COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	MSc degree of clinical pharmacology
(2) Department offering the programme:	Clinical pharmacology department
(3) Department responsible for teaching the course:	Clinical pharmacology department
(4) Part of the programme:	Second part (3th semester)
(5) Date of approval by the Department`s council:	10/7/2016
(6) Date of last approval of programme specification by Faculty council	9-8-2016
(7) Course title:	Basic pharmacology
(8) Course code:	CPHARM 506 BP CPHARM 506 BPP
(9) Total teaching hours:	255
(10) Credit hours:	7 h Lectures 5 h Laboratory

(B) Professional information

(1) Course Aims:

The broad aims of the course are:

1. Acquire comprehensive knowledge of commonly known drugs through study the pharmacodynamics, kinetics, adverse effects, clinical applications & drug-drug Interactions.
1. Acquire skill of preparing animal model of disease for experimental drug use
2. Study classical and modern approaches to drug development.
3. Gain the skill of carrying out a scientific research and an effective presentation.

(2) Intended Learning Outcomes (ILOs):

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

1. Categorize pharmacodynamics and pharmacokinetics of the drugs.
2. Describe drug interactions and adverse drug effects of commonly used and newly developed drugs.
3. Subscribe sympathetic and parasympathetic A.N.S.
4. Identify Histamine, 5HT, Eicosanoids, and peptides.
5. Identify drugs of anemia, hyperlipidemia & coagulation
6. Demonstrate renal and G.I.T. pharmacology.
7. Clarify an introduction to CNS pharmacology, hypnotic- Sedatives, opioids, general & local anesthetics.
8. Classify antipsychotics & antidepressants & anticonvulsants.
9. Subdivide antibacterial drugs, antiviral, antiparasitic and antifungal drugs.
10. Enumerate cancer chemotherapy.
11. Recognize research ethics
12. Outlines the principles of designing a study, writing a proposal and articles for publication

B- Intellectual skills

1. Anticipate all types of drug interactions.
2. Detect adverse drug reaction and detect the molecular and pharmacological basis behind it

C- Professional/practical skills

1. Perform screening for sympathomimetics.
2. Perform screening & bioassay of parasympathomimetcs & Parasympatholytics.
3. Perform screening for serotonin, analgesics, histamine, anti-histaminics and neuromuscular blockers.
4. Determine the unknown drug concentration.
5. Determine unknown substance.
6. Design clinical trials to a new drug to test its pharmacokinetics, side effects and toxicity

D- Communication & Transferable skills

1. Work effectively within a team.
2. Access information effectively in library and midline data base.

(3) Course content: 3rd semester

(Subjects	Lectures
Pharmacokinetics	7
Drug receptors & pharmacodynamics.	7
Drug interactions	7
Adverse drug effects	7
Introduction to autonomic nervous system (A.N.S) Sympathetic A.N.S Parasympathetic A.N.S	7
Histamine, 5HT, peptides Eicasanoids and NSAIDs	7
Renal pharmacology	7
Agents used in anaemia. Drugs & hyperlipidaemia Drugs &coagulation	7
Introduction to CNS Hypnotic- Sedatives.	7
Opioids	7
General & local anaesthetics	7
Introduction to chemotherapy Antibacterial drugs	7
Antifungal drugs	7
Cancer chemotherapy,	7
immunomodulators.	7
Total teaching hours:	105

Practical

topics	Laboratory Credit hours
Screening for sympathomimetics.	20
Screening for antagonists of adrenergic receptors.	20
Screening & bioassay of parasympathomimetcs.	20
Screening & bioassay of Parasympatholytics.	20
Screening for neuromuscular blockers.	10
Screening for histamine.	10
Screening for antihistaminics	10
Screening for serotonin.	10
Screening for analgesics	10
Identify unknown substance.	10
Determine the unknown drug concentration.	10
Total teaching hours:	150

(4) Teaching methods:

4.1: Lectures

4.2: Experimental (lab sessions)

(5) Assessment methods:

5.1: - **Written exam** for assessment of knowledge & intellectual ILOs

5.2: **MCQ exam** for assessment of knowledge & intellectual ILOs

5.3: - **Oral examinations** for assessment of knowledge, intellectual, communication & professional ILOs

5.4: - **OSPE** for assessment of communication, practical & professional ILOs

Assessment schedule:

المقرر	الاختبار	الدرجة				إجمالي
		تحريري		شفهي	عملي	
الفارماكولوجيا الأساسية	إختبار تحريري مدته ثلاث ساعات + اختبار شفهي + اختبار عملي	نظري	MCQ	٧٥	٧٥	٣٠٠
		١٢٠	٣٠			

(6) References of the course:

6.1: Text books:

Basic and clinical pharmacology (Katzung) [Last edition].
Pharmacology (Rang and Dale) [last edition].
Laurence pharmacology
Goodman and gilman's (The Pharmacological Basis of Therapeutics)

6.2: Journals:

Pharmacological reviews, …… etc

(7) Facilities and resources mandatory for course completion:

- Computer labs with open access to medical research databases
- Upgraded library
- Induction course introducing study skills.
- Candidate's logbook.
- Internet with a wide range of learning support material.
- Dissertation Supervisor

Course coordinators:

- Prof. Dr. Hussein El Beltagy

-Prof. Dr. Ali Gaballa

- Prof. Dr. Mohamed-Hesham Daba.

- Dr.Mohamed Aboelkheir Abdallah

- Ass. Lecturer. Rania al Qatary

Head of the department:

Prof. Dr. Hussein El Beltagy