



COURSE SPECIFICATION

(Radiotherapy Technology in Hematology-HEM 617 RT)

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate Doctorate Degree of Clinical Hematology/HEMA 600
(2) Department offering the programme.	Internal Medicine Department
(3) Department responsible for teaching the course.	Hematology Unit and Radiotherapy and Nuclear Medicine Department.
(4) Part of the programme.	First part
(5) Date of approval by the Department's council.	26/04/2016
(6) Date of last approval of programme specification by Faculty council.	9/08/2016
(7) Course title.	Radiodiagnosis Technology in Hematology
(8) Course code.	HEM 617 RT
(9) Credit hours	1 hour
(10) Total teaching hours.	15 hours

(B) Professional information

(1) Course Aims:

The radiotherapy technology course aims to provide the MD candidate with working knowledge, practical skills and competencies in radiation biology and radiotherapy as a management of hematological diseases.

(2) Intended Learning Outcomes (ILOs):

A- Knowledge and Understanding:

A1. To identify the principles and application of radiation medicine to hematopoietic and lymphopoietic malignancies via demonstrating the following:

A1a. a working knowledge and understanding of the basic principles of radiation biology.

A1b. practical knowledge of the basic approaches of administering radiation therapy, including the different radiation source types (e.g. electron beam, external beam, brachytherapy)

A1c. the short-term toxicities and the potential long-term consequences of radiation therapy (e.g. secondary malignancies, coronary artery disease).

A1d. the interactions of radiation therapy with medications, including antineoplastic pharmacologic agents.

(3) Course Contents (1 credit hours/15 teaching hours/theoretical):

Subjects	Lectures	Total Teaching Hours
Biological aspects of Radiation Oncology	2	
Factors affecting the response of Tumors to Radiation	2	
Tumor oxygenation	2	
Hypoxia cell sensitizers and cytotoxins	2	
Role of hypoxia imaging in clinical Oncology	2	
Radiation physics	2	
Treatment planning	1.5	
Clinical application of Radiation therapy	1.5	
	1 credit hour/15 teaching hours	

(4) Teaching methods:

4.1. Power Point presentation.

4.2. Laboratory work.

(5) Assessment methods:

5.1. Written exam and MCQ for assessment of knowledge

Assessment schedule:

Final exam 25th week

Percentage of each Assessment to the total mark.

Written exam: 80 marks

MCQ: 20 marks

(6) References of the course:

Text books:

Hollan-Frei Cancer Medicine and DeVita Cancer Principles and Practice of Oncology

(7) Facilities and resources mandatory for course completion.

-Lecture Hall.

-Data show.

-Equipped Laboratory.

Course coordinator: Dr Mona Taalab

Head of Hematology Unit: Prof Mohamed Nasr Mabed

Head of the Internal Medicine Department: Prof. Dr. Salah Al-Gamal

Date of First Approval: 22/12/2010

Date of Last Approval: 26/04/2016