



MUĞLA SITKI KOÇMAN UNIVERSITY
FACULTY OF MEDICINE

2021-2022

ENGLISH PROGRAM

PHASE V

Department of RADIOLOGY

CLERKSHIP GUIDEBOOK

CLERKSHIP LOG BOOK

CLERKSHIP PROGRAM

Prepared by Department of Radiology

INTRODUCTION

Dear Students,

Welcome to the Radiology clerkship program which is an important part of your education.

In this clerkship program, which is going to continue for 2 week/weeks, we aim to give the basic education of the clerkship program in all aspects of theoretical courses and practical applications. This guide describes what you will learn and perform during your clerkship, the rules you must follow in our clinic, and the working conditions. We wish you all success with the belief that this guide will guide you sufficiently through your clerkship studies.

A. GENERAL INFORMATION	
Course Code	5010
Course Title	Radiology
Duration of the course	2 weeks
Theoretical Course duration (Hours)	48
Application Course duration (Hours)	23
AKTS	3
Year	Phase V
Level of Course	Undergraduate (Bachelor)
Required/Elective	Required
Program	Faculty of Medicine (English)
Language	English
Style	Formal
Teaching Methods:	Theoretical lessons Practice Case Discussions Small Working Groups
Recommended Legislation Reading:	<ol style="list-style-type: none">1. MSKÜ Ön Lisans ve Lisans Eğitim-Öğretim Yönetmeliği2. MSKÜ Tıp Fakültesi Eğitim-Öğretim ve Sınav Yönetmeliği3. MSKÜ Tıp Fakültesi Sınav Kılavuzu4. Yükseköğretim Kurumları Öğrenci Disiplin Yönetmeliği

B. TEACHING STAFF

Head of the Department:	Doç Dr Neşat ÇULLU
Supervisor of the Clerkship Education Program	Doç Dr Neşat ÇULLU
Supervisor of the Examinations and End of Clerkship Survey:	Dr Öğr Üyesi Rabia Mihriban Kılınç
Teaching staff of the Clerkship Program:	Doç Dr Neşat ÇULLU Doç Dr Funda Dinç Elibol Dr Öğr Üyesi R. Mihriban Kılınç Dr Öğr Üyesi Bünyamin Güney Dr Öğr Üyesi Dr İ. Önder Yeniçeri Dr Öğr Üyesi Dr Emrah Doğan

C. PHYSICAL SPACES

Classrooms and Study Areas	<u>Classroom Floor-Room No:</u> MSKUEAH 2nd Floor, Education room <u>Polyclinic Floor-Room No:</u> MSKUEAH 2nd Floor, Training room, USG and report rooms
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D. OBJECTIVES- AIMS-LEARNING OUTCOMES OF THE CLERKSHIP PROGRAM

Objectives (MED-RAD- OBJ-....)	<ol style="list-style-type: none"> 1. Within the scope of the National EAP, it is aimed to provide information about radiological imaging methods and interventional radiological procedures used in the diagnosis and treatment of diseases and to teach the basic principles of radiological evaluation.
Aims (MED-RAD- AIM-....)	<ol style="list-style-type: none"> 1. To be able to recognize radiological imaging modalities / to distinguish the method by which radiological examinations are performed, to explain the physical basis of imaging modalities 2. To be able to explain disease-specific radiological diagnosis modalities and algorithms 3. To be able to detect normal-pathological findings in radiological diagnostic methods 4. To be able to reach a result by evaluating the radiological pathological findings, clinical history and laboratory findings together 5. To be able to describe interventional radiological procedures and explain their place in the diagnosis algorithm 6. Ability to read chest radiography, standing direct abdominal radiography and direct urinary system radiography in accordance with the technique 7. To be able to read the musculoskeletal system direct graphs in accordance with the technique 8. To be able to explain where, when and in which situations radiological modalities should be used
Learning Outcomes (MED-RAD- LO-....)	<ol style="list-style-type: none"> 1. Recognize the radiological imaging modalities / distinguish the method used in radiological examinations, explain the physical basis of imaging modalities. 2. Explain disease-specific radiological diagnosis modalities and algorithms. 3. Can detect normal-pathological findings in radiological diagnostic methods. 4. It can be concluded by evaluating the detected radiological pathological findings together with the clinical history and laboratory findings. 5. Recognize interventional radiological procedures and explain their place in the diagnostic algorithm. 6. She/He can read chest radiography, standing direct abdominal radiography and direct urinary system radiography according to her technique. 7. The musculoskeletal system can read direct radiographs in accordance with her technique. 8. Explain where, when and in which situations radiological modalities should

be used.

<p style="text-align: center;">PHASE V</p> <p style="text-align: center;">RADIOLOGY CLERKSHIP</p> <p style="text-align: center;">MATRIX SHOWING THE RELATIONSHIP BETWEEN OBJECTIVES-AIMS-LEARNING OUTCOMES and ENGLISH THE COURSE SCHEDULE</p>	
COURSE SUBJECT	OBJECTIVES-AIMS and LEARNING OUTCOMES
Introduction to Radiology / History of Radiology / Radiology physics	MED-RAD-OBJ-1 MED-RAD-AIM-1 MED-RAD-LO-1
Radiological imaging methods / Introduction of radiology and imaging units	MED-RAD-OBJ-1 MED-RAD-AIM-1 MED-RAD-LO-1
Circulatory system radiology / Evaluation of direct radiographs in circulatory system radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4,6 and 8 MED-RAD-LO-2,3,4,6 and 8
Endocrine system radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4 and 8 MED-RAD-LO-2,3,4 and 8
Digestive system radiology / Evaluation of direct radiographs in digestive system radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4,6 and 8 MED-RAD-LO-2,3,4,6 and 8
Genitourinary system radiology / Evaluation of direct radiographs in genitourinary system radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4,6 and 8 MED-RAD-LO-2,3,4,6 and 8
Musculoskeletal radiology / Evaluation of direct radiographs in musculoskeletal radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4,7 and 8

	MED-RAD-LO-2,3,4,7 and 8
Nervous system radiology / Evaluation of direct radiographs in nervous system radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4 and 8 MED-RAD-LO-2,3,4 and 8
Head and neck radiology / Evaluation of direct radiographs in head and neck radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4 and 8 MED-RAD-LO-2,3,4 and 8
Interventional radiology applications	MED-RAD-OBJ-1 MED-RAD-AIM-5 MED-RAD-LO-5
Breast radiology / Evaluation of mammograms	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4 and 8 MED-RAD-LO-2,3,4 and 8
Respiratory system radiology / Evaluation of direct radiographs in respiratory system radiology	MED-RAD-OBJ-1 MED-RAD-AIM-2,3,4,6 and 8 MED-RAD-LO-2,3,4,6 and 8

<p>PHASE V</p> <p>RADIOLOGY CLERKSHIP</p> <p>COURSE SUBJECTS RELATED TO PHASE I-II-III and IV</p>
Evaluation of direct radiographs in digestive system radiology
Evaluation of direct radiographs in genitourinary system radiology
Evaluation of direct radiographs in musculoskeletal radiology
Evaluation of direct radiographs in respiratory system radiology
Evaluation of direct radiographs and CT in nervous system radiology

E. ADDITIONAL INFORMATION

Duties and responsibilities of students	<ol style="list-style-type: none">1. During the course program (if no change is notified by the relevant faculty member during the clerkship period), students are expected to fully present for theoretical or practical application. According to the regulation, there is an attendance requirement of 70% in theoretical courses and 80% in applied courses in Phase V.2. Although there is no directive of the medical faculty regarding dress, all students are expected to perform personal care and dress with a style and care worthy of a physician candidate during all practical and theoretical training hours.3. It is expected to be worn a white coat in all practical trainings.4. Students who fail the theoretical exam will not be taken to the practical exam.
Recommended Reading/ Studying materials	<ol style="list-style-type: none">1. Klinik Radyoloji, Ercan Tuncel2. Temel Radyoloji, İbrahim Tanzer Sancak

F. ASSESSMENT METHOD(S) CLERKSHIP FINAL EXAM EVALUATION

* It is compulsory to get at least 60 points from the written exam in order to take the practical exams in the clerkship exams.
** With the condition of having at least 60 points in each stage of the clerkship exams, the final success grade is calculated as the arithmetic average of each stage.

Exam type	Explanation (if any)	Contribution Value (%)
Multiple choice questions		50
Practice exam	Exam with radiological images	50
Total		100

**G. ASSESSMENT METHOD(S)
CLERKSHIP MAKE-UP EXAM EVALUATION:**

* It is compulsory to get **at least 60 points** from the written exam in order to take the practical exams in the clerkship exams.

** With the condition of having **at least 60 points** in each stage of the clerkship exams, the final success grade is calculated as the arithmetic average of each stage.

Exam type	Explanation (if any)	Contribution Value (%)
Multiple choice questions,		50
Practice exam	Exam with radiological images	50
Total		100

H. DEPARTMENT OF RADIOLOGY STUDENT CLERKSHIP LOG BOOK:

**STUDENT NAME SURNAME:
NUMBER:**

CLERKSHIP TERM:

PRACTICE	TEACHING STAFF (SIGNATURE)
PA chest radiography evaluation	
Evaluation of abdominal radiograph	
DÜSG evaluation	
Musculoskeletal X-ray evaluation	
Brain CT evaluation	
Mammography evaluation	

DECISION

Sufficient

Insufficient

Head of the Department
or
Supervisor of Clerkship

I.CHANGES TO THE PREVIOUS YEAR OF EDUCATION

Are there any changes in the course schedule compared to previous year?	NO
Are there any changes in the Clerkship guide and log book?	NO
Are there any changes in the objectives- aims- learning outcomes of the clerkship program?	NO
Are there any changes in the scoring of Medical Faculty Clerkship - Program Outcomes Matrix?	NO

Medical Faculty Clerkship -Program Outcomes Matrix*

The Name of the Clerkship	Py1	Py2	Py3	Py4	Py5	Py6	Py7	Py8	Py9	Py10	Py11	Py12	Py13
RADIOLOGY	0	5	5	5	5	5	5	5	0	0	0	5	0

*** Will be completed according to the following program outcomes. (Score from 0 to 5.)**

1- To have detailed, updated and advanced level of information in the field of basic, clinical, and surgical medical sciences.

2- To be able to use the advanced theoretical and practical knowledge gained from basic, clinical, and surgical medical sciences To perform the first assessment of the patient encountered, to reveal differential diagnosis, ask for the necessary tests, to prescribe, arrange treatment plans, to plan disease management and to carry out post-mortem operations.

3-To communicate effectively with patients and patients' relatives and with units required according to the medical requirements. To inform people and organizations about issues related to the health field; transfer thoughts and suggestions verbally and written regarding the issue.

4- To take responsibility as an individual and as a team member to solve complex and unpredictable problems encountered in clinical practice, besides to construct independently, to develop a solution method, to solve and evaluate the results. To be able to reveal the public health problems, to apply and explain individual, organizational, social development ways for effective and efficient health services.

5- Planning and managing the activities related to the professional development of employees working under the responsibility of them.

6- To know and apply the laws and regulations related to health care.

7- To examine the concepts and ideas concerning basic, clinical and surgical medical sciences through scientific methods, to interpret and evaluate data, to identify problems, to be able to analyze, and develop solutions based on evidence and research.

8-To have scientific and ethical values when collecting, interpreting, disseminating and implementing data related to the health field, and also to teach these values and to check them.

9-To monitor current information and communicate with colleagues in the field by using a foreign language

10- To use computer software, information and communication technologies at a level required in the field

11- To value the universality of social rights, gain social justice consciousness, to have sufficient consciousness of environmental protection and occupational safety and quality management processes.

12-To gain the lifelong learning skills and to monitor the latest developments from the professional aspect.

13- To fulfill the responsibilities arising from the humanitarian, social and cultural values.



2021 - 2022 ACADEMIC YEAR

PHASE V

RADIOLOGY CLERKSHIP

GROUP 5

TERM LENGTH: 2 WEEK

11 /10/ 2021 - 22 / 10 / 2021

First Week

Date	Time	T* / P*	ÖM*/ TD*	UÇEP Clause	UÇEP Learning Degree	Topic of the Lecture	Lecturer
Monday 11.11.2021	08:30 - 09:20	T				Introduction to radiology	Dr Neşat Çullu
	09:30 - 10:20	T				Radiology history	Dr Neşat Çullu
	10:30 - 11:20	T		D4	K	Radiological imaging methods	Dr Neşat Çullu
	11:30 - 12:20	T		D4	K	Presentation of radiology and imaging units	Dr Neşat Çullu
	12:30-13:20	P				Advisory hour	
	13:30 - 14:20					elective internship	elective internship
	14:30- 15:20					elective internship	elective internship
	15:30 - 16:20					elective internship	elective internship
	16:30 - 17:20					elective internship	elective internship
Tuesday 12.11.2021	08:30 - 09:20	T		D4	ÖnT		Dr Neşat Çullu
	09:30 - 10:20	T		D4	ÖnT		Dr Neşat Çullu
	10:30 - 11:20	T		15,28,29, 95,97, 207, 222,270, 271	ÖnT		Dr Neşat Çullu
	11:30 - 12:20	T		15,28,29, 95,97, 207, 222,270, 271	ÖnT		Dr Neşat Çullu
	12:30-13:20	P				Advisory hour	
	13:30 - 14:20	T		3,75,76,105 ,126,141,142 ,143,144,191 ,192	ÖnT		Dr Neşat Çullu
	14:30- 15:20	T		3,75,76,105, 126,141,142, 143,144,191, 192	ÖnT		Dr Neşat Çullu
	15:30 - 16:20	P		D4			Dr Neşat Çullu
	16:30 - 17:20	P		D4			Dr Neşat Çullu
Wednes day 13.11.2021	08:30 - 09:20	T		D4	ÖnT	Evaluation of direct radiographs in digestive system radiology	Dr Rabia Mihriban Kılınç
	09:30 - 10:20	T		D4	ÖnT	Evaluation of direct radiographs in digestive system	Dr Rabia Mihriban Kılınç

					radiology	
			16,30,77,83, 108,109,110, 136,160,173, 175,187,188, 198,201,209, 249,250,254, 255,264,336	ÖnT	Digestive system radiology	Dr Rabia Mihriban Kılınc
			16,30,77,83, 108,109,110, 136,160,173, 175,187,188, 198,201,209, 249,250,254, 255,264,336	ÖnT	Digestive system radiology	Dr Rabia Mihriban Kılınc
			16,30,77,83, 108,109,110, 136,160,173, 175,187,188, 198,201,209, 249,250,254, 255,264,336	ÖnT	Digestive system radiology	Dr Rabia Mihriban Kılınc
			D4		Practical (Working with test samples)	Dr Rabia Mihriban Kılınc
			D4		Practical (Working with test samples)	Dr Rabia Mihriban Kılınc
			D4		Practical (Working with test samples)	Dr Rabia Mihriban Kılınc
Thursday 14.11.2021			D4	ÖnT	Evaluation of direct radiographs in genitourinary system radiology	Dr Rabia Mihriban Kılınc
			D4	ÖnT	Evaluation of direct radiographs in genitourinary system radiology	Dr Rabia Mihriban Kılınc
			D4	ÖnT	Genitourinary system radiology	Dr Rabia Mihriban Kılınc
			1,43,48,49,5 0,217,244, 247,248,281, 299,300,312, 313	ÖnT	Genitourinary system radiology	Dr Rabia Mihriban Kılınc
			1,43,48,49,5 0,217,244, 247,248,281, 299,300,312, 313	ÖnT	Genitourinary system radiology	Dr Rabia Mihriban Kılınc
			D4		Genitourinary system radiology	Dr Rabia Mihriban Kılınc
			D4		Genitourinary system radiology	Dr Rabia Mihriban Kılınc

						Genitourinary system radiology	Kılınç
	15:30 - 16:20	P		D4		Practical (Working with test samples)	Dr Rabia Mihriban Kılınç
	16:30 - 17:20	P		D4		Practical (Working with test samples)	Dr Rabia Mihriban Kılınç
Fiday 15.11.2021	08:30 - 09:20	T		D4	ÖnT	Evaluation of direct radiographs in musculoskeletal radiology	Dr Bünyamin Güney
	09:30 - 10:20	T		D4	ÖnT	Evaluation of direct radiographs in musculoskeletal radiology	Dr Bünyamin Güney
	10:30 - 11:20	T		D4	ÖnT	Evaluation of direct radiographs in musculoskeletal radiology	Dr Bünyamin Güney
	11:30 - 12:20	T		117, 237, 238, 239, 292	ÖnT	Evaluation of direct radiographs in musculoskeletal radiology	Dr Bünyamin Güney
	13:30 - 14:20	T		117, 237, 238, 239, 292	ÖnT	Evaluation of direct radiographs in musculoskeletal radiology	Dr Bünyamin Güney
	14:30 - 15:20	P		D4		Practical (Working with test samples)	Dr Bünyamin Güney
	15:30 - 16:20	P		D4		Practical (Working with test samples)	Dr Bünyamin Güney
	16:30 - 17:20	P		D4		Practical (Working with test samples)	Dr Bünyamin Güney
	Second Week						
Date	Time	T* / P*	ÖM* / TD*	UÇEP Clause	UÇEP Learning Degree	Topic of the Lecture	Lecturer
Monday 18.11.2021	08:30 - 09:20	T		D4	ÖnT	Evaluation of direct radiographs in nervous system radiology	Dr İ.Önder Yeniçeri
	09:30 - 10:20	T		D4	ÖnT	Evaluation of direct radiographs in nervous system radiology	Dr İ.Önder Yeniçeri
	10:30 - 11:20	T		79,80,100,102,127,165,176,229	ÖnT	Nervous system radiology	Dr İ.Önder Yeniçeri

	11:30 - 12:20	T		79,80,100,102,127,165,176,229	ÖnT	Nervous system radiology	Dr İ.Önder Yeniçeri
	12:30-13:20	P				Advisory hour	
	13:30 - 14:20					elective internship	elective internship
	14:30- 15:20					elective internship	elective internship
	15:30 - 16:20					elective internship	elective internship
	16:30 - 17:20					elective internship	elective internship
Tuesday 19.11.2021	08:30 - 09:20	T		D4	ÖnT	Evaluation of direct radiographs in head and neck radiology	Dr İ.Önder Yeniçeri
	09:30 - 10:20	T		D4	ÖnT	Head and neck radiology	Dr İ.Önder Yeniçeri
	10:30 - 11:20	T		310, 311	ÖnT	Head and neck radiology	Dr İ.Önder Yeniçeri
	11:30 - 12:20	T		310, 311	ÖnT	Practical (Working with test samples)	Dr İ.Önder Yeniçeri
	12:30-13:20	P				Advisory hour	
	13:30 - 14:20	T			ÖnT	Interventional radiology applications	Dr İ.Önder Yeniçeri
	14:30- 15:20	P				Interventional radiology applications	Dr İ.Önder Yeniçeri
	15:30 - 16:20	P		D4		Practical (Working with test samples)	Dr İ.Önder Yeniçeri
	16:30 - 17:20	P		D4		Practical (Working with test samples)	Dr İ.Önder Yeniçeri
Wednes day 20.11.2021	08:30 - 09:20	T		D4	ÖnT	Evaluation of mammograms	Dr Funda Dinç Elibol
	09:30 - 10:20	T		D4	ÖnT	Evaluation of mammograms	Dr Funda Dinç Elibol
	10:30 - 11:20	T		D4	ÖnT	Breast radiology	Dr Funda Dinç Elibol
	11:30 - 12:20	T		213	ÖnT	Breast radiology	Dr Funda Dinç Elibol
	13:30 - 14:20	T		213	ÖnT	Breast radiology	Dr Funda Dinç Elibol
	14:30- 15:20	P		D4		Practical (Working with test samples)	Dr Funda Dinç Elibol
	15:30 - 16:20	P		D4		Practical (Working with test samples)	Dr Funda Dinç Elibol
	16:30 - 17:20	P		D4		Practical (Working with test samples)	Dr Funda Dinç Elibol
Thursday 21.11.2021	08:30 - 09:20	T		D4	ÖnT	Evaluation of direct radiographs in respiratory system	Dr Emrah Doğan

					radiology	
	09:30 - 10:20	T	D4	ÖnT	Evaluation of direct radiographs in respiratory system radiology	Dr Emrah Doğan
	10:30 - 11:20	T		ÖnT	Respiratory system radiology	Dr Emrah Doğan
	11:30 - 12:20	T		ÖnT	Respiratory system radiology	Dr Emrah Doğan
	13:30 - 14:20	T		ÖnT	Respiratory system radiology	Dr Emrah Doğan
	14:30- 15:20	P	D4		Practical (Working with test samples)	Dr Emrah Doğan
	15:30 - 16:20	P	D4		Practical (Working with test samples)	Dr Emrah Doğan
	16:30 - 17:20	P	D4		Practical (Working with test samples)	Dr Emrah Doğan
Fiday 22.11.2021	08:30 - 09:20				Multiple Choice Theoretical Exam	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr İÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	09:30 - 10:20				Multiple Choice Theoretical Exam	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr İÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	10:30 - 11:20				Multiple Choice Theoretical Exam	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr İÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	11:30 - 12:20				Practical exam	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr İÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	13:30 - 14:20				Practical exam	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr İÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	14:30- 15:20				Practical exam	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr İÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	15:30 - 16:20				Internship General Evaluation	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr

							iÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
						Internship General Evaluation	Dr NÇullu, Dr RM Kılınç, Dr BGüney, Dr iÖ Yeniçeri, Dr FD Elibol,Dr Edoğan
	16:30 - 17:20						

Total Teorical: 44

Pratical: 24