



COURSE SPECIFICATION

(Clinical Pharmacology)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate Doctorate degree of Medical Oncology
(2) Department offering the programme.	Internal Medicine Department
(3) Department responsible for teaching the course.	Pharmacology department + Medical Oncology Internal Medicine Department
(4) Part of the programme.	first part
(5) Date of approval by the Department's council	2/08/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title.	Clinical Pharmacology
(8) Course code.	MONC 606
(9) Total teaching hours.	15 hours/15 weeks

B) Professional information

1) Course Aims.

The broad aim of the course are as follows.

To provide the candidate with application of fundamental principles of pharmacology in the design of rational therapeutic regimens for patients, with a particular emphasis in anticancer therapy.

2) Intended Learning Outcomes (ILOs).

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

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

A– Knowledge and Understanding

- A1. Recognize chemotherapeutic drugs and protocols, biologic products, and growth factors and their mechanisms of action; pharmacokinetics, clinical indications, and their limitations, including their effects, toxicity, and interactions.
- A2. Identify combined modality therapy of cancer and new target therapies.
- A3. Identify concepts of supportive care, including hematologic, oncologic, and infectious disease
- A4. Recognize pain management in patients with Oncologic disorders.

B– Intellectual skills

- B1. Construct chemotherapy combinations protocols.
- B2. Calculate doses for chemotherapy.
- B3. Compare between conventional chemotherapy and novel therapies.

3) Course content:

Subjects	Lectures	Clinical	Laboratory	Field	Total Teaching Hours
1) Development of anticancer drugs	1h				1h
2) Pharmacokinetics & Pharmacodynamics	1h				1h
3) Pharmacogenomics	1h				1h
4) Design and analysis of clinical trials. a. Phase I b. Phase II c. Phase III	2h				2h
5) Classic antineoplastic drugs. a. Alkylating agents. b. Antimetabolites c. Topoisomerase-interacting agents d. Cisplatin and its analogs e. Antimicrotubule agents.	3h				3h
6) Endocrine manipulation of cancer	1h				1h
7) Small molecule tyrosine kinase inhibitors	1h				1h
8) Targeting signal transduction with antibodies	1h				1h
9) Histone deacetylase inhibitors & hypomethylating agents	1h				1h
10) Proteasome inhibitors	1h				1h
11) Cancer biotherapeutics. a. Interferon b. Interleukins c. Antisense agents d. Anti-angiogenesis e. Monoclonal antibodies	2h				2h

4) Teaching methods:

4.1 Power point presentation

5) Assessment methods:

5.1 Written exam for assessment of A1–4, B1–3,

5.3. MCQ for assessment of A1–4, B1–3,

Assessment schedule:

Assessment 1: Final exam week/month: 15th week

Percentage of each Assessment to the total mark.

Written exam: 80 marks 80% of total pharmacology exam.

MCQ exam 20 marks 20% of total pharmacology exam.

6) References of the course:

6.1: Hand books.

– Modern Pharmacology, Clinical pharmacology department, faculty of medicine, Mansoura University

– ESMO Handbook on Clinical Pharmacology of Anti- Cancer Agents

6.2: Text books–Pharmacology and therapeutics (Goodman).

–Basic and clinical pharmacology (Katzung).

– Pharmacology (Rang and Dale).

– Cancer Clinical Pharmacology (Jan H. M. Schellens)

7) Facilities and resources mandatory for course completion:

– Lectures Halls.

– Data show.

Course coordinator:

Prof. Dr. Sameh Shamaa

Prof. Dr. Tawfik Elkhodary

Dr. Ziad Emarah

Head of the department:

Prof. Dr. Salah El-Gamal

Date of First Approval: 22/12/2010

Date of Last Approval: 23/08/2016