Philadelphia University	PHILADELPHIA	Approved Date: 19-3-2022
Faculty:	UNIVERSITY	Issue:1
Department:	THE WAY TO THE FUTURE	Credit Hours:3
Academic Year:2021\2022	Course Syllabus	Bachler:

# **Course Information**

Course No.		Course Title	,	Prerequisite
0521323	Pharmacology II			0521314
	Course Ty	pe	Class Time	Room No.
University Requirement	quirement	Faculty	Sat/Mon Section 3: 9.45 – 11.1	5 611
☐ Major Requ	irement	Elective		
5	Compulsory		Sat/Mon Section 4: 12.45 -14.0	00 614
			Sun/Tues. Section 1: 8.15 – 9.45	5 609
			Sun/Tues. Section 1 (New plan):	507

C	Course	Level	*	Hours		Hours	
4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>		T. L L 4		
		•		Contact	Independent Learning	Assessment	9
				45	42	3	
					Total: 90		

<sup>\*</sup>According to JNQF standards

# **Instructor Information**

Name	Office No.	Phone No.	Office Hours	E-mail
Dr. Yousef Abusamra, Assistant professor	516	2201	Sat/Mon: 11.00 – 12.00 Sun/Tue: 10.00 -11.00	yabusamra@philadelphia.edu.jo

### **Course Delivery Method**

☐ Blended	☐ Online ☐ Physical			
Learning Model				
ъ .	Synchronous	Asynchronous	Physical	
Percentage			100%	

#### **Course Description**

This course is one of the major requirements for pharmacy students that is built upon and consolidates the knowledge gained in Pharmacology-I and is designed to provide the students with the unit processes in pharmacology. It deals with the study of the mechanisms of action, metabolism & excretion, clinical use & toxicities of drugs that act on the endocrine systems, and gastrointestinal systems. It also covers antibiotics and other antibacterial agents together with antiviral and tubercular drugs.

### **Course Learning Outcomes**

Number	Outcome	Corresponding Program Outcomes					
	Knowledge						
<b>K</b> 1	Classify the major groups of endocrine drugs, and identify						
	the drugs that are used for diabetic disease, corticosteroids,	Kp1					
	hormonal contraception, drugs used for gastrointestinal						
	disease, and antimicrobial agents.						
<b>K2</b>	Identify pharmacokinetics and pharmacodynamics of	Kp1					
	drugs, indications, clinical uses, side effects, and						
	contraindications, and recognize the drug-drug interactions						
	and drug-food interactions and prevent adverse drug						
	reactions in the body.						
К3	Build knowledge on routes of drug administration and the	Kp1					
	effects of the drug on pregnant and lactating women.						
	Skills						
<b>S1</b>	Interpret, analyze, and evaluate information in the	Sp1					
	literature.						
	Competencies						
<b>C1</b>	Possess self-learning skills, problem-solving & critical	Sp2					
	thinking abilities.						
C2	Prediction of the clinical uses, and side effects by knowing						
	the pharmacokinetics & pharmacodynamics of the drugs	Cp1					
	and utilizing that in consultation provision for the patients.						

# **Learning Resources**

Course Textbook	Basic and Clinical Pharmacology by Katzung BG, Masters SB,				
	Trevor AJ				
	(Editors), McGraw Hill, New York, 14th edition, 2018 ISBN				
	978-1-259-64115-2.				
<b>Supporting References</b>	1. Lippincott, Illustrated Reviews: Pharmacology by Whalen K, 8th				
	edition, 2023.				
	2. The Pharmacological Basis of Therapeutics by Brunton;				
	Laurence L. Lazo,				
	Johns S. Parker, Keith L & Alfred Goodman Gillman 11th edition				
	McGraw Hill.				
	ISBN 0-07-142.				
	3. Pharmacotherapy: A Pathophysiologic Approach by: Joseph T.				
	DiPiro, Gary				
	C. Yee, L. Michael Posey, Stuart T. Haines, Thomas D. Nolin,				
	Vicki Ellingrod. 11th				
	Edition, 2020.				
<b>Supporting Websites</b>					
<b>Teaching Environment</b>	Classroom laboratory Learning Platform				
	Other				

# Meetings and Subjects TimeTable

Wee k	Topic	Learning Method*	Task	Learning Material
1	Vision and Mission of Faculty of Pharmacy Course Syllabus Endocrine hormones; pancreatic hormones	Lecture		Vision and Mission of the Faculty of Pharmacy Course Syllabus
		Lecture,		Textbook
2	Anti-diabetic drugs Insulin	Flipped learning		Textbook
3	Oral Antidiabetic Agents	Lecture, Collaborative learning	Quiz 1	Textbook
4	Pituitary gland: introduction Growth hormone analogs and antagonists Gonadotropins	Lecture, Collaborative learning Flipped	Case study	Textbook

	Prolactin and oxytocin  Thyroid and anti-thyroid drugs	learning and Class presentations		
5	Adrenocortacosteriods & Adrenocortical antagonists	Lecture, Collaborative learning		Textbook
6	Hormonal contraception The Gonadal hormones &inhibitors.	Lecture, Collaborative learning		Textbook
7	Drugs used in gastrointestinal disease; Peptic ulcer	Lecture, Collaborative learning	Videotaped Assignment	Textbook
8	Antiemetic agents, laxatives, and Antidiarrheal agents.  Drugs used for the treatment of irritable bowel syndrome (IBS) &inflammatory bowel disease (IBD)	Problem- solving based learning  Flipped learning, discussion forums, and presentations	Short report  Quiz 2	Textbook
9	Chemotherapeutic drugs; Introduction to chemotherapy.  β-Lactam antibiotics &other inhibitors of cell wall synthesis.  Penicillin	Lecture,  Problem- solving based learning Lecture Case study		Textbook

10	Cephalosporins, Monolactams Carbapenems&Vancomycin	Lecture, Problem- solving based learning		Textbook
11	Chloramphenicol, Tetracyclines, Macrolides and Clindamycin.	Lecture, project-based learning	Short presentation	Textbook
	MID-1	TERM EXAM		
12	Aminoglycosides and other drugs used to treat gram-negative infection	Lecture, Problem- solving based learning		Textbook
13	Sulphonamides, Trimethoprim & Quinolones	Collaborative learning		Textbook
14	Anti-viral, Anti-tubercular agents, and Antifungal drugs	Flipped learning Discussion forum		Textbook
15	Anti-viral, Anti-tubercular agents, and Antifungal drugs	Flipped learning Discussion Forum Class presentations and forum discussion		Textbook
16	FINA	L EXAM		

<sup>\*</sup>Includes lectures, flipped classes, project-based learning, problem-solving-based learning, and collaborative learning.

## **Course Contributing to Learner Skill Development**

## **Using Technology**

- -Use PowerPoint or any other relevant programs for preparing presentations
- -Use a variety of Electronic databases in searching for published data.

### **Communication Skills**

- -Report writing
- -Oral presentation of selected topics

# **Application of Concept Learnt**

-Practical application in the corresponding practical course

### **Assessment Methods and Grade Distribution**

Assessment Methods	Grade	Assessment Time (Week No.)	Course Outcomes to be Assessed
Mid Term Exam	% 30	11	Kp1, Cp1
Term Works*	% 30	Continuous	Kp1, Sp1, Cp1
Final Exam	% 40	16	Kp1, Sp1, Sp2, Cp1
Total	%100		

<sup>\*</sup> Include quizzes, in-class and out-of-class assignments, 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**
	K	nowledge		
<b>K</b> 1	Classify the major groups of		Lecture	Subjective Quiz
	endocrine drugs, and identify	Kp1		
	the drugs that are used for			Exam/subjective
	diabetic disease,			Questions
	corticosteroids, hormonal			
	contraception, drugs used for			
	gastrointestinal disease, and			
	antimicrobial agents.			
<b>K2</b>	Identify pharmacokinetics and	Kp1	Lecture,	Subjective Quiz
	pharmacodynamics of drugs,			
	indications, clinical uses, side		Collaborative	Exam/subjective
	effects, and contraindications,		learning	Questions
	and recognize the drug-drug		Problem-	
	interactions and drug-food		solving	

	interactions and prevent		based			
	adverse drug reactions in the		learning			
	body.					
	•					
<b>K3</b>	Build knowledge on routes of	Kp1	Lecture	Subjective Quiz		
	drug administration and the					
	effects of the drug on		Collaborative	Exam/subjective		
	pregnant and lactating		learning	Questions		
	women.		Problem-	Case study		
			solving	evaluation		
			based			
			learning			
	Skills					
<b>S</b> 1	Interpret, analyze & evaluate	Sp1	Problem-	Subjective Quiz		
	information in the literature.	-	solving	Exam/subjective		
			based	Questions		
			learning	Case study		
				evaluation		
	Co	ompetencies	-			
C1	Possess self-learning skills,	Sp2	Collaborative	Subjective Quiz		
	problem-solving & critical	_	learning	•		
	thinking abilities.					
	uniking admities.		Problem-	Exam/subjective		
			solving	Questions		
			based	`		
			learning	Videotaped		
				assignment		
				evaluation		
				-		
C2	Prediction of the clinical uses,		Project-based	Oral		
	and side effects by knowing	Cp1	learning	presentation		
		T.		evaluation		
	the pharmacokinetics &					
	pharmacodynamics of the					
	drugs and utilizing that in					
	consultation provision for the					
	patients.					
	patients.					

<sup>\*</sup>Include lecture, flipped class, project-based learning, problem-solving-based learning, and collaborative learning.

# **Course Policies**

Policy	Policy Requirements	
Passing Grade	The minimum pass for the course is (50%) and the minimum final mark is (35%).	
Missing	<ul> <li>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</li> </ul>	

<sup>\*\*</sup> Include quizzes, in-class and out-of-class assignments, presentations, reports, videotaped assignments, and group or individual projects.

Exams	in his final mark.	
	<ul> <li>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.</li> <li>Anyone absent from a final exam with a sick excuse or a compulsive</li> </ul>	
	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 from 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, and intellectual property rights.	

# **Program Learning Outcomes to be Assessed in this Course**

Number	Learning Outcome	Course Title	Assessment Method	Targeted Performance Level
Sp4	Assure that patients' best interests are represented.	Pharmacology-	Oral presentation	75 % of the students should have a minimum score of 7 out of 10

# **Description of Program Learning Outcomes Assessment Method**

Number	Detailed Description of Assessment		
Sp4	Students should prepare reports related to the gist of the outcome, and display them before their colleagues in the classroom. They have total freedom to run the time allocated for each of them and stimulate the reactions of their colleague. They have to try their best to present ideal presentations whose parts will be evaluated according to the rubric shown below.		