

STUDY GUIDE

Pharmacology I

1208311



Course coordination

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Course Identification

1. Credit hours	1
2. Level/year at which this course is offered	5th
3. Pre-requisites for this course	Possess relevant knowledge of physiology, and biochemistry

Course Committee Members

1. Dr. Rahma Hamayun
2. Dr. Hassan Eltom
3. Dr. Muhammad Jan

Actual Learning Hours

No	Activity	Learning Hours
Contact Hours		
1	Lecture	15
2	Laboratory/Studio	
3	Tutorial	
4	Others (specify)	
	Total	15

Course Objectives

Course Description

During this course, the student will be familiar with different groups of medications, their indications, pharmacodynamics, pharmacokinetic, drug interactions, adverse drug reactions, contraindications and percussions; thereby the student will utilize the basic science literature of pharmacology to be able to prescribe medications rationally, communicate to the patients effectively, promotes the concept of compliance, counsel the patient about their medication use, and participate in patient and community education.

Course Main Objective

By the end of this course the students are able to:

1. Understand the scope of pharmacology in relation to different diseases including cancer chemotherapy and antimicrobial therapy.



2. Recognize the basic principles of pharmacokinetics and pharmacodynamics of drugs (including absorption, distribution, metabolism, excretion, elimination half-life, and bioavailability, how drugs produce their action, receptors, drug-receptor interactions, dose-response curve relationships, potency and efficacy of drugs, etc.)
3. Recall the scientific names of drugs and drug groups used in the treatment of important diseases of various body systems.
4. Acquire cognitive, motor, and communication skills that are necessary throughout the clinical career for rational therapeutics.

Course Learning Outcomes

CLOs		Aligned PLOs
1	Knowledge and Understanding	
1.1	Recognize the basic principles of Pharmacology that enable the Providing of quality nursing care	K1
1.2	Recognize the general pharmacology of ANS, and cardiovascular Systems	K1
2	Skills:	
2.1	Demonstrate the skills of retrieving drug profile.	S1
3	Values:	
3.1	Demonstrate high level of integrity while preparing the required assignments.	V1
3.2	Employ the skill of self-learning through updated medical information from different approved sources	V2

Course Content

No	List of Topics	Contact Hours
1	Introduction ,	1
2	pharmacokinetics	1
3	Pharmacodynamics	1
4	Factors affecting drug response & drug toxicity	1

5	Cholinergic	1
6	Anticholinergic Drugs	1
7	Adrenergic	1
8	Anti-adrenergic Drugs	1
9	Diuretics	1
10	Antihypertensive Drugs	1
11	Heart Failure	1
12	Anti-dysrhythmia	1
13	Anti-anginals	1
14	Antihyperlipidemics	1
15	Anticoagulants	1
	TOTAL	15

Teaching strategies and Assessment Methods for Students

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	Recognize the basic principles of Pharmacology that enable the providing of quality nursing care	Direct instruction (Lectures)	MCQs
1.2	Recognize the general pharmacology of ANS, and cardiovascular systems	Direct instruction (Lectures)	MCQs
2.0	Skills		
2.1	Demonstrate the skills of retrieving Drug profile.	Assignments	Assignment rubric

3.0	Values		
3.1	Demonstrate high level of integrity While preparing the required assignments.	Assignments	Assignment rubric
3.2	Employ the skill of self-learning through updated medical information from different approved sources	Assignments	Assignment rubric

Assessment Tasks for Students (Copy and paste the table from courses specification)

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Midterm	6	30%
2	Assignment	8	10%
3	Class participation and attendance	1-10	10%
4	Written Exam (MCQs) Final	14	50 %

Course blueprint (% of total summative marks in blue print is to be given in the range)

Topics	Teaching strategies	Assessment methods	Knowledge		% of total contact hours	% of total summative marks
			K1	K2		
Lectures					100%	80%
Introduction ,	Lectures	Mcqs	K1		6.67%	5-6%
pharmacokinetics	Lectures	Mcqs	K1		6.67%	5-6%
Pharmacodynamics	Lectures	Mcqs	K1		6.67%	5-6%
Factors affecting drug response	Lectures	Mcqs	K1		6.67%	5-6%
Cholinergic	Lectures	Mcqs	K1		6.67%	5-6%
Anticholinergic Drugs	Lectures	Mcqs	K1		6.67%	5-6%
Adrenergic	Lectures	Mcqs	K1		6.67%	5-6%

Topics	Teaching strategies	Assessment methods	Knowledge		% of total contact hours	% of total summative marks
			K1	K2		
Anti-adrenergic Drugs	Lectures	Mcqs	K1		6.67%	5-6%
Diuretics	Lectures	Mcqs	K1		6.67%	5-6%
Antihypertensive Drugs	Lectures	Mcqs	K1		6.67%	5-6%
Heart Failure	Lectures	Mcqs	K1		6.67%	5-6%
Anti-dysrhythmia	Lectures	Mcqs	K1		6.67%	5-6%
Anti-anginals	Lectures	Mcqs	K1		6.67%	5-6%
Antihyperlipidemics	Lectures	Mcqs	K1		6.67%	5-6%
Anticoagulants	Lectures	Mcqs	K1		6.67%	5-6%
Log book (attendance and class participation)					0%	10%
Assignment					0%	10%

Learning Resources

Required Textbooks	Lippincott's Illustrated Review of Pharmacology; 7 th ed.; Richard A Harvey & Pamela C Champe; Lippincott's Williams & Wilkins; 2018.
Essential References Materials	Basic and clinical pharmacology; 15 th edition; Bertram G. Katzung; McGraw Hill Medical Company; 2020. Focus on Nursing Pharmacology, 8 th , Amy M. Karch; Lippincott's Williams & Wilkins, 2019
Electronic Materials	Digital Library
Other Learning Materials	Power points

Related check lists

Assignment rubric