



COURSE SPECIFICATION

(Elective courses)

Brachytherapy

Faculty of Medicine–Mansoura University

(A) Administrative information

(1) Programme offering the course.	Postgraduate MD degree of Clinical Oncology and Nuclear Medicine/ CONM600
(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.	Brachytherapy
(8) Course code.	CONM617BT
(9) Credit hours	1.5 hour
(9) Total teaching hours.	22.5 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- To provide our candidate with the concepts and principles of brachytherapy.**
- 2-To prepare our candidates to acquire competencies, practical skills and applications of various brachytherapy tools used in day to day oncological practice, and be aware of indications, contraindications, normal tissue tolerances and the management of radiation reactions and complications.**
- 3- To give our candidates the ability to decide the plan of treatment for each patient according to stage of different body parts.**

(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

The trainee should:

- A1: Recognize general principles of brachytherapy.**
- A2: Describe different delivery systems.**
- A3: Discuss principles of isotopes.**
- A4 : Define principles of radiotherapy planning with brachytherapy.**



B- Intellectual skills

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B1: Interpret individualized brachytherapy techniques to tumor of different sites

B2: Distinguish the indications, contraindications and potential complications of brachytherapy in order to plan and prescribe appropriate treatment for common malignancies.

B3: Use different brachytherapy machines and equipments.

B4: Designs the plan of treatment to different tumors sites.

B5: Applies different techniques to different body parts



Course content:

Subjects	Lectures	Clinical	Laboratory	Field	Total Teaching Hours
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*Brachytherapy.					
• Introduction	2				2
• Delivery systems	3				3
• Isotopes for brachytherapy	3				3
• Clinical use	3				3
• Dosimetry	3				3
• The Manchester system for interstitial implants	3				3
• The Paris system for iridium wire implants and after loading techniques	2.5				2.5
• Dose reporting	3				3

(3) Teaching methods.



(4)

4.1: lectures

(5) **Assessment methods.**

5.1: written exam for assessment of Knowledge and intellectual skills.

Oral exam for assessment of Knowledge ,intellectual and transferable skills

MCQ exam for assessment of Knowledge and intellectual skills.

Assessment schedule.

Assessment 1: written exam held after 6 semester of registration

Assessment 2: Oral exam held after 6 semester of registration OSCE and
Structured oral exams.

Assessment 3: MCQ at the end of each semester.

Percentage of each Assessment to the total mark.

Written exam: 48 marks.

Oral exam: 50 marks.

MCQ exam: 12 marks.

(6) **References of the course.**

6.1: Text books.

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

(7) 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:

Professor: Mohamed Elawady.

Assistant Professor: Ghada Ezzat Eladawei

Head of the department.



Professor : Ibrahim Awad.

Date: