

The University of Jordan

Faculty: Medicine

Semester: First

Course Name: Introductory to Pharmacology

Department: Pharmacology

Academic Year: 2015-2016

Course Number: 0503203

Credit hours	3	Level	3	Office phone		23464	
Coordinator/ Lecturer	Dr. Malek Zihlif	Office number	310				
E-mail	m/zihlif@ju.edu.jo malzuhluf@yahoo.com	Office hours For Dr Malek Zihlif	Sun	Mon	Tue	Wed	Thur

Course Description

This course explores pharmacodynamics, pharmacokinetics, drug actions and interactions. The second part of the course focus on the autonomic nervous system and it pharmacology. The thirds part of the course focuses on fundamental principles in anti-microbial, antiviral and anticancer drugs.

Intended Learning Outcomes (ILOs):

Successful completion of the course should lead to the following outcomes:

1. Describe and explain the fundamental concepts of pharmacotherapeutics, pharmacokinetics, pharmacodynamics, and pharmacogenetics/genomics.
2. Describe principles of safe administration of medications.
3. Recognize the basics for proper choice of drug/s in proper dose in relation to age, sex, genetic variation and concomitant disorders.
4. Describe the pharmacological actions and uses of drugs acting on the autonomic nervous system.
5. Explain the mechanisms of action and side effects of the autonomic nervous system.
6. Explain the principles of antimicrobial and antiviral drugs and antiviral drugs, selective toxicity and clinical application.
7. Demonstrate knowledge and understanding of the mechanisms of drug action and drug resistance for both antimicrobial and antiviral drugs and antiviral drugs.
8. Describe and explain major methods used in the treatment of cancer and
9. Be aware of the range of chemotherapeutic agents and have an understanding of their modes of action.

Course Contents

Week	Topic	lecturer
1	<i>Definitions in Pharmacology Pharmacokinetic Principles</i>	<i>Prof Yacoub</i>
2	<i>Pharmacokinetic Principles</i>	<i>Prof Yacoub</i>
	<i>Pharmacokinetic Principles</i>	<i>Prof Yacoub</i>
	<i>Routes of Drug Administration</i>	<i>Prof Yacoub</i>
3	<i>Receptors and Postreceptor Phenomena</i>	<i>Dr Malek</i>
	<i>Dose-Response relationships</i>	<i>Dr Malek</i>
	<i>Drug Interactions</i>	<i>Dr Malek</i>
4	<i>Adverse Drug Effects and Toxicity</i>	<i>Dr Malek</i>
	<i>Pharmacogenetics</i>	<i>Dr Malek</i>
	<i>Pharmacogenetics</i>	<i>Dr Malek</i>
5	<i>Introduction to the ANS Pharmacology Cholinergic drugs</i>	<i>Dr Hamzeh</i>
6	<i>Cholinergic drugs</i>	<i>prof Hamzeh</i>
	<i>Anti cholinergic drugs</i>	<i>prof Hamzeh</i>
	<i>Anti cholinergic drugs</i>	<i>prof Hamzeh</i>
7	MIDTERM EXAM WEEK (Tentative)	
8	<i>adrenergic drugs</i>	<i>prof Hamzeh</i>
	<i>adrenergic drugs</i>	<i>prof Hamzeh</i>
	<i>adrenergic drugs</i>	<i>prof Hamzeh</i>
9	<i>Anti-adrenergic drugs</i>	<i>Dr Malek</i>
	<i>Anti-adrenergic drugs</i>	<i>Dr Malek</i>
	<i>Introduction to Antimicrobial Agents</i>	<i>Dr Malek</i>
10	<i>Cell wall inhibotors:B-Lactam Antibiotics</i>	<i>Dr Malek</i>
	<i>Cell wall inhibitors B-Lactam Antibiotics</i>	<i>Dr Malek</i>
	<i>Cell wall inhibitors: non B-Lactam Antibiotics</i>	<i>Dr Malek</i>
11	<i>Protein synthesis inhibitors: Macrolide Antibiotics</i>	<i>Dr Malek</i>
	<i>Protein synthesis inhibitors</i>	<i>Dr Malek</i>

	<i>Aminoglycosides &</i>	
	<i>Protein synthesis inhibitors</i> <i>Tetracyclines and other protein synthesis inhibitors</i>	Dr Malek
12	DNA active antibiotics: <i>Antifolate drugs</i> and grase inhibitors	Dr Malek
	Antiviral: Anti-HSV, CMV, influenza drugs	Dr Malek
13	Antiviral: Anti-HIV drugs	Dr Malek
	Introductory to cancer treatment	Dr Malek
	Cancer Chemotherapy	Dr Malek
14	Cancer Chemotherapy	Dr Malek
	Cancer Targeted therapy	Dr Malek
15	FINAL EXAM WEEK	

Learning Methodology

Lectures & Exams

Evaluation

Evaluation	Point %
Midterm Exam	40%
Final Exam	50%
Attendance	10%

Main Reference/s:

Course Textbook:

Basic and Clinical Pharmacology
B. G Katzung
12th Edition
Mc Graw Hill (Lange)

Additional References:

Goodman and Gilman's
The Pharmacological Basis of Therapeutics

Brunton, Lazo, Parker
12th Edition 2011
Mc Graw Hill