapter 21</p> <p>Obstructive pulmonary diseases  <u>Readings:</u> Porth, Chapter 22</p>
Oct 21 to Oct 27 Oct 27	<p><b>ON-LINE/BLACKBOARD Mid-Term Examination</b>  NO CLASS – Sipple Lecture (attendance required)</p>
Nov 3	<p><b>Quiz #4</b>  Renal disorders  <u>Readings:</u> Porth, Chapter 23</p> <p>Renal Failure  <u>Readings:</u> Porth, Chapter 25</p>
Nov 10	<p><b>Quiz #5</b>  Gastrointestinal disorders  <u>Readings:</u> Porth, Chapter 27</p> <p>Peptic ulcer disease  Inflammatory bowel diseases  <u>Readings:</u> Porth, Chapter 28</p> <p>Hepatobiliary and exocrine pancreatic disorders  Hepatitis &amp; cirrhosis  <u>Readings:</u> Porth, Chapter 29</p>

**Date:**                      **Lecture Content and Student Assignments**

Nov 17                      **Second Disease Paper Due**  
Musculoskeletal disorders  
Readings: Porth, Chapter 41

Bone fractures  
Readings: Porth, Chapter 42

Rheumatic diseases  
Readings: Porth, Chapter 43

Nov 24                      NO CLASS – Thanksgiving Break

Dec 1                      **Quiz #6**  
Neurological disorders  
Readings: Porth, Chapter 33

Somatosensory disorders  
Nociception  
Readings: Porth, Chapter 34

Motor function disorders  
Readings: Porth, Chapter 35

Brain function disorders  
Disruption in thought and mood  
Readings: Porth, Chapter 36

Dec 8                      **Quiz #7**  
Endocrine disorders  
Readings: Porth, Chapter 30

Thyroid disorders  
Readings: Porth, Chapter 31

Diabetes mellitus  
Neuropathies  
Readings: Porth, Chapter 32

Dec 9 - 15                      **ON-LINE/BLACKBOARD - Final Examination and Course Evaluations**