

Kingsborough Community College

City University of New York

Department of Nursing

Nursing 27: Pathophysiology

Course Syllabus: 2009-2010

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. Class work will consist of 3 hours of lecture/discussion.

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.

Course requirements:

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

Attendance: Complete participation in class is possible only when students are able to focus attention on the class, therefore entering class after it has begun is disrespectful to Faculty and classmates. Talking out of turn or exhibiting other disruptive behaviors is not tolerated and students will be asked to leave the classroom or lab. 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.

A student is deemed excessively absent when absent 15% of the number of contact hours a class meets during a semester. **More than five hours of lecture constitutes excessive absence.** When a student is excessively absent, a grade of "WU": will be assigned as described in the college catalog.

Attendance at pre and post-conferences for agency laboratory experiences is required. Absence from these conferences constitutes an absence for that agency laboratory experience.

A student is deemed excessively absent in any course when he or she has been absent 15% of the number of contact hours a class meets during a semester.

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

Grades for nursing 27 will be determined as described below:

Group Presentation: 10 % total

4 Exams 50% (Any missed exams will be completed on the final exam day)

Case studies (10 % total) 2 typed case studies selected from course readings. One case study must be an infant, child or adolescent. The other may be an adult/older adult. Each case study is 5% for a total of 10%. Failure to submit a case study by the end of the course will result in a zero (0) grade for the assignment.

Final Exam 30% Cumulative

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

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

Required text: Port, Carol Mattson. (2007) Essentials of Pathophysiology: Concepts of Altered Health States. (Second edition). Philadelphia, 2007.

Date	Topic	Assignment
9/12/2009	Course orientation/requirements KCC academic honesty policy Cell injury and response Inflammation and healing	Nursing 27 syllabus Chapter 1&2 Chapter 14
9/19/2009	<u>NO CLASS</u>	
9/26/2009	Immunity and Infection Neoplasm/Leukemia/Lymphoma	Chapter 12 &13(review) Chapter 14 and 15 Chapter 5, 9
10/3/2009	<u>Exam # 1</u> Blood and lymphatic disorders Disseminated intravascular coagulation	Chapter 10, 11
10/10/2009	Fluid and Electrolytes Acid/base balance	Chapter 6
10/17/2009	Urinary system disorders Renal failure <u>CASE STUDY 1 DUE</u>	Chapter 23, 24 Chapter 25
10/24/2009	<u>Exam # 2</u>	

	Gastrointestinal disorders	Chapter 27, 28
	Endocrine disorders	Chapter 30(review) Chapter 31, 32
10/31/2009	Pulmonary Peripheral vascular	Chapter 20(review) Chapter 21, 22
11/7/2009	Exam # 3 Cardiac disorders	Chapter 16,17,18,19
11/14/2009	Musculoskeletal disorders	Chapter 41(review) Chapter 42, 43
	Case study #2 due	
11/21/2009	Exam # 4 Acute neurological disorders	Chapter 33(review) Chapter 34, 36
11/28/2009	<u>NO CLASS</u>	
12/5/2009	Chronic neurological disorders	Chapter 35, 36
12/12/2009	Male/ Female Reproductive disorders Pregnancy Congenital and Genetic disorders	Chapter 38, 39 167, 222-223, 315, 371-372 Chapter 4
12/19/2009	<u>Nursing 27 Final Exam 5PM to 9PM</u>	

Exam Content: Every exam will include lab 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 will be included in each exam.

Exam 1
 Introduction/pathophysiology
 Immunity/Infection
 Systemic Lupus Erythematosus
 Vaccination
 HIV/AIDS
 Opportunistic infections
 Noscomial infection: C difficile, MRSA

Exam 2
 Anemia (all)
 Fluid and electrolyte imbalance
 Fluid volume excess/deficit
 Acid/Base imbalances

Exam 3

Liver

Pancreas

Peptic ulcer

GERD

Pyloric Stenosis

Hiatal hernia

GI Disorders

Exam 4

Cardiac, hypertension

Pregnancy induced hypertension

MI/CHF

Dysrhythmia

Atrial fibrillation

Pulmonary: CPOD, Asthma, TB,

Arterial blood gases

Final exam is cumulative and will include all course content.