



**PROGRAMME SPECIFICATION**  
Faculty of Medicine-Mansoura University

**( A ) Administrative information**

(1) Programme Title & Code	Postgraduate MD degree of Clinical Oncology and Nuclear Medicine CONM600
(2) Final award/degree	MD degree of Clinical Oncology and Nuclear Medicine
(3) Department (s)	Clinical Oncology and Nuclear Medicine
(4) Coordinator	Professor Dr: Mohamed Elawady.  Assistant Professor: Ghada Ezzat Eladawei
(5) External evaluator (s)	Prof Dr. Ahmad Elzawawy (Suez CanalUniversity) Prof Dr. Salah Abdelmonim (AlexandriaUniversity)
(6) Date of approval by the Department's council	7/6/2016
(7) Date of last approval of programme specification by Faculty council	9/8/2016

**( B ) Professional information**

**( 1 ) Programme Aims:**

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

Each trainee in Clinical Oncology & Nuclear Medicine who Complete this course should be able to:

- 1-Provide the candidate with pathology of cancer of different body parts

2-Provide the candidates with the basic information concerning use of radionuclides in clinical practice and teach them the diagnostic and therapeutic procedures which include scintigraphy and radionuclide therapy indifferent diseases.

3- Provide the students the principles of cancer management and decision making for treatment policy.

4-Teach them recent advances in management of cancer of different body parts.

5-Prepare the candidate to be able to use brachytherapy in treatment of cancer when indicated.

6-Prepare the candidates to be able to use bone marrow transplantation in treatment of cancer when indicated.

7-Provide the candidate with types and method of treatment of pediatric tumors.

(1) **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 programme, the candidate will be able to:

A- Knowledge and Understanding

The trainee should: know and understand:

A1: Describe pathology of different body parts.

A2: Explain the general basis of nuclear medicine and uses of nuclear medicine in diagnosis and treatment of different body parts.

A3: Discuss principles of cancer management.

A4: Describe indications and goals of treatment with anticancer agents in primary and metastatic malignant disorders.

A5: Identify oncologic emergencies, supportive care of cancer patients.

A6: Describe the recent advances in radio-therapeutic and systemic treatment (chemotherapy, hormone therapy, biologic agents) according to evidence based practice and understand and practice clinical audit and risk management and know the usefulness of

anticancer agents in the neo-adjuvant, concomitant, and adjuvant setting and as a radiation sensitizer.

A7: Recognize general principles and different delivery systems of brachytherapy.

A8: Define principles of isotopes and radiotherapy planning with brachytherapy.

A9: Define rationale of intensive chemotherapy and bone marrow transplantation.

A 10: Describe types and indication of bone marrow transplantation.

A 11: Define acute graft-versus-host disease and chronic graft-versus-host disease.

A 12: Describe indications and goals of treatment with anticancer agents in primary and metastatic pediatric tumors.

A 13: Describe the recent advances in radio-therapeutic and systemic treatment according to evidence based practice in pediatric tumors.

## B- Intellectual skills

B1: Differentiate between benign and malignant tumors and distinguish the biology of tumor growth.

B2: Practice diagnostic and therapeutic use of isotopes in different body systems.

B3: Analyze Clinical knowledge, that is radiological, medical, surgical and pathological, relating to the specific body systems

B4: Distinguish the indications, contraindications and potential complications of radiotherapy and systemic therapy (chemotherapy, hormone therapy, biological agents) in order to plan and prescribe appropriate treatment for common malignancies.

B5: Evaluate the management of complications of disease process and of different treatment modalities.

B6: Interpret individualized brachytherapy techniques to tumor of different sites

B7: Evaluate the management of acute graft-versus-host disease and chronic graft-versus-host disease.

B8: Analyze Clinical knowledge, which is radiological, medical, surgical and pathological, relating to the pediatric tumors.

B9: Distinguish the indications, contraindications and potential complications of radiotherapy and systemic therapy in order to plan and prescribe appropriate treatment for pediatric malignancies.

#### C- Professional/practical skills

Training should give appropriate experience in the areas identified below:

C1: Prescription and administration of cytotoxic chemotherapy and biological therapy.

C2: Applies technique based specialities 2D and (3D) conformal radiotherapy.

C3: Applies quality management and safety in radiation oncology.

C4: Designs the plan of treatment to System-based site specialities:

- breast cancer
- upper and lower gastrointestinal (GI)
- sarcomas
- urological malignancy and germ cell tumors
- skin tumors
- pediatric oncology
- thoracic malignancy
- head and neck
- gynecological oncology
- neuro-oncology
- lymphomas & leukemia
- cancer of unknown primary

C5: participate in an appropriate on-call rotation, or other schemes of exposure to emergency oncology and palliative care, in which he/she will be responsible to a named consultant(s).

#### D- Communication & Transferable skills

D1: Trainees must be able to.

Explain disease processes and treatment details honestly in language appropriate to patients and their families.

Communicate clearly and efficiently both orally and in writing with medical colleagues in other disciplines.

Maintain accurate records of consultations and other interactions with patients and their families.

D2: Trainees must take part in discussions in multi-disciplinary meetings.

	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective6	Objective7
A1	●						
A2		●					
A3			●				
A4			●				
A5			●				
A6				●			
A7					●		
A8					●		
A9						●	
A10						●	
A11						●	
A12							●
A13							●
B1	●						
B2		●					
B3			●				
B4			●	●			
B5			●				
B6					●		
B7						●	
B8							●
B9							●
C1			●	●			
C2			●	●			
C3			●	●			
C4			●	●			
C5			●	●			
D1			●				
D2			●				

### ( 3 ) Academic standards:

Academic standards for the programme are attached in **Appendix I**. In which Benchmark is used. A comparison between ARS, NARS, programme ILOs is attached in **Appendix II**.

3.a- External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme:

Accreditation council for graduate medical education

Website: [www.rcr.ac.uk](http://www.rcr.ac.uk)

[www-gmc-uk.org](http://www-gmc-uk.org)

3.b- Comparison of the specification to the selected external reference/ benchmark:

The aims of the Benchmark are covered by the current program.

There are differences in the credit hours and the time table of the program

About 85% of the topics of the benchmark are covered in our program.

### ( 4 ) Curriculum structure and contents:

4.a- Duration of the programme : 6 semesters

4.b- programme structure:

Candidates should fulfill a total of 60 credit hours

●4.b.1: Number of credit hours:

First part: Pathology 5 credit hours.

Second part:

Clinical oncology and nuclear medicine and elective courses: 25 credit hours.

Log book including clinical training, workshops and training courses:

15 credit hours.

Dissertation: 15 credit hours.

●4.b.2: Teaching hours/week:

( 5 ) Programme courses:

First part

Compulsory courses:

Course Title	Course Code	NO. of hours per week				Total teaching hours 5 credit hours	
		Theoretical		Laboratory /practical	Field		Total
		Lectures	seminars				
Pathology of Tumors	CONM605	5				75	75lectures

Second part

a- Compulsory courses (thesis will be included in this table):

Course Title	Course Code	NO. of hours per week				Total teaching hours	
		Theoretical		Laboratory /practical	Field		Total
		Lectures	seminars				
Clinical Onco &	CONM617CO	14		15		660	(210lectures, 450practical)
Nuclear Med	CONM617NM	8			practical		120lectures
Total							

b- Elective course:

Course Title	Course Code	NO. of hours per week				Total teaching hours
		Theoretical		Clinical /practical	Total	
		Lectures	seminars			
-- Intensive chemotherapy & Bone Marrow transplant	CONM617IC BMT	1.5				22.5lectures
-Pediatric oncology	CONM617PO	1.5				22.5lectures
		1.5				22.5lectures

-Brachytherapy	CONM617BTh														
Total															

### Programme-Courses ILOs Matrix

Programme ILOs are enlisted in the first row of the table (by their code number: a1, a2.....etc), then the course titles or codes are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the programme ILOs in question.

P.S. All courses` specifications are attached in [Appendix III](#).

Course Title/Code	Programme ILOs															
	a1	a2	a3	a4	a5	a6	a7	a8	a9	a10	a11	a12	a13	B1	B2	B3
Pathology of Tumors	x													x		
- Nuclear Medicine		x													x	
- Clinical Oncology			x	x	x	x										x
- Intensive chemotherapy & Bone Marrow transplant									x	x	x					
-Brachytherapy.							x	x								
-Pediatric Oncology.												x	x			



Course Title/Code	Programme ILOs													
	B4	B5	B6	B7	B8	B9	C1	C2	C3	C4	C5	D1	D2	
Pathology of Tumors														
- Nuclear Medicine												×		
- Clinical Oncology	×	×					×	×	×	×	×	×	×	
- Intensive chemotherapy & Bone Marrow transplant				×										
-Brachytherapy.			×											
-Pediatric Oncology.					×	×								

## ( 6 ) Programme admission requirements:

- General requirements:

According to the faculty postgraduate by laws **Appendix IV**.

- Specific requirements (if applicable):

## ( 7 ) Regulations for progression and programme completion:

- Student must complete minimum of 60 credit hours in order to obtain the MD degree, which include the courses of first and second parts, thesis, activities of the log book and other activities in the department.

- Courses description are included in **Appendix III**.

During 6 semesters, the candidate will have clinical rotation in the clinical oncology and nuclear medicine (out patient's clinic, nuclear medicine unit, chemotherapy, in patients, and radiotherapy planning).

### *The dissertation:*

The postgraduate student has to prepare an thesis on a chosen subject in clinical oncology or nuclear medicine . An open discussion of the thesis presented by the student must be accomplished before earning the degree.

### *The second part includes:*

*(covered through 24months)*

A course in clinical oncology and nuclear medicine and Elective courses.

A clinical and practical training in clinical oncology and nuclear medicine (log book activities).

The course topics are covered through:

- Lectures
- Clinical seminars
- Journal clubs
- Conferences

- Lectures and seminars of the previously described courses must be documented in the log book and signed by the lecturer.
- Works related to thesis must be documented in the log book and signed by the supervisors.

( 8 ) Evaluation of Programme's intended learning outcomes (ILOs):

Evaluator	Tools*	Sample size
Internal evaluator (s) Prof	INTERVIEW COMMUNICATION	
External Evaluator (s) Prof Dr. Ahmad Elzawawy (Suez CanalUniversity) Prof Dr. Salah Abdelmonim ( AlexandriaUniversity).	QUESTIONNAIRE	
Senior student (s)		
Alumni		
Stakeholder (s)		
others		

- TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E\_MAIL

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme are in place.	
Programme coordinator: Name:: Prof	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:Seham Ali Elsaied Gad Elhak	Signature & date:

P.S. The programme specification should have attached to it all courses specifications for all courses listed in the matrix.