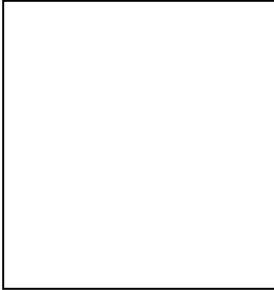




Log Book of MS.
of
Clinical Oncology and
Nuclear Medicine



Personal Data



Name:

Department :

Mobile Number:.....

E-mail Address:

Master Degree:

Date of registration:/...../.....

MD/PhD Degree:

Date of registration:/...../.....

Signature:

Head of the Department

Vice Dean for research and postgraduate study

Aim of the Logbook:



To provide evidence that the candidate attained the desired level of competence required to gain the award. In this book, the candidate will document all academic and clinical skills he/she attained during their training.

Important regulations (for MS candidates):

- To be legible for the first part MS exam you have to attend at least 70% of the lectures of each course in the semester as evidenced by the logbook
- To be legible for the (MCQ online) exam at the end of each of second part semesters you have to attend at least 70% of the lectures of each course/module in the semester as evidenced by the logbook.
- To be legible for the final MS exam .
 - 1- A time interval of 36 months must pass since the day of registration to the job for residents and demonstrators and 30 months since the day of degree registration for non residents.
 - 2- You have to spend a year of daily clinical/practical training in the department or two years with three times/week practical/clinical training.
 - 3-You have to register 4 semesters on Ibn lhaythm registration page.
 - 4- You have to attend 70% of the lectures of each course in the second part of MS degree.
 - 5- You have to fulfill and perform 70% of the practical skills documented in the logbook.

Important regulations (for MD/PhD candidates):

- To be legible for the first part MD exam you have to attend at least 70% of the lectures of each course in the semester as evidenced by the logbook
- To be legible for the (MCQ online) exam at the end of each of second part semesters you have to attend at least 70% of the lectures of each course/module in the semester as evidenced by the logbook.



- To be legible for the final MD/PhD exam .

- 1- A time interval of 36 months must pass since the day of degree registration.
- 2- You have to take your practical/clinical training three times/week for two years .
- 3-You have to register 5 semesters on Ibn Ikhaym registration page.
- 4- You have to attend 70% of the lectures of each course in the second part of MD/PhD degree.
- 5- You have to fulfill and perform 70% of the practical skills documented in the logbook.





Bylaws of the MS





Contents

Section I: Scientific lectures .

Section II: Clinical cases.

Section III: Procedures/operations

Section IV: Seminars

Section V: Clinical rotation

Section VI: Scientific activities (conferences/workshops)



Section I: Scientific Lectures

MSC. 1st Part

Compulsory Course title:	Medical Radiation Physics
Course code:	CONM517MRP
Credit hours	1 lecture 1 clinical
Total teaching hours:	15hours lectures 30 hours clinical

15 hours lectures



Subjects	Lecture Hours	Date	Signature of Lecturer
*Medical radiation physics and physical aspects of radiation protection.	2		
*External beam dosimetry and treatment planning.	2		
*Clinical application of electron beam Therapy	2		
High linear energy transfer and heavy charged particles	1		
Intraoperative radiation therapy	2		
Conformal and stereotactic therapy	2		
Total body and hemibody irradiation	2		
Basic principles of nuclear medicine, physics , diagnostic and therapeutic studies, and radioimmunoassay	2		
Total teaching hours	15		



30 hours clinical skills

Clinical skills	Teaching hours	Date	Trainer signature
Radiation protection	2		
External beam dosimetry	2		
Treatment planning	2		
Clinical application of electron beam therapy	2		
Hemibody irradiation	2		
CT planning	2		
Isodose curves	2		
Radiotherapy machines	2		
3D planning	2		
Dose fractionation	2		
Gamma camera	2		
Normal tissue tolerance	2		
Radioisotopes dealing	2		
Target delineation	2		
Diagnostic and therapeutic use of isotopes	2		



Compulsory Course title.	Tumor biology, Radiobiology & Radiation protection
Course code.	CONM517RBP
Credit hours	1 hour lecture 1 hour clinical
Total teaching hours.	15hours lectures 30 hours clinical



15 hours lectures

Subjects	Lecture hours	Date	Signature of Lecturer
* Principles of molecular cell Biology of cancer: DNA Structure, gene expression, human genome, identification of oncogenes and tumor suppressor genes and implication for oncology	0.5		
* Cell cycle, tumor growth and molecular biology of the cell cycle.	0.5		
* Cell survival curves	0.5		
* Chromosome abnormalities in human cancers and leukemia.	0.5		
*Growth factors and Growth factor receptors and relation to malignancy and targeted therapy	0.5		
* Radiobiology: radiation interaction with biological material, cell repair of radiation damage, relative biologic effectiveness.	0.5		
*Linear energy transfer (LET). *High LET.	0.5		
*Oxygen effect and reoxygenation	0.5		
*Radiation dose and fractionation	0.5		
* Tumor radiobiology , radiosensitivity, adverse effects of radiation.	0.5		
*Radiosensitizers and radioprotectors.	0.5		
*Effect of radiation on different tissues and organs.			
-Skin	0.5		
-liver	0.5		
-Lung	0.5		
-Digestive system	0.5		



-Testis and ovaries	0.5		
-Central nervous system	0.5		
-Cardiac system	0.5		
-Hemopoietic and lymphoid	0.5		
-Kidneys	0.5		
-Skeletal system	0.5		
*Acute and late effects of whole body Irradiation	0.5		
*Chemical modifiers of radiation.	0.5		
*Chemotherapy and irradiation.	0.5		
* Biology of cancer chemotherapy,	0.5		
*Biochemical resistance to chemotherapy	0.5		
*Molecular basis of chemosensitivity&chemoresistance.	0.5		
*Chemotherapeutic drugs and groups.	0.5		
*Chemotherapy toxicity.	0.5		
* Response to chemotherapy and biology of tumor growth	0.5		

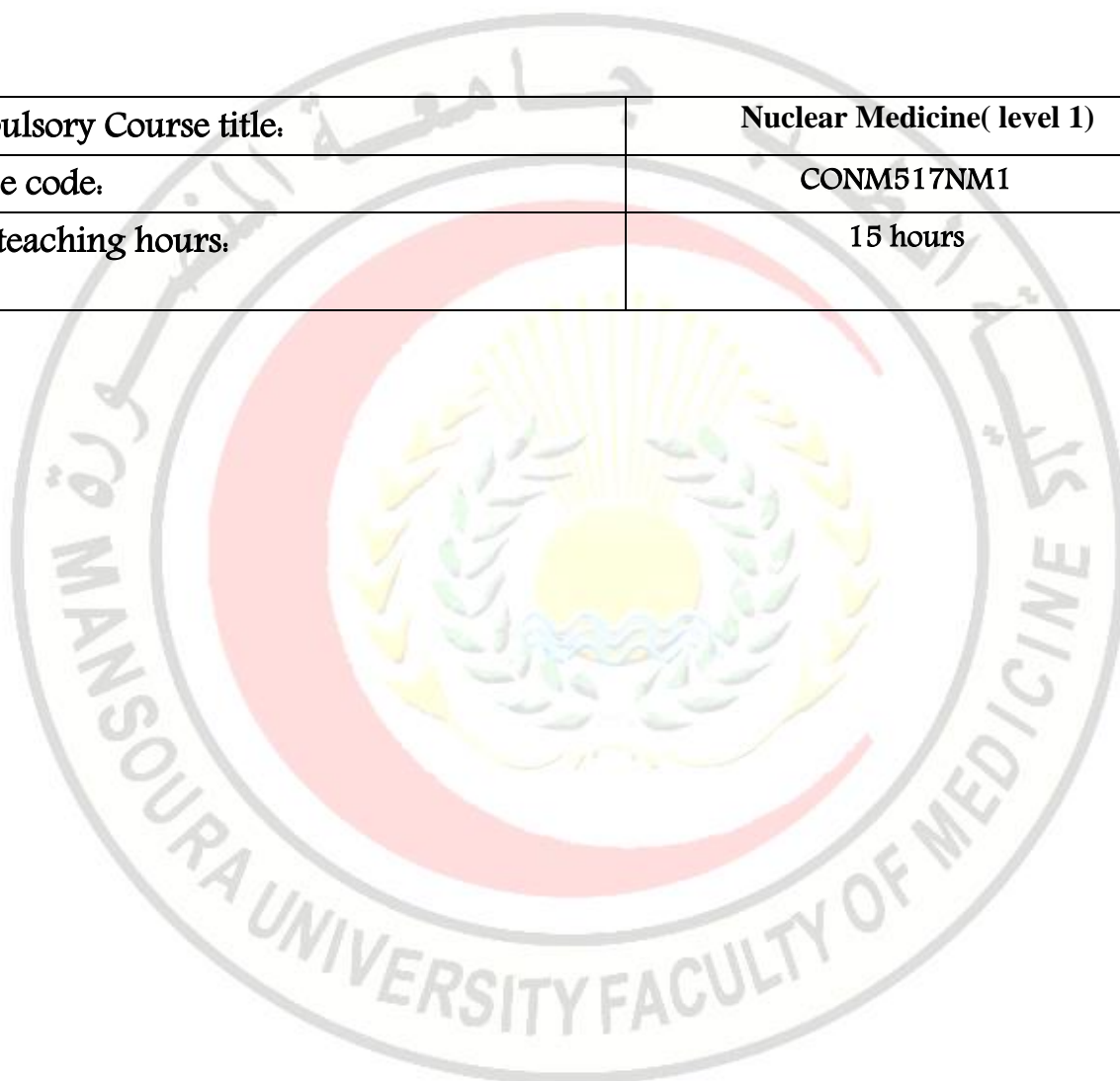


30 hours clinical skill

Clinical skill	Teaching hours	Date	Trainer signature
*Effect of radiation on different tissues and organs.			
-Skin	2		
-liver	1		
-Lung	2		
-Digestive system	2		
-Testis and ovaries	1		
-Central nervous system	2		
-Cardiac system	1		
-Hemopoietic and lympho	2		
-Kidneys	1		
-Skeletal system	2		
*Radiation dose and fractionation	2		
*Radiosensitizers and radioprotectors	2		
*Acute and late effects of whole body irradiation	2		
*Chemical modifiers of radiation.	2		
*Chemotherapy and irradiation.	2		
*Chemotherapy toxicity.	2		
* Response to chemotherapy and biology of tumor growth	2		



Compulsory Course title:	Nuclear Medicine(level 1)
Course code:	CONM517NM1
Total teaching hours:	15 hours





15 hours lectures

Subjects	Lecture hours	Date	Signature
*General basis of nuclear medicine.	2		
*Laboratory techniques used in nuclear medicine including preparation of standards.	1		
*Dose preparation and quality assurance of the dose calibrators.	2		
*Radiopharmacology.	1		
*Health physics-waste disposal and decontamination.	2		
* Radioimmunoassay and radioimmunotherapy	1		
* Concepts of quality control in nuclear medicine.	1		
* Radiation exposure of unsealed sources.	2		
* Instrumentation.			
- Patient selection and preparation	1		
- Complications and precaution	1		
Radionuclides production and use	1		



Compulsory Course title:	Radiation technology
Course code:	CONM517RTec
Credit hours	1 hour lectures 1 hour clinical
Total teaching hours	15 hours lectures 30 hours clinical



15 hours lectures

Subjects	Lectures Hours	Date	Signature of Lecturer
* General principles of radiotherapy of tumors: radiotherapy objectives, side effects and complications.	2		
* Radiation modalities: external beam, brachytherapy, sealed radioactive source	1		
* Radiotherapy equipments and machines: linear accelerators, telecobalt, kilovoltage X-ray machines and Simulators	1		
* Principles and basic techniques of radiation oncology	1		
* Individualized radiotherapy techniques of tumour of different sites:			
-Brain.	1		
-Head and neck;	2		
-Breast	1		
- Thyroid&lung	1		
- Gastrointestinal	0.5		
- Genitourinary system	1		
- Skin	1		
- Bone& Soft tissue tumors	1		
- haematological	0.5		
- Pediatric tumors	1		



30 hours clinical skills

Subjects	Lectures hours	Date	Trainer signature
radiotherapy side effect complications.	1		
external beam	2		
linear accelerators	2		
telecobalt,.	1		
kilovoltage X-ray machine	1		
Simulators	1		
techniques of radiation oncology			
*2D	1		
*3D	1		
* Individualized radiotherapy techniques to tumours at different sites:			
-Brain.	2		
-Head and neck;	2		
-Breast	2		
- Thyroid&lung	2		
- Gastrointestinal	2		
- Genitourinary system	2		
- Skin	2		
- Bone& Soft tissue tumours	2		
- haematological	2		
- Pediatric tumors	2		



Second part

Compulsory Course title.	Clinical Oncology
Course code.	CONM517CO
Credit hours	7 lectures 10 clinical
Total teaching hours.	105 hours lectures 300practical



105 hours lectures

Modules	Subjects & Date of Lectures	Lecture Hours	Lecturer Signature
Module-1	*Principles of cancer management and decision making for treatment policy: surgery, radiotherapy, hormonal therapy and chemotherapy.	2	
	* Multidisciplinary approach of treatment.	1	
	*Cancer of the head and neck		
	- nasal cavity,	1	
	- paranasal sinuses,	1	
	- nasopharynx,	1	
	-oral cavity,	1	
	-oropharynx,	1	
	- larynx,	1	
	- hypopharynx -and salivary glands.	1	
* Cancer of the lung			
-Small cell	1.5		
-Non small cell	1.5		
-Carcinoid	1		
-Large cell neuroendocrine carcinoma	1		
* Mediastinum			
-Thymic tumors	1		
-Germ cell tumors	1		
-Mesenchymal tumors	1		
-Neurogenic tumors	1		
-Primary cardiac malignancies	1		
-pleura.	1		



	<p>*Gynecologic tumors :</p> <ul style="list-style-type: none"> - vulva -vagina -cervix -endometrium -fallopian tubes -gestational trophoblastic disease -ovary 	<p>1</p> <p>1</p> <p>1.5</p> <p>1.5</p> <p>1</p> <p>1</p> <p>1</p>	
	<p>*Cancer of the breast.</p> <ul style="list-style-type: none"> -Early breast cancer -Locally advanced breast cancer -metastatic breast cancer 	<p>2</p> <p>2</p> <p>2</p>	
Module-2	<p>* Cancer of the genitourinary system</p> <ul style="list-style-type: none"> - kidney -ureter -bladder - prostate -urethra -penis -testis 	<p>1</p> <p>1</p> <p>1.5</p> <p>1.5</p> <p>1</p> <p>1</p> <p>1</p>	
	<p>*Cancer of the GIT:</p> <ul style="list-style-type: none"> - esophagus -stomach - pancreas - hepatobiliary - small intestine -colon -rectal -anal region 	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1.5</p> <p>1</p>	
	<p>*Non-melanomatous skin cancer</p> <p>*melanomas</p>	<p>1.5</p> <p>1</p>	
	<p>*Cancer of the endocrine system:</p> <ul style="list-style-type: none"> -thyroid -parathyroid - adrenals -pancreas 	<p>1.5</p> <p>1</p> <p>1</p> <p>1</p>	



	-carcinoid	1	
	* Neoplasms of the central nervous System:	1.5	
	-Low grade gliomas	1.5	
	-High grade gliomas	1	
	-Meningiomas	1	
	-Ependymoma	1	
	-Medulloblastoma	1	
	-Pituitary	1	
	-Spinal cord	1	
	-Orbital, ocular&optic nerve tumors	1	
Module-3	* Solid tumours of childhood.		
	-Neuroblastoma	1	
	-Wilm	1	
	-Retinoblastoma	1	
	-Pediatric bone tumors	1	
	Rhabdomyosarcoma	1	
	-liver tumors	1	
	-Germ cell tumors	1	
	*Cancer in Aids and other immunodeficiency status	1	
	* Soft tissue sarcomas	2	
	*Bone sarcomas.		
	-Osteosarcoma	1	
	-Giant cell tumors	1	
	-Ewing sarcoma	1	
	-Chondrosarcoma	1	
	*Leukemias	2	
	*lymphomas	2	
	*plasma cell neoplasms.	1	
	*Paraneoplastic syndromes and	1	
	* oncologic emergencies	2	
	*Cancer of unknown primary site	2	



*Principles of chemotherapy: chemotherapy objectives, side effects and complications of chemotherapy	1	
*Principles of applications of biologic Therapy	1	
*Adverse effects of treatment	1	
*Treatment of metastatic cancer. -Brain mets -Lung mets -Liver mets -Bone mets	1 1 1 1	
*Supportive care in cancer patient.	1	
*Administration of cancer treatment	1	
* Psychological aspects of patients with Cancer	1	
*Rehabilitation of cancer patients.	1	

300 clinical hours

Clinical skill	Teaching hours	Date	Trainer signature
Management of: *Cancer of the head and neck - nasal cavity, - paranasal sinuses, - nasopharynx, -oral cavity, -oropharynx, - larynx, - hypopharynx -salivary glands.	3 3 4 3 3 4 4 3		



Cancer lung			
-Small cell lung	4		
-Non small cell lung	4		
-Carcinoid	3		
-Large cell neuroendocrine carcinoma	3		
*mediastinum			
-Thymic tumors	3		
-Germ cell tumors	3		
-Mesenchymal tumors	3		
-Neurogenic tumors	3		
-Primary cardiac malignancies	3		
-pleura.	3		
*Gynecologic tumors :			
- vulva	3		
-vagina	3		
-cervix	4		
-endometrium	4		
-fallopian tubes	3		
-gestational trophoblastic disease	3		
-ovary	3		
*Cancer of the breast.			
-Early breast cancer	5		
-Locally advanced breast cancer	5		
-metastatic breast cancer	5		
* Cancer of the genitourinary system			
- kidney	3		
-ureter	3		
-bladder	4		
- prostate	5		
-urethra	3		
-penis	3		
-testis	3		
*Cancer of the GIT:			
- esophagus	4		
-stomach	4		



- pancreas	3		
- hepatobiliary	3		
- small intestine	3		
-colon	4		
-rectal	3		
-anal region	3		
*Non-melanomatous skin cancer	3		
*melanomas	4		
*Cancer of the endocrine system:			
-thyroid	4		
-parathyroid	4		
- adrenals	3		
-pancreas	3		
-carcinoid	3		
* Neoplasms of the central nervous System:			
-Low grade gliomas	4		
-High grade gliomas	3		
-Meningiomas	4		
-Ependymoma	4		
-Medulloblastoma	4		
-Pituitary	4		
-Spinal cord	3		
-Orbital, ocular&optic nerve tumors	3		
* Solid tumours of childhood.			
-Neuroblastoma	3		
-Wilm	3		
-Retinoblastoma	4		
-Pediatric bone tumors	3		
Rhabdomyosarcoma	3		
-liver tumors	3		
-Germ cell tumors	3		
*Cancer in Aids and other immunodeficiency status	3		
* Soft tissue sarcomas	4		



*Bone sarcomas.			
-Osteosarcoma	3		
-Giant cell tumors	3		
-Ewing sarcoma	3		
-Chondrosarcoma	3		
*Leukemias	4		
*lymphomas	4		
*plasma cell neoplasms.	4		
*Paraneoplastic syndromes and	3		
* oncologic emergencies	4		
*Cancer of unknown primary site	3		
Handling of chemotherapy side effects and complications of chemothe	3		
* applications of biologic therapy	3		
*dealing with adverse effects of lines of treatment	3		
*Treatment of metastatic cancer.			
-Brain mets	3		
-Lung mets	3		
-Liver mets	3		
-Bone mets	3		
*Supportive care in cancer patient.	4		
*Administration of cancer treatment	4		
* Deal with psychological aspects of patients with cancer	4		
*how to rehabilitateof cancer patients.	3		



Compulsory Course title.	Nuclear Medicine
Course code:	CONM 517 NM2
Credit hours	4 hours
Total teaching hours:	60 hours lectures



semistar	Subjects	Lectures	Total Teaching Hours	Date	Lecturer Signaturer
1st	*General basis of nuclear medicine.	3	3		
	*Laboratory techniques used in nuclear medicine including preparation of standards.	2	2		
	*Dose preparation and quality assurance of the dose calibrators.	3	3		
	*Radiopharmacology.	2	2		
	*Health physics-waste disposal decontamination.	2	2		
	Nuclear medicine detectors	3	3		
2nd	* Concepts of quality control in nuclear medicine.	2	2		
	* Radiation exposure of unsealed sources.	2	2		
	* SPECT	1	2		
	*Monitoring devices	1			
	*PET	1	3		
	*whole body counters	1			
	*scintillation counters	1			
	* Therapeutic uses of isotopes: -thyroidcancers, - thyrotoxicosis, -bone metastasis,	2 2 2	2 2 2		
3rd	* Diagnostic scintigraphic studies of:				
	-brain,	2	2		
	-myocardium	2	2		
	-kidney	2	2		
	- thyroid	3	3		
	-parathyroid	2	2		

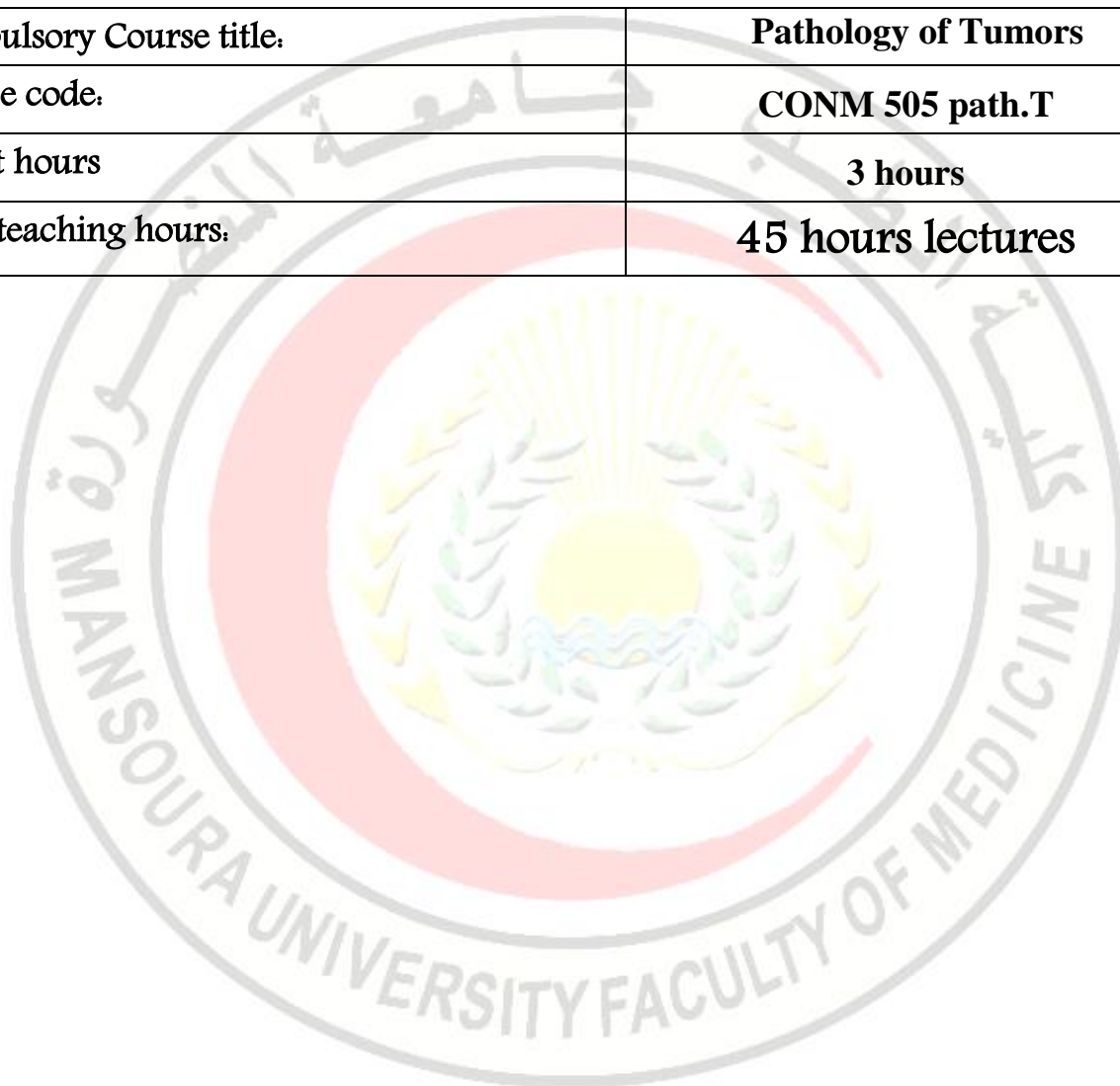


-lung	3	3		
-bone	2	2		
- liver	2	2		
-spleen	2	2		
- pancreas	2	2		
-salivary glands	2	2		
-gastrointestinal	2	2		
-genitourinary	2	2		
-reticuloendothelial systems	2	2		





Compulsory Course title:	Pathology of Tumors
Course code:	CONM 505 path.T
Credit hours	3 hours
Total teaching hours:	45 hours lectures





Subjects	Lecture hours	Date	Lecturer Signature
*General pathology: -Neoplasia -Tumor growth -Carcinogenesis -Tumor markers -Hormones & cancers	2 2 2 2 2		
*Special pathology: -pathology of head and neck tumors. - pathology of brain malignancies. -pathology of lung and pleural cancers - pathology of gastro-intestinal malignancies -pathology of female genital system tumors - pathology of male genital system tumors	2 2 2 3 3 2		
* pathology of urothelial system tumors * pathology of breast cancer *pathology Soft tissue sarcomas *pathology of Bone sarcomas *pathology of Skin cancer and melanomas. *pathology of Cancer of the endocrine system thyroid, parathyroid, adrenals, pancreas, carcinoid * pathology of Solid tumours of childhood. *Leukemias, lymphomas and plasma cell neoplasms	2 2 2 2 3 3 3 3 4		



Elective Course title:	Molecular biology related to oncology
Course code:	CONM517MB
Total teaching hours:	30 hours

Subjects	Lecture Hours	Date	Lecturer Signature
* 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		



Elective Course title:	Genetics related to oncology
Course code:	CONM517GO
Total teaching hours:	30 hours

Subjects	Lecture hours	Date	Lecturer Signature
Genetics related to oncology			
-cancer as genetic disease	4		
-mechanism of cancer predisposition	4		
-gatekeepers, gatetakers, landscapers	5		
-clinical characteristic of cancer families	4		
-multisystem genetic syndromes	4		
-nonsyndromic hereditary cancer	5		
-gene therapy	4		



Elective Course title:	Experimental radiobiology.
Course code:	CONM517ERP
Total teaching hours:	30 hours

Subjects	Lectures	Date	Lecturer Signature
*Biological characters of malignant cells	3		
*Model tumor systems:			
-definition	1		
-preparation	2		
-tumor growth measurement	3		
-tumor control dose	2		
-dilution assay technique	2		
-lung colony assay	2		
* Invivo/ Invitro technique	2		
* spheroids	2		
* predictive assay			
-aim	1		
-Intrinsic radiosensitivity	2		
-O ₂ status	2		
-proliferative potential	2		
*Invitro cell survival curve	2		
*hyperthermia and relation to irradiation	2		



Compulsory second part Course title.	Medicine& surgery related to oncology
Course code.	CONM 517 MSO
Credit hours	2 hours lectures 1 hour clinical
Total teaching hours.	30hours lectures 30 hours clinical



30 hours lectures

Subjects	Lectures	Date	Lecturer signature
*Deep vein thrombosis(DVT)	1		
* Shock	1		
*Breast:			
-Benign breast diseases	1		
-Cancer breast	2		
*Thyroid			
-Thyrotoxicosis	1		
-Cancer thyroid	2		
*Head and neck			
-Tongue ulcer	1		
-lip ulcer	1		
-Jaw swelling	1		
*Gastro-intestinal tumors			
-Oesophageal	1		
-Liver tumors	0.5		
-Pancreatic tumors	0.5		
-Colorectal tumors	1		
-Stomach tumors	1		



30 clinical hours

Basic of surgery		Date	Trainer signature
Diagnosis and 1st aid measures of DVT	1		
Differentiate different types of shock	1		
1st aid measures of shock	1		
Differential diagnosis of breast lumb	2		
Clinical staging of breast cancer	1		
Examination of breast and axilla	1		
Differential diagnosis of thyroid nodule	1		
Assessment of thyrotoxic manifestation	1		
Examination of neck	2		
Diagnosis and differentiation of ulcers of H&N	1		
Assessment of head and neck swelling	1		
Performing abdominal examination	1		
Differential diagnosis of abdominal swellings	1		
Medicine			
Ability to detect cancer early	2		
Diagnose paraneoplastic syndromes	1		
Differential diagnosis of types of jaundice	1		
Using hormonal treatment in cancer and manage side effects	2		
Management of medical problems related to cancer	2		
Detection and management of metabolic disorders related to cancer	2		
Detection of hormonal disorders	1		
Diagnose and differentiate haematologic disorders	2		
Management of lymphoma	2		



Subjects	Lectures	Date	Lecturer Signature
-Hormone and cancer	2		
-Prevention and early detection of cancer	1		
-Paraneoplastic	1		
-Gastric tumor	1		
-colonic tumor	1		
-hepatocellular carcinoma	1		
-hepatic focal lesion	1		
-Jaundice	1		
-lung cancer	1		
-hypercalcaemia	0.5		
-pituitary dysfunction	1		
-thyroid nodule	1		
-goitre	0.5		
-lymphoma	1		
-plasma cell disorders	1		



Section II:

Clinical Cases(the total required number of cases is one third of the mentioned number for postgraduate students working outside university hospital)



List of requirements

Diagnosis of the case	Total number of cases for whom history taking and examination were done at initial presentation	Total No. of cases to give chemotherapy in the outpatient clinic under supervision	Total No. of admission cases to implement the treatment protocol under supervision	Total No. of cases to follow up on radiation machines during radiotherapy course under supervision
Breast cancer	100	70	50	70
Brain tumors	70	20	40	30
Nasopharyngeal tumors	15	12	12	12
Oropharyngeal tumors	12	12	12	12
Hypopharyngeal tumors	12	10	10	10
Oral cavity tumors	15	12	12	12
Maxillary tumors	8	3	3	3
Salivary tumors	8	3	3	3
Esophageal tumors	10	5	5	5



Gastric tumors	6	4	4	4
Pancreatic tumors	10	5	5	5
Large intestinal tumors	40	10	10	10

Musculoskeletal	15	5	5	5
Lymphomas	15	5	5	5
Lung	15	5	5	5
Genitourinary tumors	40	15	15	15





Clinical cases details

Cases of diagnosis 1 ...Breast cancer.....

Level of participation	Date	Location	Signature of supervisor











Cases of diagnosis 2: Brain tumors.....









Cases of diagnosis 3 ...Nasopharyngeal tumors.....

Level of participation	Date	Location	Signature of supervisor







Cases of diagnosis 4: Oropharyngeal tumors.....







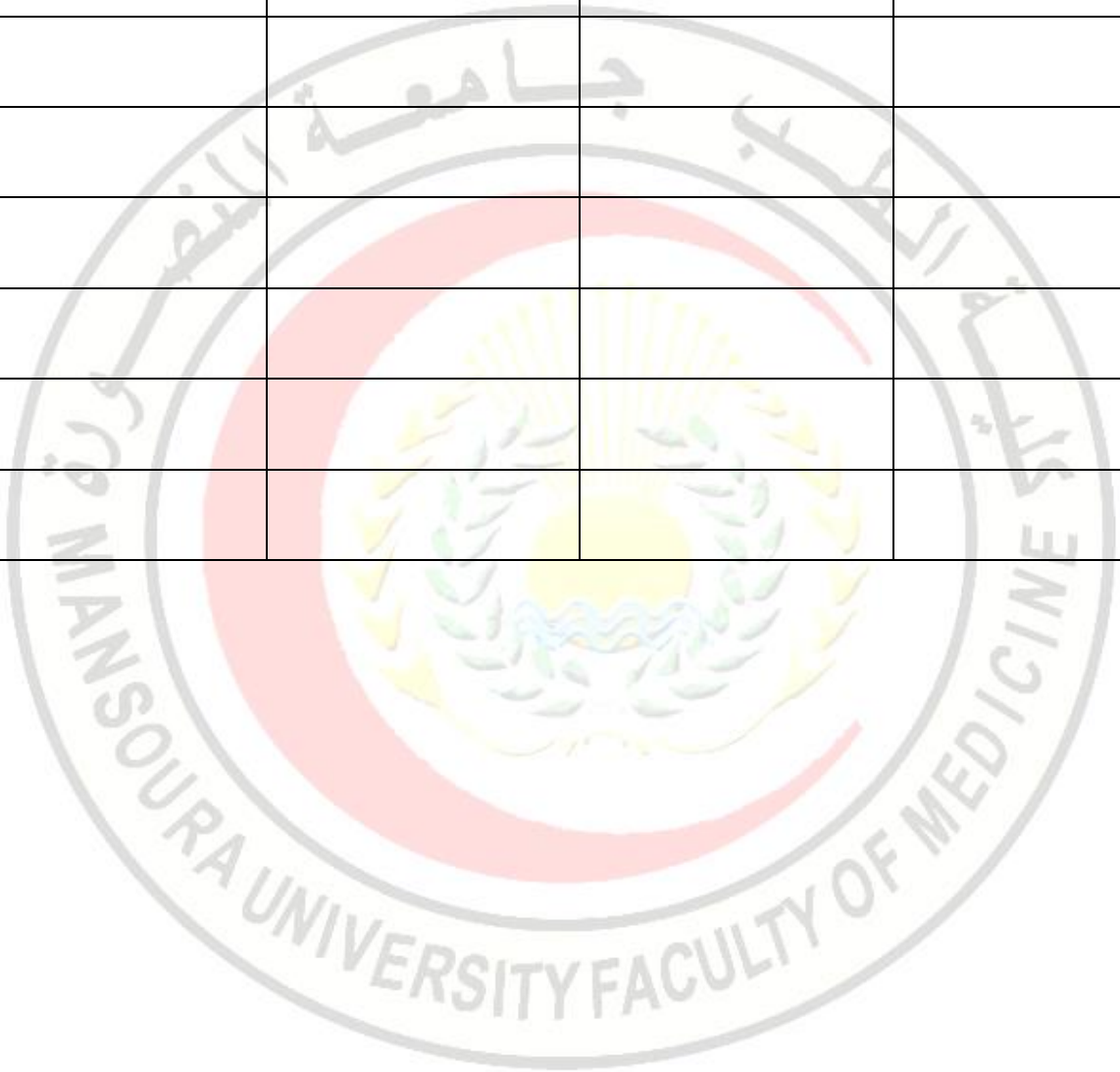


Cases of diagnosis 5 Hypopharyngeal tumors.....

Level of participation	Date	Location	Signature of supervisor









Cases of diagnosis 6:...Oral cancers.....



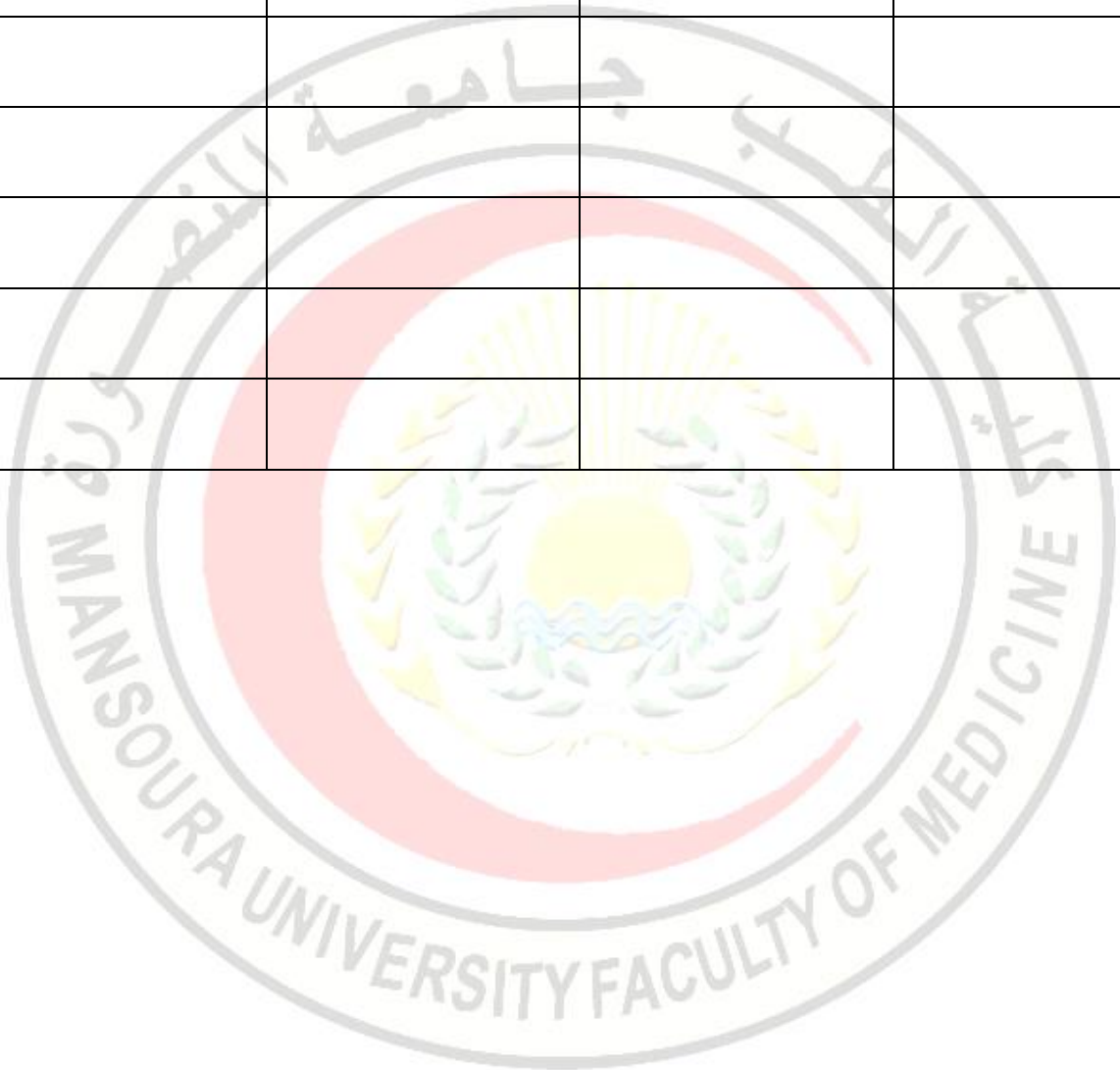




Cases of diagnosis 7 ...Maxillary tumors.....

Level of participation	Date	Location	Signature of supervisor







Cases of diagnosis 8:.....Salivary tumors.....





Cases of diagnosis 9 ...Esophageal tumors.....

Level of participation	Date	Location	Signature of supervisor





Cases of diagnosis 10:Gastric tumors.....







Cases of diagnosis 11 ...Pancreatic tumors.....

Level of participation	Date	Location	Signature of supervisor







Cases of diagnosis 12:...Large intestinal tumors.....







Cases of diagnosis 13 Musculoskeletal

tumors.....

Level of participation	Date	Location	Signature of supervisor









Cases of diagnosis 14:...Lymphomas.....







Cases of diagnosis 15:...Lung carcinomas.....







Cases of diagnosis 16:...Genitourinary tumors.....







Section III:

Planning Procedures(the total

required number of cases is one third of the mentioned number for postgraduate students working outside university hospital)



List of requirements (may include multiple pages)

Radiotherapy planning	Total number required	Observer	Assistant	Independent
Breast cancer	50	30	10	10
Brain tumors	25	10	7	8
Nasopharyngeal tumors	10	4	2	4
Oropharyngeal tumors	8	2	3	3
Hypopharyngeal tumors	8	2	3	3
Oral cavity	8	2	3	3
Maxillary tumors	6	2	2	2
Salivary tumors	6	2	2	2
Esophageal tumors	6	2	2	2
Gastric tumors	6	2	2	2



Pancreatic tumors	6	2	2	2
Large intestinal tumors	25	12	6	13
Musculoskeletal tumors	15	6	5	4
Lymphomas&Myelomas	30	15	8	7
Lung tumors	20	7	7	6
Genitourinary tumors	30	7	15	8



Radiotherapy planning	Total number required	Observer	Assistant	Independent



Radiotherapy planning	Total number required	Observer	Assistant	Independent



Planning Procedures

Planned cases of diagnosis 1 ...Breast cancer.....			
Level of participation	Date	Location	Signature of supervisor













Planned cases of diagnosis 2:...Brain tumors.....





Level of participation:

Observer

Assistant

Independent



Planned cases of diagnosis 3 ...Nasopharyngeal tumors.....

Level of participation	Date	Location	Signature of supervisor









Planned cases of diagnosis 4:Oropharyngeal tumors.....





Level of participation:

Observer

Assistant

Independent



Planned cases of diagnosis 5 ...Hypopharyngeal tumors.....

Level of participation	Date	Location	Signature of supervisor





Planned cases of diagnosis 6:.....Oral cavity tumors.....



Level of participation:

Observer

Assistant

Independent



Planned cases of diagnosis 7 ...Maxillary tumors.....

Level of participation	Date	Location	Signature of supervisor



Planned cases of diagnosis 8: ...Salivary tumors.....



Level of participation:

- Observer
- Assistant
- Independent



Planned cases of diagnosis 9 Esophageal tumors.....			
Level of participation	Date	Location	Signature of supervisor





Planned cases of diagnosis 10: ...Gastric tumors.....



Level of participation:

Observer

Assistant



Planned cases of diagnosis 11Pancreatic tumors.....

Level of participation	Date	Location	Signature of supervisor





Planned cases of diagnosis 12: ...Large intestinal tumors.....





Level of participation:

Observer

Assistant

Independent



Planned cases of diagnosis 13 ...Musculoskeletal tumors.....

Level of participation	Date	Location	Signature of supervisor





Planned cases of diagnosis 14:...Lymphomas.....





Level of participation:

Observer

Assistant

Independent



Diagnosis No 15 Lung tumors









Level of participation:

Observer

Assistant

Independent



Diagnosis No 16-Genitourinary tumors-----.....











Diagnosis No 17





Section IV:



Seminars



List of requirements:

- 1- Seminar attendance:20.....(no. of times required)
- 2- Seminar performance:5.....(no. of times required)

1- Attendance

Topic	Date	Supervisor signature





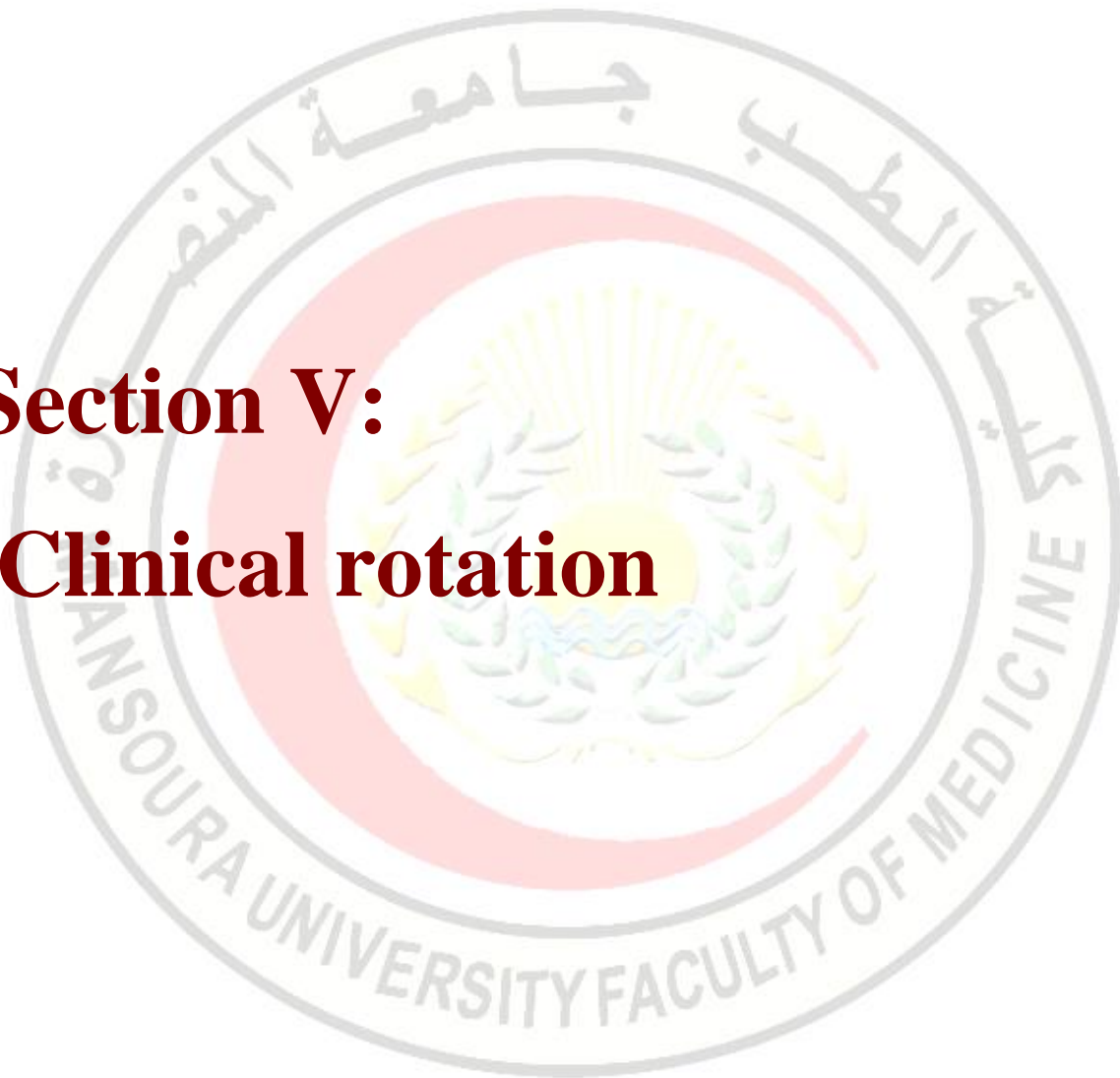


2-Performance (may include multiple pages)

Topic	Date	Supervisor signature



Section V: Clinical rotation





Clinical Rotation (130 practical hours)

Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology					
Internal medicine					
Surgery					
Radio diagnosis					



Clinical Rotation

Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology					
Internal medicine					
Surgery					
Radio diagnosis					



Clinical Rotation

Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology					
Internal medicine					
Surgery					
Radio diagnosis					



Clinical Rotation

Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology outpatient clinic					
Internal medicine					
Surgery					
Radio diagnosis					



Rotation	Date		Department/ hospital	Trainee`s signature	Trainer`s signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology outpatient clinic					
Internal medicine					
Surgery					
Radio diagnosis					



Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology outpatient clinic					
Internal medicine					
Surgery					
Radio diagnosis					



Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology outpatient clinic					
Internal medicine					
Surgery					
Radio diagnosis					



Rotation	Date		Department/ hospital	Trainee's signature	Trainer's signature
	From	To			
Chemotherapy unit					
Nuclear medicine unit					
Patient admission unit					
Machine supervision					
Clinical oncology outpatient clinic					
Internal medicine					
Surgery					
Radio diagnosis					



Section VI

Scientific activities

(Conferences/workshops)



List of requirements

Conferences			
Total number required	Attendance	Organization	Presentation
3	3		
Workshops			
Total number required	Attendance	Organization	Presentation
2	2		



Activity (Conference/Workshop)	Role	Date	Supervisor's signature

- Role:**
- Attendant
 - Organizer
 - Presenter