



COURSE SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

| (1) Programme offering the course: | Postgraduate MSc program of internal medicine | | |
|---|---|--|--|
| (2) Department offering the programme. | Internal medicine department | | |
| (3) Department responsible for teaching the | Clinical pharmacology | | |
| course: | department in collaboration with | | |
| | Internal medicine department | | |
| (4) Part of the programme: | First part | | |
| (5) Date of approval by the Department's council | 5/11/2014 | | |
| (6) Date of last approval of programme specification by Faculty council | 9/8/2016 | | |
| (7) Course title: | Clinical pharmacology | | |
| (8) Course code: | MED506 | | |
| (9) Total teaching hours: | 15 hours | | |
| (10) Credit hours | 1 (one) hour | | |

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

*Application and integration of the basics of clinical pharmacology with the knowledge related to the practice of internal medicine and health care.

(2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding:

A1. Recall the clinical pharmacological basics of the following including, General pharmacology, Adverse effects of drugs, Pharmacodynamics, Pharmacokinetics, Drug interactions. Drugs at extremes of age.

A2. recognize the clinical pharmacological basics of Autonomic pharmacology including, Sympathomimetics, Adrenoceptor blockers, Cholinomimetics, Antimuscarininc, *Autacoids*: Histamine, Seretonin, , prostaglandins, Angiotensin, *Cardiovascular pharmacology*, Drugs for treatment of heart failure, Drug therapy for hypertension, Antiarrhythmic drugs, Drugs for angina pectoris, *Drugs acting on the blood and blood, forming organs, Renal pharmacology:* Diuretics and anti-diuretics, UTI

Drug nephrotoxicity, *Antimicrobial drugs:* General chemotherapy, Special chemotherapy, *Endocrinal system:* Hypothalamic and pituitary hormones, Thyroid and anti-thyroid, parathyroid and bone, Corticosteroids and anti-corticosteroids, Pancreatic hormones and anti-diabetics, *Drugs acting on the central nervous system:* Drugs for insomnia, Drug treatment of epilepsy, Drug therapy of gout, Drugs for RA, Opioid analgesics, Anxiolytics and antipsychotics, Antidepressants, *Drugs affecting GIT:* Drug therapy for peptic ulcer & GERD, Prokinetic drugs, Emetics and antiemetics, Antidiarrheal drugs, Drugs for constipation, Drugs and the liver, Drugs for hepatic encephalopathy.

B- Intellectual skills:

- $\rm B1\,$ identify strengths, deficiencies, and limits in one's knowledge and expertise and be able to be updated and face challenges.
- $B\ 3$ integrate knowledge and understanding of internal medicine and other medical specialties and interpret basic clinical tests and images as well as obscure findings to solve clinical problems .
- $B\ 8$ use information technology to optimize learning and write an essay about a specific medical problem.

(3) Course content:

| Subjects | Lectures | Total Teaching Hours |
|---|-------------------|----------------------|
| | 1/week (15 weeks) | (15 hours) |
| General pharmacology: 1- Adverse effects of drugs 2- Pharmacodynamics 3- Pharmacokinetics 4- Drug interactions. 5- Drugs at extremes of age. | 1/week | 2 hours |
| Autonomic pharmacology: 1- Sympathomimetics 2- Adrenoceptor blockers 3- Cholinomimetics 4- Antimuscarininc | 1/week | 2 hours |
| Autacoids: Histamine Seretonin Prostaglandins Angiotensin | 1/week | 1 hour |
| Cardiovascular pharmacology: 1- Drugs for treatment of heart failure. 2- Drug therapy for hypertension. 3- Antiarrhythmic drugs 4- Drugs for angina pectoris. | 1/week | 2 hours |
| Drugs acting on the blood and blood forming organs | 1/week | 1 hour |

| Renal pharmacology: | 1/week | 1 hour |
|---|---------|--------|
| Diuretics and anti-diuretics | 1) Wook | |
| UTI | | |
| Drug nephrotoxicity | | |
| Antimicrobial drugs: | 1/week | 2 hour |
| General chemotherapy | , | |
| Special chemotherapy | | |
| Endocrinal system: | 1/week | 2 hour |
| Hypothalamic and pituitary hormones | , | |
| Thyroid and anti-thyroid | | |
| Parathyroid and bone | | |
| Corticosteroids and anti-corticosteroids | | |
| Pancreatic hormones and anti-diabetics | | |
| Drugs acting on the central nervous system: | 1/week | 2 hour |
| Drugs for insomnia | , | |
| Drug treatment of epilepsy | | |
| Drug therapy of gout | | |
| Drugs for RA | | |
| Opioid analgesics | | |
| Anxiolytics and antipsychotics | | |
| Antidepressants | | |
| Drugs affecting GIT: | 1/week | 2 hour |
| Drug therapy for peptic ulcer & GERD | | |
| Prokinetic drugs | | |
| Emetics and antiemetics | | |
| Antidiarrheal drugs | | |
| Drugs for constipation | | |
| Drugs and the liver | | |
| Drugs for hepatic encephalopathy | | |

(4) Teaching methods:

- 4.1: Lectures with power point presentation.
- 4.2: Seminars and group discussions.
- 4.3. Self learning.

(5) Assessment methods:

5.1:written exam (short essay) for assessment of ILOs (a2,4,6; b1,3,8)

Assessment schedule:

Assessment 1: writtem exam for 1.5 hours (short essay): 72 marks.

Assessment2: oral exam: 60 marks

Assessment: MCQ: 18 marks...

Other assessment without marks: presentations during seminars, log book.

- (6) References of the course:
 - 6.1: Hand books: of the medical microbiology and immunology department.
 - 6.2: Text books: Laurence Clinical pharmacology.
 - 6.1: websites.
- (7) Facilities and resources mandatory for course completion:
 Lecture rooms with data show availability
 Log book

Course coordinators.

Head of the department: Prof Salah Elgamal