



COURSE SPECIFICATION

Elective course

(Molecular biology related to oncology)

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate Master degree of Clinical Oncology and Nuclear Medicine/ CONM517
(2) Department offering the programme.	Clinical oncology and nuclear medicine department
(3) Department responsible for teaching the course.	Clinical oncology and nuclear medicine department
(4) Part of the programme.	second part
(5) Date of approval by the Department`s council	7/6/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title.	Molecular biology related to oncology
(8) Course code.	CONM517MB
(9) Total teaching hours.	30 hours

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

- 1- Educate the basic principles of Molecular biology .**
- 2-teach the candidate cell cycle, cell invasion and metastasis.**
- 3-give candidate the ability to apply molecular therapy in treatment of cancer.**

(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:** Discuss Molecular basis of cell death and Cell survival - in vitro and in vivo
- A2:** Define behavior of tumor cells.
- A3:** Describe molecular therapy use in treatment of cancer .
- A4:** discuss cell cycle and apoptosis

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

B- Intellectual skills

- B1:** predict behavior of the growth, control of growth , and metastasis of malignant cells.
- B2:** estimate cancer cell death (apoptosis)
- B3:** apply molecular therapy in the treatment
- B4:** differentiate different stages of cell cycle.

(3) Course content:

Subjects	Lectures	Clinical	Labo y	Field	Total Teaching Hours
* Molecular biology related to oncology					
--basic principles	5				
-genomic and cancer	4				
-cytogenesis	4				
-cell cycle	4				
-apoptosis	4				
-invasion&metastasis	5				
-molecular therapy	4				

(4) Teaching methods:

4.1. lectures.

(5) Assessment methods:

5.1. written exam for assessment of Knowledge and understanding.

MCq continuous assessment for assessment of knowledge , intellectual ILOs

Assessment schedule.

Assessment 1. written exam held after 36 months of admission to job or 30 months of registration to the MS degree.

Assessment 2. Oral exam held after 36 months of admission to job or 30 months of registration to the MS degree.

Assessment 3. MCQ exam held at the end of 2nd, 3rd, 4th semester.

Percentage of each Assessment to the total mark.

Written exam.80 marks

Oral exam. 50 marks.

MCQ (as continuous assessment). 20 marks

References of the course:

6.2. Text books:

- **PerezCA, Brady LW, HalperinEC, et al., editors. *Principles and Practice of Radiation Oncology*. 5th ed. Philadelphia: Lippincott**

Williams&Wilkinns; 2008.

● **Hansen EK and Roach M.:** *Handbook of Evidence-based Radiation Oncology*. 1st edition. New York: springer science+ business media, LLC; 2007.

● **Casciato DA,** editor. *Manual of clinical oncology*. 6th edition. Philadelphia: Lippincott Williams&Wilkins; 2009.

● **DeVita VT, Hellman S, Rosenberg SA,** editors. *Principles and Practice of Oncology*. 8th ed. Philadelphia: Lippincott; 2008.

(6) Facilities and resources mandatory for course completion.

Candidates and their learning are supported in a number of ways:

- Candidates logbook
- Programme Specification
- Extensive library and other learning resources
- Computer laboratories with a wide range of software
- Intranet with a wide range of learning support material
- MSc/MD Dissertation Supervisor

Course coordinator:

Prof.d. Soumaya Eteiba

Assistant prof. Rasha Abdel Latif

Head of the department:

Prof.d. Ibrahim Awad

Date:

P.S. This specification must be done for each course.