



## 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 (4 <sup>th</sup> 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:	Clinical Pharmacology	
(8) Course code.	CPHARM 506 CP CPHARM 506 CPP	
(9) Total teaching hours.	255	
(10) Credit hours.	7h lectures 5h practical	

## (B) Professional information

## (1) Course Aims.

The broad aims of the course are.

- **1.** Use knowledge of mechanisms of drug action to extrapolate likely effect of new drugs, doses and combinations
- 2. Understand and work within the current drug regulatory framework.
- 3. Gain enough knowledge about evidence based pharmacotherapy

## (2) Intended Learning Outcomes (ILOs).

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

## A- Knowledge and Understanding

- 1- Recognize the pharmacotherapy of different cardiovascular disorders including hypertension, IHD, Arrhythmia and heart failure.
- 2- Outline the pharmacotherapy of blood diseases including anemia and blood coagulation disorders.
- 3- Describe the pharmacotherapy of bronchial asthma and cough.
- 4- Outline the pharmacotherapy of neurological and psychological disorders including anxiety disorders, depression, epilepsy, Parkinsonism, alzeimer, psychosis and drug abuse.
- 5- Outline the pharmacotherapy of endocrinal disorders including DM, Cushing, adissonian, thyroid and pituitary disorders.
- 6- Recognize the pharmacotherapy of obesity, osteoprosis & osteoarthritis.
- 7- Study the pharmacotherapy of malaria, amebiasis and TB.
- 8- Describe the pharmacotherapy of hepatic and gastroenterological disorders including viral hepatitis, hepatic encephalopathy, peptic ulcer, upper GIT bleeding, inflammatory bowel syndrome (IBS) and inflammatory bowel disease (IBD).
- 9- Describe the effect of drugs on the kidney and liver and the effect of those disorders on drug prescription.
- 10- Outline the geriatric and pediatric pharmacology.
- 11- Study the effect of drugs on pregnancy and lactation.
- 12- Recognize research ethics
- 13- Outlines the principles of designing a study, writing a proposal and articles for publication.

### B- Intellectual skills

- 1. Interpret the effects of age, body size, organ dysfunction and concurrent illness on drug distribution and metabolism relevant to the trainee's practice
- 2. Interpret the risks of treatments to be able to make decisions in various situations.
- 3. Apply knowledge of pharmacotherapy in different clinical situations through case scenarios and field visits.
- 4. Analyze drug-drug interactions in different conditions

## C- Professional/practical skills

- 1. Prescribe rationally in different case scenarios.
- 2. Construct and adjust dose regimen correctly in different age groups, physiological change (e.g. deteriorating physiological function) and following therapeutic drug monitoring.
- 3. Perform techniques to evaluate physiological effects of drugs like Bl.P. measurement, pulse recording, temp measurement, etc.
- 4. Design clinical trials to a new drug to test its pharmacokinetics, side effects and toxicity.
- 5. Analyze case scenarios to illustrate important interactions and adverse drug effects for benefits of patients and doctors.
- 6. Design therapeutic plan in different clinical situations according to evidence based pharmacotherapy
- 7. Apply principles of individualization of therapy when necessary
- 8. Prescribe appropriately in pregnancy, and during breast feeding.

## D- Communication & Transferable skills

- 1. Work effectively within a team.
- 2. Respond appropriately to unprofessional behavior of others.
- 3. Ensure appropriate personal language and behavior.
- 4. Apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality.

# (3) Course content: 4<sup>th</sup> semester

Subjects	Lectures and	Practical
	seminars	
Pharmacotherapy of hypertension.	7	10
Pharmacotherapy of IHD.	<b>'</b>	10
Pharmacotherapy of Heart failure.	7	10
Pharmacotherapy of arrhythmia.	,	
Pharmacotherapy of bronchial asthma and cough.	7	10
Pharmacotherapy of anxiety disorders.		10
Pharmacotherapy of depression & psychosis.	7	
Pharmacotherapy of drug abuse.		
Pharmacotherapy of epilepsy.		10
Pharmacotherapy of Parkinsonism Pharmacotherapy of	7	
Alzheimer		
Pharmacotherapy of D.M.	7	10
Pharmacotherapy of thyroid disoredrs.	,	
Pharmacotherapy of pituitary disorders.	7	10
Pharmacotherapy of cushing & adissonian disease	,	
Pharmacotherapy of Obesity.	7	10
Pharmacotherapy of osteoporosis.	1	
Pharmacotherapy of osteoarthritis		10
Pharmacotherapy of malaria.	7	
Pharmacotherapy of amebiasis.		
Pharmacotherapy of viral hepatitis.	7	10
Pharmacotherapy of T.B	•	
Pharmacotherapy of IBS.		10
Pharmacotherapy of upper GIT bleeding.	7	
Pharmacotherapy of peptic ulcer.		
Pharmacotherapy of IBD.	7	10
Pharmacotherapy of hepatic encephalopathy.	,	
Drugs & kidney	7	10
Drugs & liver	,	
Geriatric and Pediatric pharmacology	7	10

Drugs & pregnancy	7	10
Drugs & lactation	<i>'</i>	
Total teaching hours:	105	150
	255	

## (4) Teaching methods.

- 4.1. Lectures
- 4.2: Seminars
- 4.3. Field visits

## (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 ILOs
- **5.4. OSPE** for assessment of communication skills, practical & professional ILOs

### Assessment schedule.

#ag 1		السدرجة		الاغتبار	المقرر	
إجمالي	عملي	شفهي	تعريري		(4 منجاز	المسرر
۳٠.	Y 0	٧٥	MCQ	نظري	إختبار تحريرى مدته ثلاث ساعات + اختبار شفهي + اختبار عملي	الفار ماكولو جيـــــــا الاكلينكيه

## (6) References of the course.

#### 6.1. Text books.

Basic and clinical pharmacology (Katzung) [Last edition]. Pharmacology (Rang and Dale) [last edition].

Modern pharmacology

Laurence pharmacology

Goodman and gilman's (The Pharmacological Basis of Therapeutics)

Clinical pharmacy and therapeutics

Prescribing scenarios at a glance

## 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.

### Course coordinators.

- Prof. Dr. Hussein El Beltagy
- -Prof. Dr. Ali Gaballa
- Prof. Dr. Mohamed-Hesham Daba.
- Ass.Lecturer. Amira Eladl.
- Ass. Lecturer. Rania al Qatary

## Head of the department.

Prof. Dr. Prof. Dr. Hussein El Beltagy