

Philadelphia University	 PHILADELPHIA UNIVERSITY THE WAY TO THE FUTURE	Approved Date: 10/10/2022
Faculty: pharmacy		Issue: 1
Department:-	Course Syllabus	Credit Hours:3
Academic Year:2022/2023		Bachelor:

Course Information

Course No.	Course Title	Prerequisite	
0510432 0520300	Pathophysiology	Physiology 2 (0520223)	
Course Type		Class Time	Room No.
<input type="checkbox"/> University Requirement <input checked="" type="checkbox"/> Faculty Requirement <input checked="" type="checkbox"/> Major Requirement <input type="checkbox"/> Elective <input type="checkbox"/> Compulsory			

Instructor Information

Name	Office No.	Phone No.	Office Hours	E-mail

Course Delivery Method

<input type="checkbox"/> Blended <input type="checkbox"/> Online <input checked="" type="checkbox"/> Physical			
Learning Model			
Percentage	Synchronous	Asynchronous	Physical
			100%

Course Description

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 Learning Outcomes

Number	Outcome	Corresponding Program Outcomes	Corresponding Competencies

Knowledge			
K1	Build Knowledge on the abnormal organic disorders to previous obtained knowledge of physiology & pathology.	K _p 1	C1
K2	Understand the basic mechanism of organs disorders	K _p 1	C1
K3	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.	K _p 1	C1
K4	Understand the mechanisms of disease in relation to different organs	K _p 1	C1
Skills			
S1	Discuss normal physiologic dysfunctions which maintain dynamic equilibrium of the human organisms relationship to disordered form & function, and solve clinical cases related to acute and chronic diseases	S _p 2	C8
S2	Appreciate the impact of disordered physiology on the individual & the family	S _p 3	C9
S3	Appreciate psychological & social mechanisms developed by individuals to deal with the impact of disordered form or function	S _p 6	C12
S4	Appreciate the importance of clear communication among health professionals & their clients in situations involving disordered physiology	S _p 6	C12

Learning Resources

Course Textbook	Pharmacotherapy: a pathophysiological approach , Joseph T. DiPiro, Gary C. Yee, L. Michael Posey, Stuart T. Haines, Thomas D. Nolin, Vicki L. Ellingrod, 11 th edition; 2021; ISBN-13: 978-1260116816
Supporting References	<ul style="list-style-type: none"> • Understanding Pathophysiology, Sue E. Huether, 5th edition; 2008; ISBN-10: 0323078915 • Essentials of pathophysiology: concepts of altered health states, Porth, Carol Mattson, Wolters Kluwer /Lippincott Williams&Wilkins, 1st Edition 2010. • Pathophysiology, Damjanvo, Ivan, Philadelphia: Saunders/Elsevier 1st edition, 2009. • Essentials of pathophysiology: concepts of altered health states, porth, Carol Mattson, 2007, 2d edition. • Pathophysiology: functional in human health, Braun, Carie A. Anderson Cindy M. Lippincott Williams&Wilkins, 1st edition, 2007.
Supporting Websites	www.scinedirect.com , www.youtube.com www.freemedicaljournals.com www.ahajournals.org
Teaching Environment	<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Laboratory <input checked="" type="checkbox"/> Learning Platform <input type="checkbox"/> Other

Meetings and Subjects Time Table

Week	Topic	Learning Method*	Task	Learning Material
1	The vision and mission of Pharmacy Faculty Course syllabus <ul style="list-style-type: none"> Introduction to pathophysiology course 	Lecture		Vision and Mission of faculty of pharmacy Course syllabus Text Book, part 1
2	Basics and principles of Pathophysiology: <ul style="list-style-type: none"> Introduction & cell and basic terms of pathophysiology, General Features of Inflammation. 	Lecture		Text Book, chapters 1,2,3
3	Basics and principles of Pathophysiology: <ul style="list-style-type: none"> Pathologic Aspects of Repair, Edema, Thrombosis, Embolism, Infarction & Shock 	Lecture	Quiz	Text Book, chapters 3,4
4	pathophysiology of gastrointestinal tract diseases: <ul style="list-style-type: none"> Digestive system disorders: Oral Inflammatory Lesions, Diseases of Salivary Glands, Diseases of the Esophagus, stomach & intestine ne(ulcers, Gastric Polyps and Tumors, Intestinal Obstruction, Vascular 	Lecture		Text Book chapters 15
5	Pathophysiology of gastrointestinal tract diseases: <ul style="list-style-type: none"> Disorders of Bowel, Malabsorptive Diarrhea, Infectious Enterocolitis, Diverticulitis, Ulcerative colitis & acute appendicitis. 	Lecture Collaborative learning		Text Book chapters 15,16,17
6	Pathophysiology of respiratory system diseases: <ul style="list-style-type: none"> Respiratory disorders: Asthma, bronchitis, Tuberculosis, Acute Respiratory Distress Syndrome, 	Lecture	Video assignment	Text Book chapters 9,13
7	Pathophysiology of respiratory system diseases: <ul style="list-style-type: none"> Asbestos, Pneumoconioses , Sarcoidosis , Pulmonary Embolism, pneumonia & Carcinomas of the Lung 	Lecture		Text Book chapters 9,13
8	Pathophysiology of cardiovascular system diseases: <ul style="list-style-type: none"> 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, 	Lecture	Quiz	Text Book chapters 10,11

9	Pathophysiology of cardiovascular system diseases: <ul style="list-style-type: none"> Arrhythmias, Cor pulmonale, Valvular Heart Disease, Infective endocarditis, Cardiomyopathy & Myocarditis 	Lecture Collaborative learning	Homework	Text Book chapters 10,11
10	Pathophysiology of Renal system diseases: <ul style="list-style-type: none"> Renal disorders: Nephrotic Syndrome, renal failure, stone, Membranous nephropathy, Nephritic Syndrome, Tubulointerstitial Nephritis, Acute Tubular Injury, Arterionephrosclerosis, Adult polycystic kidney & Renal Cell Carcinoma 	Lecture		Text Book chapters 9,14,18
11	Pathophysiology of Endocrine system diseases <ul style="list-style-type: none"> Endocrine disorders: Diabetes Mellitus, Cushing syndrome, infertility, Hyperpituitarism, Hashimoto thyroiditis, Graves Disease, Hyperparathyroidism & Obesity 	Lecture	Quiz	Text Book chapters 20
12	Pathophysiology of blood system diseases Blood diseases :anemia & leukemia	Lecture		Text Book chapters 6,8,10,11
13	Pathophysiology of Cerebrovascular Diseases: <ul style="list-style-type: none"> Cerebrovascular Diseases : stroke Cerebral Edema, Hydrocephalus, Herniation, Stroke, Cerebro-Vascular Accidents (CVA), Subarachnoid Hemorrhage and Saccular Aneurysms 	Lecture project based learning		Text Book chapters 23
14	Pathophysiology of Cerebrovascular Diseases: <ul style="list-style-type: none"> Nervous & muscular systems disorders: Peripheral Neuropathies, Guillain-Barré syndrome, Lambert-Eaton syndrome, Dystrophinopathies, Schwannomas and neurofibromas, Hydrocephalus, Cerebrovascular Diseases & Multiple sclerosis 	Lecture		Text Book chapters 23
15	Pathophysiology of Male & female genital diseases	Lecture		Text Book chapters 18,19
16	Final Exam			

*Includes: lecture, flipped Class, project based learning, problem solving based learning, collaboration learning.

Course Contributing to Learner Skill Development

Using Technology
Using Microsoft programs (word, power point), YouTube videos, Google and scientific websites
Communication Skills
Videos and home works discussion
Application of Concept Learnt
Transfer learnt Pathophysiological information about body systems and diseases to others

Assessment Methods and Grade Distribution

Assessment Methods	Grade	Assessment Time (Week No.)	Course Outcomes to be Assessed
Mid Term Exam	% 30	6 th	K1,K2,S1,S2
Term Works*	% 30	Continuous	S1-S4
Final Exam	% 40	16 th	K1-K4 S1-S4
Total	%100		

* Include: quizzes, in-class and out of class assignment, presentations, reports, Videotaped assignment, group or individual project.

Alignment of Course Outcomes with Learning and Assessment Methods

Number	Learning Outcomes	Corresponding Competencies	Learning Method*	Assessment Method**
Knowledge				
K1	Build Knowledge on the abnormal organic disorders to previous obtained knowledge of physiology & pathology.	C1	Lecture	Quizzes Exam Home work
K2	Understand the basic mechanism of organs disorders	C1	Lecture	Exam Video assignments
K3	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.	C1	Lecture Collaborative learning	Exam Home work

K4	Understand the mechanisms of disease in relation to different organs	C1	Lecture Project Based Learning	Exam Quizzes
Skills				
S1	Discuss normal physiologic dysfunctions which maintain dynamic equilibrium of the human organisms relationship to disordered form & function, and solve clinical cases related to acute and chronic diseases	C8	Lecture Collaborative learning	Quizzes Exam
S2	Appreciate the impact of disordered physiology on the individual & the family	C9	Lecture	Video assignment
S3	Appreciate psychological & social mechanisms developed by individuals to deal with the impact of disordered form or function	C12	Lecture	Video assignment Home work
S4	Appreciate the importance of clear communication among health professionals & their clients in situations involving disordered physiology	C12	Lecture Project Based Learning	Video assignment Home work

*Include: lecture, flipped class, project based learning, problem solving based learning, collaboration learning.

** Include: quizzes, in-class and out of class assignments, presentations, reports, videotaped assignments, group or individual projects.

Course Policies

Policy	Policy Requirements
Passing Grade	The minimum pass for the course is (50%) and the minimum final mark is (35%).
Missing Exams	<ul style="list-style-type: none"> • Anyone absent from a declared semester exam without a sick or compulsive excuse accepted by the dean of the college that proposes the course, a zero mark shall be placed on that exam and calculated in his final mark. • Anyone absent from a declared semester exam with a sick or compulsive excuse accepted by the dean of the college that proposes the course must submit proof of his excuse within a week from the date of the excuse's disappearance, and in this case, the subject teacher must hold a compensation exam for the student. • Anyone absent from a final exam with a sick excuse or a compulsive excuse accepted by the dean of the college that proposes the material must submit proof of his excuse within three days from the date of holding that exam.
Attendance	The student is not allowed to be absent more than (15%) of the total hours prescribed for the course, which equates to six lecture days (n t) and seven lectures (days). If the student misses more than (15%) of the total hours prescribed for the course without a satisfactory or compulsive excuse accepted by the dean of the faculty, he is prohibited from taking the final exam and his result in that subject is considered (zero), but if the absence is due to illness or a compulsive excuse accepted by the dean of the college

	that The article is introduced, it is considered withdrawn from that article, and the provisions of withdrawal shall apply to it.
Academic Integrity	Philadelphia University pays special attention to the issue of academic integrity, and the penalties stipulated in the university's instructions are applied to those who are proven to have committed an act that violates academic integrity, such as cheating, plagiarism (academic theft), collusion, intellectual property rights.

Program Learning Outcomes to be assessed in this Course

Number	Learning Outcome	Course Title	Assessment Method	Targeted Performance level
Sp3	Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding	Pathophysiology	Case Study report	75% of students have a minimum score 7 out of 10

Description of Program Learning Outcomes Assessment Method

Number	Detailed Description of Assessment
Sp3	Case studies: titles will be announced, and students will choose the case-study with questions and work in groups. The students will prepare a report with a diagnosis and answers

Assessment Rubric of the Program Learning Outcomes

Each case study will be evaluated, totaling 10 points as follows

- **Introduction to the topic:** proper generation of questions about the problem (diagnosis) **2 marks**
- **Quality of information:** complete and concise answers **2 marks**
- **Information gathering:** sources of information and citation (APA style) **2 marks**
- **Grammer and spelling, the flow of information, organized writing and following outline, clear** **1 mark**
- **Graphs and photos:** are engaging and enhance text **1 mark**
- **Oral discussion on handing over, Teamwork:** **2 marks**
- **All reports should be printed , No hand writing**