Philadelphia University
Faculty of Pharmacy
Department of Clinical Sciences
2nd Semester, 2018/2019

Course syllabus	
Course code: 0520400	**Course title:** Pharmacology II
Course prerequisite(s) and/or corequisite (s): **Pharmacology -I (0520328)**	**Course level:** Third level
Credit hours: 3 hours	**Lecture time: S/T/Th:** No lectures **M/W:** 12.45-14.15
Location: Section 3: 805 / Faculty of Engineering	

Academic Staff Specifics				
Name	**Rank**	**Office number and location**	**Office hours**	**E-mail address**
Dr. Yousef Abusamra	Assistant Professor	Faculty of Nursing, 1st floor, Room No. **408**	**Su,Tu,Th** 10.00 -11.00 12.00 – 13.00 **M, W** 9.00 -11.00	yabusamra@philadelphia.edu.jo

Course module description:

This module is a major requirement that is designed to provide the students with the unit processes taking place in pharmacology at this level the student has been exposed to pharmacology1. This course continuation of the study of the properties, effects of the primary agents in the major drug categories, mechanism of action, pharmacokinetic, clinical use & toxicities. Topics include the endocrine system, gastrointestinal system & antimicrobial agents (introduction, and antibacterial agents, anti-fungal agents, anti-viral agents and anti-tubercular agents).

Course objectives:

Specific learning objectives will be provided for each individual lecture topic.
However the general course goals are as follows:

1. The student should know the correct drug classification
2. Knowledge & identify the indication & clinical uses of the major class of clinically important drugs.
3. Understand the scientific principle of drug action and the various mechanisms by which drugs can mediate their pharmacological effect.
4. For each drug/drugs class the student should know the following: pharmacokinetics, adverse effects, contraindications and drug interactions
5. Application of this knowledge on clinical experience & research work.

Course / module components Text book

Basic and Clinical pharmacology by Katzung BG, Masters SB, Trevor AJ (editors), McGraw Hill, New York,13th edition, 2015 ISBN 978-125-925290-6.

References

Lippincotte, illustrated reviews: Pharmacology by Whalen K, Harvey RA (editors), Williams & Wilkins, 6th edition, 2015.

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.

Teaching methods

Classes will be held three hours weekly, the content of this course will be presented in a variety of different formats: Lectures, discussion groups, tutorials, problem solving, debates, etc.

Learning outcomes

- **Knowledge and understanding**
  A. Classify the Major groups of endocrine drugs, and identify the drugs which are used for Diabetic disease, corticosteroids Hormonal contraception, drugs used in gastrointestinal disease and antimicrobial agents.
  B. Identify pharmacokinetic and pharmacodynamics of drugs, indication and, clinical uses, side effects and contraindication.
  C. Build knowledge on routs of drug administration, effects of drug on pregnant and lactating women.
  D. Recognize the drug - drug interaction and drug - food interaction and prevent adverse drug reactions on the body.
- **Cognitive skills (thinking and analysis)**
  A. Possess self-learning skills, problem solving & critical thinking abilities.
  B. Prediction of the clinical uses, side effects and drug-drug interactions by understanding the pharmacokinetic &pharmacodynamics of drug.
  C. Interpret, analyze & evaluate information in the literature.
- **Communication skills (personal and academic).**
  A. Write clear concise & organized communication. Give oral presentation to small & large groups, application of animation effect to the slides, addition pictures, and figures for delivery of information relating to the concepts of pharmacology.
  B. Display some scientific videos to give the information by easiest and simplest way to the students.
  C. Make students groups to solve problems.
  D. Questions-feedback.
- **Transferable Skills**
  Students will apply most of the acquired knowledge from the theoretical lectures in the co-requisite practical laboratory. The theoretical information also allows them to be able to perform a research & experimental work.

Assessment instruments

- Short reports and/ or presentations, and/ or Short research projects**.**
- Homework assignments**.**
- Quizzes.
- Exams (First, Second and Final Exams)**.**

Allocation of Marks	
Assessment Instruments	**Mark**
First examination	20
Second examination	20
Final examination:	40
Reports, research projects, quizzes, homework, Projects	20
Total	100

Documentation and academic honesty

- Documentation style (with illustrative examples).
- Protection by copyright.
- Avoiding plagiarism.

Course / academic calendar

Week	**Basic and support material to be covered**	**Homework/reports and their due dates**
(1)	Endocrine hormones; pancreatic hormones	
(2)	Anti-diabetic drugs Insulin	
(3)	Oral antidiabetic agents	
(4)	Pituitary hormones	Report on Hypothalamic, Pituitary hormones & synthetic analogue.
(5)	Thyroid and anti-thyroid drugs	
(6) **First examination**	Adrenocorticosteriods & Adrenocortical antagonists	Report on agents that affect bone mineral homeostasis.
(7)	Hormonal contraception (Oral, parentral & implanted). The Gonadal hormones & inhibitors.	
(8)	diarrheal agents .Drugs used for the treatment of irritable Bowel syndrome (IBS) & inflammatory bowel disease(IBD)	
(9)	Chemotherapeutic drugs; Introduction to chemotherapy. B-Lactam antibiotics & other inhibitors of the cell wall synthesis.	

	Penicillin.	
(10)	Cephalosporins, Monolactams Carbapenems &Vancomycin	
(11) **Second exam**	Chloramphenicol, Tetracyclines, Macrolides and Clindamycin.	
(12)	Aminoglycosides and other drugs used to treat gram negative infection.	
(13)	Sulphonamides, Trimethoprim & Quinolones.	
(14)	Antifungal Anti-mycobacterium and Anti-fungal drugs.	
(15) Specimen examination (Optional)	Anti-viral drugs	
(16) **Final Examination**		

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

1. Clinical Pharmacology by Bennett PN, Brown MJ ,Sharma PJ, Elsevier, London ,11th edition, 2012.
2. British National Formulary (BNF) Royal Pharmaceutical Society. UK 58th edition, 2009.

Electronic resources

http://www.philadelphia.edu..jo/pharmacy/resources.html