

COURSE INFORMATION					
Course Title	Code	Semester	T COURSE INFORMATION		
			Lecture+Practice+Labrotory Hour	Credits	ECTS
Radiation Oncology (Clinical Clerkship)	MED512	Phase 5 / 9-10	16+5	3	3*

* ECTS credits are the university credits of the courses in Yeditepe University, Faculty of Medicine, Undergraduate Medical Education Program

Prerequisites	The student that joins this course, should completed Phase 1, 2 , 3 and 4 courses of medical faculty.
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Language of Instruction	English
Course Level	Second Cycle including First Cycle Degree (One Tier Programme)
Course Type	Compulsory
Course Coordinator	Assoc. Prof. Gökhan Yaprak, MD
Instructors	Gökhan Yaprak, MD. (Course Coordinator) Beyhan Ceylaner Bıçakcı, MD. Hüseyin Tepetam, MD Şule Gül Karabulut, MD. Assist.Prof Duygu Gedik, MD. Özlem Yetmen Doğan, MD Hazan Özyurt Bayraktar MD Ayfer Ay Eren MD Uğur Yılmaz MD Sevim Özdemir MD Fatih Demircioğlu MD
Assistants	Dr. Melike Pekiş Varan, MD
Goals	The course aims to convey necessary knowledge on pathology, clinics and treatment of oncological diseases and to equip with skills and attitudes required for an appropriate approach to management of oncology patients
Content	For further details please see Academic Program Book of Phase V at http://med.yeditepe.edu.tr/sites/default/files/phase_5_0.pdf Introduction and Radiation Oncology Terminology Radiation Physics Radiotherapy Methods and Devices Radiation Biology Role of Radiation Therapy in Soft-Tissue Sarcomas Role of Radiation Therapy in Gastrointestinal Cancers Role of Radiation Therapy in Lymphomas Role of Radiation Therapy in Head and Neck Cancers Role of Radiation Therapy in Lung Cancer Role of Radiation Therapy in Breast Cancer Role of Radiation Therapy in Urinary System Cancers Role of Radiation Therapy in Gynecologic Cancers Radiotherapy Side Effects Student Group Study Clinical experience Assessment Session - Written Exam Review of the Exam Questions, Evaluation of the Program

Learning Outcomes <i>At the end of this clerkship, the student should be able to</i>	Programme Learning Outcomes	Teaching Methods	Assessment Methods
Explain the basic oncological terminology	1.1.4	1,2,3	A
Describe the stages of common cancers	1.1.6, 1.1.8	1,2,3	A
Describe the management of common cancers	1.1.9, 1.1.11	1,2,3,12	A
List the steps of radiotherapy planning from treatment decision to radiation delivery	1.1.11	1,2,3,9,12	A
List the common site-specific and general side effects of radiotherapy	1.1.3	1,2,3,12	A
Explain the basic rationale of radiophysics	1.1.3	1,2,3	A
Explain the basic rationale of radiobiology	1.1.3	1,2,3	A
Identify the oncological emergencies	1.1.9, 1.1.11	1,2,3,12	A
Obtain an appropriate history of patients and families as necessary	1.1.2, 1.1.4	12	A
Perform proper physical examination in oncology patients considering special features related to diagnosis	1.1.5	12	A
Interpret laboratory, pathological and radiological data	1.1.7, 1.1.8	1,2,3,12	A
Manage oncological emergency cases	1.1.9, 1.1.1	1,2,3,12	A
Use written and online sources correctly and efficiently to access evidence-based information	3.1.1, 3.1.2, 3.1.3	3	A

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 9: Simulation, 12: Case Study
Assessment Methods:	A: Testing B: Presentation C: Homework

COURSE CONTENT		
Week	Subject	Study Materials
1	Introductory Session Introduction and Radiation Oncology Terminology	Materials for the course provided by instructor
1	Lecture Radiation Physics	Materials for the course provided by instructor
1	Lecture Radiotherapy Methods and Devices	Materials for the course provided by instructor
1	Lecture Radiation Biology	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Soft-Tissue Sarcomas	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Gastrointestinal Cancers	Materials for the course provided by instructor

1	Lecture Role of Radiation Therapy in Lymphomas	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Head and Neck Cancers	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Lung Cancer	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Breast Cancer	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Urinary System Cancers	Materials for the course provided by instructor
1	Lecture Role of Radiation Therapy in Gynecologic Cancers	Materials for the course provided by instructor
1	Lecture Radiotherapy Side effects	Materials for the course provided by instructor
1	Assessment Session	
1	Program Evaluation Session Review of the Exam Questions, Evaluation of the Program	

NCC 2014 – Essential Medical Procedures (Anesthesiology and Reanimation)	Performance Level
Preparing medicines appropriately	4
Providing basic life support	3
Providing advanced life support	3
Giving recovery position to patient	4
Removal of foreign body with appropriate maneuver	4
Performing IM, IV enjection	4
Providing oxygen and nebule-inhaler treatment	4
Application and assessment of pulse-oxymeter	4
Intubation	3
Starting IV line	4
"Airway" application	4
General condition and vital signs assessment	4
Respiratory system examination	3
Cardiovascular system examination	3

RECOMMENDED SOURCES	
Textbook	<ul style="list-style-type: none"> Gunderson and Tepper's Clinical Radiation Oncology
Additional Resources	<ul style="list-style-type: none"> Lecture Notes https://econtour.org

ASSESSMENT	
Questions Types(Pencil-Paper Tests)	Proportion (inPass/FailDesicion)
Multiple Choice Questions	100%
Total	100 %
OtherAssessment Methodsand Tools	Proportion (inOtherAssessment sMethodsandTools)
Total	-
Pass/FailDecision	Proportion (inPass/FailDecision)
Pencil-PaperTests	100%
OtherAssessmentsMethodsandTools	-
Total	100 %

MATERIAL SHARING	
Documents	Via Google classroom
Assignments	Powerpoint presentations
Exams	Not shared

COURSE CATEGORY	Expertise/Field Courses
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COURSE'S CONTRIBUTION TO PROGRAM						
	PODG.1. Basic Professional Competencies	Contribution				
	POD.1.1. Clinical Competencies	1	2	3	4	5
PO.1.1.1.	values preventive health services, offers primary prevention (i.e. prevention of diseases for the protection of health), secondary prevention (i.e. early diagnosis and treatment) tertiary prevention (i.e. rehabilitation) and quaternary prevention (i.e. prevention of excessive and unnecessary diagnosis and treatment) services, provides consultancy on these issues.					X
PO.1.1.2.	employs a patient-centered approach in patient management.					X
PO.1.1.3.	recognizes most frequently occurring or significant clinical complaints, symptoms, signs, findings and their emergence mechanisms in clinical conditions.					X
PO.1.1.4.	takes medical history from the applicant himself/herself or from the individual's companions.					X
PO.1.1.5.	does general and focused physical and mental examination.					X
PO.1.1.6.	interprets findings in medical history, physical and mental examination.					X
PO.1.1.7.	employs diagnostic procedures that are used frequently at the primary health care level.					X
PO.1.1.8.	selects tests that have evidence-based high efficacy at the primary health care level and interprets results.					X

PO.1.1.9.	makes clinical decisions using evidence-based systematic data in health care service.								X
PO.1.1.10.	performs medical interventional procedures that are used frequently at the primary health care level.								X
PO.1.1.11.	manages healthy individuals and patients in the context of health care services.								X
PO.1.1.12.	keeps medical records in health care provision and uses information systems to that aim.								X
POD.1.2. Competencies related to Communication									
PO.1.2.1.	throughout his/her career, communicates effectively with health care beneficiaries, co-workers, accompanying persons, visitors, patient's relatives, care givers, colleagues, other individuals, organizations and institutions.							X	
PO.1.2.2.	collaborates as a team member with related organizations and institutions, with other professionals and health care workers, on issues related to health.							X	
PO.1.2.3.	recognizes the protection and privacy policy for health care beneficiaries, co-workers, accompanying persons and visitors.							X	
PO.1.2.4.	communicates with all stakeholders taking into consideration the socio-cultural diversity.							X	
POD.1.3. Competencies Related to Leadership and Management									
PO.1.3.1.	manages and leads within the health care team in primary health care organization.								X
PO.1.3.2.	recognizes the principles of health management and health sector economy, models of organization and financing of health care services.								X
PO.1.3.3.	recognizes the resources in the health care service, the principles for cost-effective use.								X
POD.1.4. Competencies related to Health Advocacy									
PO.1.4.1.	recognizes the health status of the individual and the community and the factors affecting the health, implements the necessary measures to prevent effects of these factors on the health.							X	
PO.1.4.2.	recognizes and manages the health determinants including conditions that prevent access to health care.							X	
POD.1.5. Competencies related to Research									
PO.1.5.1.	develops, prepares and presents research projects								X
POD.1.6. Competencies related to Health Education and Counseling									
PO.1.6.1.	provides consultancy services and organizes health education for the community to sustain and promote the health of individual and community.								X
PODG.2. Professional Values and Perspectives									
POD.2.1. Competencies related to Law and Legal Regulations									
PO.2.1.1.	performs medical practices in accordance with the legal framework which regulates the primary health care service.							X	
POD.2.2. Competencies Related to Ethical Aspects of Medicine									
PO.2.2.1.	recognizes basic ethical principles completely, and distinguishes ethical and legal problems.								X
PO.2.2.2.	pays importance to the rights of patient, patient's relatives and physicians, and provides services in this context.								X

	POD.2.3. Competencies Related to Social and Behavioral Sciences					
PO.2.3.1.	relates historical, anthropological and philosophical evolution of medicine, with the current medical practice.				X	
PO.2.3.2.	recognizes the individual's behavior and attitudes and factors that determine the social dynamics of the community.				X	
	POD.2.4. Competencies Related to Social Awareness and Participation					
PO.2.4.1.	leads community with sense of responsibility, behavior and attitudes in consideration of individual behaviors and social dynamics of the community, and if there is a necessity, develops projects directed towards health care services.				X	
	POD.2.5. Competencies Related to Professional Attitudes and Behaviors					
PO.2.5.1.	displays a patient-centered and holistic (biopsychosocial) approach to patients and their problems.					X
PO.2.5.2.	respects patients, colleagues and all stakeholders in health care delivery.					X
PO.2.5.3.	displays the proper behavior in case of disadvantaged groups and situations in the community.					X
PO.2.5.4.	takes responsibility for the development of patient safety and healthcare quality.					X
PO.2.5.5.	evaluates own performance as open to criticism, realizes the qualifications and limitations.					X
	PODG.3. Professional Development and Self-Worth					
	PODG.3.1. Personal Development and Values					
PO.3.1.1.	embraces the importance of lifelong self-learning and implements .					X
PO.3.1.2.	embraces the importance of updating knowledge and skills; searches current advancements and improves own knowledge and skills.					X
PO.3.1.3.	uses English language at least at a level adequate to follow the international literature and to establish communication related to the profession.					X
	POD.3.2. Competencies Related to Career Management					
PO.3.2.1.	recognizes and investigates postgraduate work domains and job opportunities.				X	
PO.3.2.2.	recognizes the application requirements to postgraduate work/job domains, and distinguishes and plans any requirement for further training and work experience.				X	
PO.3.2.3.	prepares a resume, and recognizes job interview methods.				X	
	POD.3.3. Competencies Related to Protection and Development of Own Physical and Mental Health					
PO.3.3.1.	implements the rules of healthy living.				X	
PO.3.3.2.	displays appropriate behavior specific to work under stressful conditions.				X	
PO.3.3.3.	uses self-motivation factors.				X	

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity /day	Duration (Hour)	Total Workload (Hour)
Course Duration (1 week)	5	5	25
Hours for off-the-classroom study (Pre-study, practice, review/week)	5	10	50
Homework	-	-	-
Exam	1	1	1
Total Work Load			76
Total Work Load / 30 (h)			2.5
ECTS Credit of the Course			3