

1	Subject	<b>Basics of clinical radiology</b>			
2	Code	DKR305			
3	Study Program	Study Program of Integrated studies in dental medicine			
4	Organizing Institution (Unit, Institute, Chair, Department)	Faculty of Medicine; Department of Radiology			
5	Educational degree (first or second cycle)	Integrated study of first and second cycle			
6	Study year/semester	3/5	7	Number of credits	2
8	Teacher	Professors from Department of Radiology			
9	Preconditions	Having attended all courses from the 3 <sup>st</sup> and 4 <sup>th</sup> semester, and having passed all mandatory subjects from the 1 <sup>st</sup> and second semester			
10	Teaching goals: To familiarize students with the basic of radiology, general diagnostic methods, their application in the area of dental medicine				
11	<b>Brief content</b>				
	<b>Theoretical course</b>				<b>Class</b>
	1.X-ray physics				1
	2.Basics of radiobiology				1
	3.Principles of x-ray image generation, geometric regularities				2
	4.Radiology protection				1
	5.Radiology of the cardiovascular system				1
	6.Radiology of the respiratory system				1
	7. Radiology of the gastrointestinal tract				1
	8.Radiology of liver, pancreas and urinary tract				1
	9.Radiology of osteoarthritic system				1
	10. Radiology and radiological pathology of the facial skeleton				1
	11. Computerized tomography and its application in dentistry				1
	12. Magnetic resonance imaging and its application in dentistry				1
	13. Ultrasound				1
	14. Colloquium				1
	Total				15
	<b>Practical lessons:</b>				<b>Class</b>
	Demonstration of performing certain radiological methods				2
	General terms of radiological image and it's analysis				2
	Radiological protection principles				2
	Obtaining X-rays and general characteristics (wavelength, extension, quality, permeability)				3
	X-ray properties (luminescence, photographic effect, ionization)				2
	Obtaining X-ray image				2
	Introduction to conventional and advanced imaging methods (CT, MR, ultrasound)				2

	Total				15	
12	Total available time		60 classes			
13	Organization of the course		15 classes - theoretical course, 15 classes- practical course, 30 classes - home individual learning and other activities			
14	Forms of teaching activities	14.1.	Theoretical course		15 classes	
		14.2.	Practical course, seminars		Practical course- 15 classes	
15	Other forms of activities	15.1.	Project tasks			
		15.2.	Individual tasks			
		15.3.	Individual (home) learning		30 classes	
16	Method of assessment	16.1.	Tests		30 points	
		16.2.	Active participation, seminar paper/project (oral/written presentation)		10 points	
		16.3.	Final (oral) exam		60 points	
17	Grading criteria (points / grade)	Up to 59 points			5 (five) (F)	
		from 60 to 67 points			6 (six) (E)	
		from 68 to 75 points			7 (seven) (D)	
		from 76 to 84 points			8 (eight) (C)	
		from 85 to 93 points			9 (nine) (B)	
		from 94 to 100 points			10 (ten) (A)	
18	Requirement for signature and taking the final exam	<p>The student is required to actively follow all of the planned activities.</p> <p>Conditions for assessment of knowledge:</p> <p>In order to get a signature, the student should obtain minimum points in both theoretical and practical courses, and to have passed the prescribed test.If the student has not passed the prescribed test and final exam, he/she in next exam session will have paper part of the exam (40 points) and final exam (60 points)</p>				
19	Language of the course	English				
20	Method for evaluation of the quality of education	Anonymous student's evaluation of the subject, teachers and collaborators involved in the educational activities				
21	<b>Literature</b>					
	22.1.	<b>Mandatory textbooks</b>				
		No.	Author	Title	Publisher	Year
		1	Subject profesors	Authorized lectures (script)	Faculty of medicine	2019
		2	Saton D.J.W.R. Young,	A short textbook of clinical imaging	Springer Verlag, London	1990
	22.2.	<b>Additional literature</b>				
		No.	Author	Title	Publisher	Year
1		Gary Johnson	Atlas of Emergency Radiology	WB Saunders Company	2001	

		2	Kok HK et al	Interventional Radiology for Medical Students	Springer	2017
--	--	---	--------------	---	----------	------