

**Kingsborough Community College**  
City University of New York  
Department of Nursing  
Nursing 27: Pathophysiology Course Syllabus: 2010-2011  
Prerequisites: Biology 12, Science 25 Credit hours: 3cr. 3 hours

**NUR 27 -- PATHOPHYSIOLOGY (3crs. Hrs.)**

Focuses on physiologic and pathophysiological mechanisms that act singly or in direct concert to produce alterations on a cellular, tissue, organ, system level as well as on the total human organism. Emphasis is placed on underlying concepts that create constellations of recurrent patterns of cellular dysfunction and in the progression to alterations in system function.

Prerequisites: BIO 12, Science 25 or Department permission

**Course Overview:** The course introduces the student to the concepts of illness across the life span. The student develops an awareness of the cellular and system dysfunction that result in illness. The understanding of pathophysiology can facilitate the health professional and consumer to assume a proactive role in health care. Application of pathophysiology can facilitate the learner's ability to assess and implement strategies that influence health care and clinical practice. Classroom instruction/ Blackboard: 3 hours. **This course requires access to Microsoft office programs: word and power point.** These programs can be accessed at home, or on campus in the library and/or MAC 224 computer labs.

**Course objectives:** Upon completion of this course the student will:

1. Incorporate the knowledge and skills from the biological, behavioral and physical sciences that influence pathophysiology and altered health states.
2. Describe pathophysiological concepts that alter health and influence disease.
3. Explain the principles of cellular and system disturbances that result in disease.
4. Identify clients/populations at risk for development of altered health states that are related to genetics, culture, lifestyle and environment.
5. Apply principles of health maintenance, early detection and treatment of disease complications to nursing and the interdisciplinary health team.
6. Discuss the implications of current research, health care practices and disease that influence clinical practice.

### Teaching Strategies:

1. Lecture/ discussion
2. Blackboard/PowerPoint presentation
3. Select assignments

### Course requirements:

Required Textbook: Porth, Carol Mattson. (2007) Essentials of Pathophysiology: Concepts of Altered Health States (2nd edition) Philadelphia: Lippincott, Williams & Wilkins.

**Attendance:** Nursing 27 is a hybrid course. Students are expected to attend class on required days. **In addition, students are expected to log onto Blackboard weekly.** Class attendance and logons will be used to determine class attendance. A student is deemed excessively absent in any course when he/she has been absent 15% or more of the contact hours a class meets during a semester. **More than one week not logged on to Blackboard constitutes excessive absence for nursing 27.**

When a student is excessively absent, a grade of “W” or “WU” will be assigned as described in the college catalog.

All pagers, wireless phones, electronic games, radios, tape or CD players or other devices that generate sound must be turned off when any member of the academic community enters a classroom. Cellular devices are allowed to be on in the classroom only if the owner is using the caller ID, voice messages or a vibrating battery or universal clip mechanism. **NO TEXTING IS ALLOWED AT ANY TIME DURING CLASS AND/OR LABS.** Members of the academic community must exit the classroom to make or receive calls.

### Effective Fall 2009 Criteria for retention in the Nursing Program mandates that students:

1. Earn a minimum of a “C” grade in every required Nursing and co-requisite course. **Students who achieve a C- grade in a required nursing course may apply to repeat the course one time only in the semester immediately following, subject to space availability. The online “Intent to Return to Nursing Course” form** must be completed and include a plan for success that demonstrates significant changes in how they will approach the course when repeated. Only one required nursing course may be repeated.
2. Students who enter Nursing 18 **MUST** complete the Nursing Program within four years from the date of entry into this course. Any student who has not attended required nursing courses for two or more consecutive semesters cannot be readmitted into the Nursing Program unless qualifying examinations have been passed in the required nursing courses previously successfully completed. Qualifying examinations may be taken only once.

**Evaluation:** Grades will be calculated according to college policy as follows:

A+ 97 - 100% A 93 - 96% A- 90 - 92

B+ 87 - 89% B 83 - 86% B- 80 - 82

C+ 78 - 79% C 75 - 77% C- 70 - 74

D+ 66 - 69% D 60 - 65%

F 59% and below

INC -Incomplete (counts as an F unless work is completed within six months)

WU -Withdrew Unofficially (counts as failure)

W -Withdrew without penalty

**Nursing 27 course grades will be determined as described below:**

Exams (1): 25% (Any missed exam will be completed on the final class day)

On line discussions (6): 5% each for a total of 30%

On line assignments (1): 20%

Final assignment (1): 25% of your total grade

Written assignments must comply with college standards and must be submitted for course completion. Five (5) points per day will be penalized for late submissions.

**Exam will consist of multiple choice and true/false questions.**

**Exam questions will be compiled from both classroom lecture material, PowerPoint presentations, and assigned readings from the course text book.**

**Exam may include lab study analysis:** Normal laboratory values must be known to answer the questions: Serum chemistry, hematology, and coagulation studies, arterial blood gases (ABG), urinalysis and disease specific indicators that are part of course content may be included in each exam.

**Assignments and discussion questions must be submitted by the due date. There will be a 10% penalty for each late day.**

**Academic Integrity**

Nursing 27 is in compliance with the CUNY policy concerning academic dishonesty. All components of this course (lecture/exams/papers and assignments) adhere to standards of academic integrity. Please refer to Kingsborough Community College and read policy:

[www.kbcc.cuny.edu/Academic\\_Integrity\\_Policy.pdf](http://www.kbcc.cuny.edu/Academic_Integrity_Policy.pdf)

A sample of the Nursing Department Academic policy statements for exams is attached for review.

Topical outline (see attached). Each unit will relate to pathophysiological responses and disease states with the focus of the unit objectives:

The learner will:

1. Discuss the system alterations that result in pathophysiological responses and disease.
2. Identify the populations at risk for development of disease.
3. Evaluate health promotion/screening activities that promote early detection of disease.
3. Determine the acute/chronic symptoms of disease and its complications.
4. Relate diagnostic tests and results to the pathophysiological changes.
5. Describe diet, exercise, lifestyle, medical/surgical and pharmacological management of the disease.
6. Identify community organizations and resources for screening, early detection and treatment of disease.
7. Discuss the implications for nursing and the interdisciplinary health team roles in health promotion, screening, detection and treatment of disease.
8. Identify implications for research that influence health care and disease management.

Course Schedule

Date Topic Assignment

Pathophysiology Course Schedule

Week	Topic(s)	Reading Assignments	
Week 1	<p>Course orientation/requirements Nursing 27 syllabus/ KCC academic honesty policy</p> <ul style="list-style-type: none"> <li>• Cell Structure and Function</li> <li>• Cellular Response to Stress, Injury, and Aging</li> <li>• Genetic Control of Cell Function and Inheritance</li> <li>• Genetic and Congenital Disorders</li> </ul>	<p><i>Please familiarize yourself with your textbook by reading the preface and opening the enclosed CD-ROM.</i></p> <p><i>To register for on-line resources, visit <a href="http://thePoint.lww.com">thePoint.lww.com</a></i></p> <ul style="list-style-type: none"> <li>• Chapter 1</li> <li>• Chapter 2</li> <li>• Chapter 3</li> <li>• Chapter 4</li> </ul>	<p><b>Classroom Experience</b>  <b>3/4/11</b></p>

Week 2	<ul style="list-style-type: none"> <li>• Immunity and Infection</li> <li>• Neoplasm/Leukemia/Lymphoma</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 12 &amp;13 (review)</li> <li>• Chapter 14 &amp; 15</li> <li>• Chapter 5, 9</li> </ul>	<b>On Line Experience</b> On Line Assignment  <b>Due Date: 3/11/11</b>
Week 3	<ul style="list-style-type: none"> <li>• Blood and Lymphatic Disorders</li> <li>• Disseminated Intravascular Coagulation (DIC)</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 10 &amp;11</li> </ul>	<b>On Line Experience</b> Discussion Question #1  <b>Due Date: 3/18/11</b>
Week 4	<ul style="list-style-type: none"> <li>• Fluids and Electrolytes</li> <li>• Acid-Base Balance</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 6</li> </ul>	<b>On Line Experience</b> Discussion Question #2  <b>Due Date: 3/25/11</b>
Week 5	<ul style="list-style-type: none"> <li>• Urinary System Disorders</li> <li>• Renal failure</li> </ul> <b>Exam I</b>	<ul style="list-style-type: none"> <li>• Chapter 23, 24, 25</li> </ul>	<b>Classroom Experience</b>   <b>4/1/11</b>
Week 6	<ul style="list-style-type: none"> <li>• Gastrointestinal Disorders</li> <li>• Endocrine Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 27, 28</li> <li>• Chapter 30 (review)</li> <li>• Chapter 31, 32</li> </ul>	<b>On Line Experience</b> Discussion Question #3  <b>Due Date: 4/8/11</b>

Week 7	<ul style="list-style-type: none"> <li>• Pulmonary Disorders</li> <li>• Peripheral vascular Disease (PVD)</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 20, 21, 22</li> </ul>	<b>On Line Experience</b> Discussion Question #4 <b>Due date: 4/15/11</b>
Week 8	<ul style="list-style-type: none"> <li>• Cardiac Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 16, 17, 18, 19</li> </ul>	<b>On Line Experience</b> Discussion Question #5  <b>4/29/11</b>
Week 9	<ul style="list-style-type: none"> <li>• Musculoskeletal Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 41, 42, 43</li> </ul>	<b>On Line Experience</b> Discussion question #6  <b>Due Date: 5/6/11</b>
Week 10	<ul style="list-style-type: none"> <li>• Acute Neurological Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 33, 34, 36</li> </ul>	<b>On line experience</b>  <b>5/13/11</b>
Week 11	<ul style="list-style-type: none"> <li>• Chronic Neurological Disorders</li> </ul>	<ul style="list-style-type: none"> <li>• Chapter 35, 36</li> </ul>	<b>Classroom experience</b>  <b><i>Final assignment</i></b>  <b>Due Date: 5/20/11</b>

