



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



COURSE NO: Biology 205

COURSE TITLE: Pathophysiology

SEMESTER: Fall, 2010

INSTRUCTOR: Jennifer A. Specht, MSN, RN, Assistant Professor
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E-Mail: Jennifer.Specht@Moravian.edu
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* (2nd 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	C = 73-76.99
A- = 90-92.99	C- = 70-72.99
B+ = 87-89.99	D+ = 67-69.99
B = 83-86.99	D = 64-66.99
B- = 80-82.99	D- = 60-63.99
C+ = 77-79.99	F = Below 60

Examinations:

All examinations will utilize items with four multiple choice responses. Only one response will be correct. This type of format will help to prepare the student to successfully take the nursing board examination (i.e., NCLEX-RN). 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. Students will be allotted the entire class/testing period to take the mid-term and the final examinations. 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 two quiz grades. 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.

Course Grades:

Quizzes (highest five of seven)	40%
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 the course faculty. 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

<u>Date:</u>	<u>Lecture Content and Student Assignments</u>
August 30	<p>Overview of Course Introduction of Key Terms Cellular adaptation, injury, & healing</p> <p><u>Readings:</u> Porth, Chapter 2</p>
September 1	<p>Genes, gene-environment interaction, genetic anomalies</p> <p><u>Readings:</u> Porth, Chapters 3 & 4</p>
September 6	NO CLASS – Labor Day Holiday
September 8	<p>Oncogenesis, cancer clinical manifestations & treatment</p> <p><u>Readings:</u> Porth, Chapter 5</p>
September 13	<p>Quiz #1 Hematopoiesis Hemostasis Coagulopathies</p> <p><u>Readings:</u> Porth, p. 179-181, and Chapter 10</p>
September 15	<p>Anemias</p> <p><u>Readings:</u> Porth, Chapter 11</p>
September 20	<p>Leukocytic and lymphoid disorders</p> <p><u>Readings:</u> Porth, Chapter 9</p>
September 22	<p>Quiz #2 Immune responses and immune disorders</p> <p><u>Readings:</u> Porth, Chapters 13 & 15</p>

<u>Date:</u>	<u>Lecture Content and Student Assignments</u>
September 27	Inflammatory responses <u>Readings:</u> Porth, Chapter 14
September 29	Clinical manifestations of infectious diseases and their treatment <u>Readings:</u> Porth, Chapter 12
October 4	Quiz #3 Cardiovascular disorders Hypertension <u>Readings:</u> Porth, Chapters 16 & 17
October 6	Coronary artery disease <u>Readings:</u> Porth, Chapter 18
October 11	NO CLASS – Fall Break
October 13	Heart failure <u>Readings:</u> Porth, Chapter 19
October 18	Mid-Term Examination
October 20	<i>Guest Lecturer: Dr. Lori Hoffman, Associate Professor</i> Female reproductive disorders Menstrual disorders Breast disorders <u>Readings:</u> Porth, Chapter 39
October 25	Male reproductive disorders Testicular and prostatic disorders <u>Readings:</u> Porth, Chapter 38

<u>Date:</u>	<u>Lecture Content and Student Assignments</u>
October 27	Pulmonary disorders Ventilation-perfusion mismatch Restrictive pulmonary diseases <u>Readings:</u> Porth, Chapters 20 & 21
November 1	Quiz #4 Obstructive pulmonary diseases <u>Readings:</u> Porth, Chapter 22
November 3	Renal disorders Acid-base, fluid & electrolyte regulation <u>Readings:</u> Porth, Chapter 23
November 8	Acute and chronic renal failure <u>Readings:</u> Porth, Chapter 25
November 10	Quiz #5 Gastrointestinal disorders Peptic ulcer disease Inflammatory bowel diseases <u>Readings:</u> Porth, Chapters 27 & 28
November 15	Hepatobiliary and exocrine pancreatic disorders Hepatitis & cirrhosis <u>Readings:</u> Porth, Chapter 29
November 17	Musculoskeletal disorders Bone fractures <u>Readings:</u> Porth, Chapters 41 & 42

<u>Date:</u>	<u>Lecture Content and Student Assignments</u>
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November 22

Quiz #6

Rheumatic diseases

Readings:

Porth, Chapter 43

November 24

NO CLASS – Thanksgiving Break

November 29

Neurological disorders
 Somatosensory disorders
 Nociception

Readings:

Porth, Chapters 33 & 34

December 1

Motor function disorders
 Brain function disorders
 Disruption in thought and mood

Readings:

Porth, Chapters 35 & 36

December 6

Quiz #7

Endocrine disorders
 Thyroid disorders

Readings:

Porth, Chapters 30 & 31

December 8

Diabetes mellitus

Readings:

Porth, Chapter 32

Final Examination: will be administered on *Thursday, December 16 at 8:30 AM*