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**Philadelphia University
Faculty of Pharmacy
2nd. semester, academic year 2017-2018**

Course syllabus

Course title: pathophysiology	Course code: 0510432
Course level: 4th year	Course prerequisite (s) and/or co-requisite (s): Physiology2 (510232)
Lecture time: 8-9; 10.20-11.20	Credit hours: 2 hours
	Contact hours: 9-10
Location:	Nursing college

Academic Staff

Specifics

Name	Rank	Office number and location	Office hours	E-mail address
Dr. basim edreess dhannoon	Associate Prof.	nursing college office 502	10-11	bdhannoon@philadelphia.edu.jo

Course description (According to the University Catalogue)

This course is designed to provide the students with knowledge about disease & dysfunction from anatomical & physiological perspective, with emphasis on integrating knowledge of tissues & organ systems into a holistic framework of body function & dysfunction. It will provide the student with a strong theoretical perspective on the mechanisms of normal and altered functioning of human cells, organs and organ systems.

Using a comprehensive study guide with reference to additional readings, course content is presented in a way that fosters a critical and conceptual foundation emphasizing the integration of organ systems and their function within the body. Particular emphasis is placed on the widespread effects upon other systems following dysfunction of a particular organ or system of the human body and the ability to discuss specific disorders in relation to general concepts of dysfunction.

Course objectives:

The aim of this course is to introduce the student to the basic mechanisms of diseases, organs affected by the diseases, and their relationship with normal physiological and pathological findings which have been studied by students previously (physiology and pathology), and their disorders. Other goals include:

1: Understand the basic mechanism of organs disorder.

2: Acquire common terminology used in pathophysiology and the basic cell changes associated with disease processes.

3: Outline cardiac disorders such as myocardial infarction, congestive heart failure, angina pectoris, & hypertension.

4: Discuss major disorders such as COPD, tuberculosis, cystic fibrosis, infections of the upper tract and pneumonia & respiratory distress syndrome.

5: Outline digestive system disorders.

6: Classify digestive system disorders into structural abnormalities, infections, or inflammatory conditions.

7: Explain the mechanisms of altered structure and function in the urinary systems, including blood pressure, acid-base balance and calcium metabolism in addition to the system's role in elimination.

8: Discuss acute and chronic renal failure.

9: Outline urinary tract disorders such as cystitis, pyelonephritis & glomerulonephritis.

10:Outline focal signs, based on the area of damage related to loss of normal function .

11:Outline endocrine disorders in diabetes mellitus.

12:Identify signs and symptoms of Cushing's syndrome and it's potential complications.

13: Evaluate the disease processes related to altered adrenal function.

Course/ resources

- Text book/ books (title , author (s), publisher, year of publication)
 - 1.Robbins basic pathology,9th edition, Vinay Kumar,2013
 - 2.Understanding pathophysiology,5th edition,Sue E,Huether,2012,ISBN:978-0-323-07891-7.
 - 3.Pathophysiology:practical approach, Lachel story,2012,ISBN:978-1-4496-2408-8.

- **Support material (s) (vcs, acs, etc).**

- **Study guide (s) (not applicable)**

- **Laboratory Handbook/ books (not applicable)**

Teaching methods (Lectures, discussion groups, tutorials, problem solving, debates, etc)

Classes will be held twice a week. The content of this course will be presented in a variety of different formats:

1. Didactic lectures;
2. Assigned readings; and

3. Group discussion in class.

Learning outcomes:

- Knowledge and understanding

-----*Build Knowledge on the abnormal organic disorders to previous obtained knowledge of physiology & pathology.

*Understand the basic mechanism of organs disorders.

*Be aware that our understanding of physiological processes in both health and disease is incomplete, subject to error and likely to change in the light of new research findings.

*Understand the mechanisms of disease in relation to different organs

- Cognitive skills (thinking and analysis).

-----*Discuss normal physiologic dysfunctions which maintain dynamic equilibrium of the human organism s relationship to disordered form & function.

- Communication skills (personal and academic).

-----*Appreciate the impact of disordered physiology on the individual & the family.-----

- Transferable Skills.

-----*Appreciate psychological & social mechanisms developed by individuals to deal with the impact of disordered form or function

* Appreciate the importance of clear communication among health professionals & their clients in situations involving disordered physiology.-----

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- Psychomotor Skills (When applicable)

Assessment instruments

- Exams (First, Second and Final Exams)
- Quizzes.
- Short reports and/ or presentations, and/ or Short research projects
- Homework assignments
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<u>Allocation of Marks</u>	
Assessment Instruments	Mark
First examination	20
Second examination	20
Final examination: 50 marks	40
Reports, research projects, quizzes, homework, Projects	20
Total	100

Documentation and academic honesty

- Documentation style (with illustrative examples)

It is expected that all students help to maintain an environment of academic honesty. The following behaviors are strictly forbidden during the administration of the exam: talking, wearing of hats with bills, checking, sending, and answering of cell phones. All students are required to hand-in the packet of the test questions with their name and 6-digit student ID number clearly indicated on each page of the exam.

- Protection by copyright

- Avoiding plagiarism.

Course/ academic calendar

Week	Basic & support material to be covered
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1st & 2nd weeks

Introduction & cell and basic terms of pathophysiology, General Features of Inflammation, Pathologic Aspects of Repair, Edema, Thrombosis, Embolism, Infarction & Shock.

3rd week & 4th

Digestive system disorders: Oral Inflammatory Lesions, Diseases of Salivary Glands, Diseases of the Esophagus, stomach & intestine (ulcers, Gastric Polyps and Tumors, Intestinal Obstruction, Vascular Disorders of Bowel, Malabsorptive Diarrhea, Infectious Enterocolitis, Diverticulitis, Ulcerative colitis & Acute appendicitis.

5th & 6th weeks

Respiratory disorders: Asthma, bronchitis, Tuberculosis, Acute Respiratory Distress Syndrome, Asbestos, Pneumoconiosis, Sarcoidosis, Pulmonary Embolism, pneumonia & Carcinomas of the Lung

1st semester examination

7th & 8th weeks

Cardiovascular system Disorders: hypertension, Aneurysms and Dissections, Atherosclerosis, Vasculitis & Vascular Tumors

Heart disorders: myocardial infarction, heart failure, Congenital heart disease, Ischemic cardiomyopathy, Ischemic Heart Disease, Angina

pectoris, Arrhythmias, Cor pulmonale, Valvular Heart Disease, Infective endocarditis, Cardiomyopathy & Myocarditis

9th week

Cerebrovascular Diseases : Cerebral Edema, Hydrocephalus, Herniation, Stroke, Cerebro-Vascular Accidents (CVA), Subarachnoid Hemorrhage and Saccular Aneurysms

11thweek

Blood diseases :anemia&leukemia

10th week

Nervous & muscular systems disorders: Peripheral Neuropathies, Guillain-Barré syndrome, Lambert-Eaton syndrome, Dystrophinopathies, Schwannomas and neurofibromas, Hydrocephalus, Cerebrovascular Diseases& Multiple sclerosis

12th weeks

Renal disorders: Nephrotic Syndrome,renal failure,stone, Membranous nephropathy, Nephritic Syndrome, Tubulointerstitial Nephritis, Acute Tubular Injury, Arterionephrosclerosis, Adult polycystic kidney& Renal Cell Carcinoma

Second semester examination

13-14 weeks

Endocrine disorders: Diabetes Mellitus, cushing syndrome, infertility, Hyperpituitarism, Hashimoto thyroiditis, Graves Disease, Hyperparathyroidism & Obesity

15th week

Male &female genital diseases

16th week

Skin diseases

Final exam.

Expected workload:

On average students need to spend 2 hours of study and preparation for each 50-minute lecture/tutorial.

Attendance policy:

Absence from lectures and/or tutorials shall not exceed 15%. Students who exceed the 15% limit without a medical or emergency excuse acceptable to and approved by the Dean of the relevant college/faculty shall not be allowed to take the final examination and shall receive a mark of zero for the course. If the excuse is approved by the Dean, the student shall be considered to have withdrawn from the course.

Other Education Resources

Books

Students will be expected to give the same attention to these references as give to the module textbook.

1:Essentials of pathophysiology: concepts of altered health states, Porth, Carol Mattson, Wolters Kluwer /Lippincott Williams&Wilkins,1st

Edition 2010.

2:Pathophysiology ,Damjanvo, Ivan, Philadelphia: Saunders/Elsevier 1st edition,2009.

**3:Essentials of pathophysiology :concepts of altered health states, porth,
Carol Mattson, 2007 , 2d edition.**

**4:Pathophysiology : functional in human health, Braun, Carie A.Anderson
Cindy M.Lippincott Williams&Wilkins, 1st edition, 2007.**

Journals

N/A

Websites

www.freemedicaljournals.com, www.ahajournals.org