Attachment No. 3		Course program of the first cycle of studies			
1.	Course title	Basics of clinical radiology			
2.	Code	DMMCR3			
3.	Study program	Dentistry - integrated first and second cycle of studies			
4.	Organizer of the study program (unit, i.e., institute, department, division)	University "Ss. Cyril and Methodius" in Skopje, Faculty of Medicine – Skopje, Department of Radiology			
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies			
6.	Academic year/semester	Year	3	Semester	5
7	Course workload expressed in ECTS credits	2			
8.	Teacher	Asst. Prof. Dr. Petar Janevski and a group of teachers			

9.	Language in which the curriculum is conducted	English		
10.	Necessary prerequisites for taking and passing the course	Completed all compulsory subjects from the second year and passed all compulsory subjects from the first year		
11.	Course objectives (competences) and learning outcomes:	The student should be familiar with the intended curriculum in order to acquire basic knowledge of the subject, with special emphasis on the individual parts of the intended curriculum that they need to understand in order to be able to use them when providing professional services.		
12.	Detailed course content by chapters and units with learning outcomes for each chapter	Theoretical teaching - Subchapter - X-ray physics.. 2 classes - Fundamentals of radiobiology 1 class - Principles of X-ray image generation, geometric regularities 2 classes - Protection in radiology 1 class - Radiology of the cardiovascular system 1 class - Radiology of the respiratory system 1 class - Radiology of the gastrointestinal tract 1 class - Radiology of the liver and pancreas, and urinary tract 1 class - Radiology of the osteoarticular system 1 class - Radiology and radiological pathology of the facial skeleton 1 class - Computed tomography and its application in dentistry 1 class - Magnetic Resonance Imaging and its application in dentistry 1 class - Ultrasound 1 class - Colloquium 1 class Results from chapter 1: The students acquire the basics of radiology, basic diagnostic methods, and their application in the field of the cardiovascular system, respiratory system, gastrointestinal tract, liver and pancreas, and urinary tract, radiological pathology of the facial skeleton, as well as CT and MRI in dentistry. Total: ..... 15 classes Practical teaching-exercises Demonstration of performing individual radiological methods, basic concepts of X-ray image and its analysis, principles of radiological protection, obtaining X-ray and basic characteristics (wavelength, propagation mode, quality, penetration), properties of X-ray rays (luminescence, phytigraphic effect, ionization), obtaining RTG image, introduction to conventional and advanced imaging methods (CT, MR, ultrasound) Total ..... 15 classes		
13	Interrelation of subjects	None		
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching, laboratory or clinical exercises, working in small groups, presentation and development of laboratory procedures, demonstration of instruments and methods used, teamwork according to the specifics of the subject.		
15.	Total available time	60 classes		
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching. classes	15
		16.2.	Exercises (laboratory, lecture), seminars, teamwork: classes	15
		16.3.	Practice: classes	/
17.	Other forms of activities	17.1.	Project assignments: classes	/
		17.2.	Independent assignments: classes	/
		17.3.	Home study - assignments	30
18	Signature requirements	To receive a signature, the student must earn a minimum of points from attending theoretical and practical classes and passing the scheduled test. If the student does not pass the scheduled test and the final exam, they may take a written exam in the next exam session.		
19	Method of assessment			
	19.1.	Attendance at theoretical classes		10-20

	19.2.	Attendance at practical classes (exercises)			10-20
	19.3.	Test			40-60
20	Grading criteria (points/grade)		from 59 points		5 (five) (F)
			60 to 68 points		6 (six) (E)
			69 to 76 points		7 (seven) (D)
			from 77 to 84 points		8 (eight) (C)
			from 85 to 92 points		9 (nine) (B)
			from 93 to 100 points		10 (ten) (A)
21.	Method of monitoring the quality of teaching		Self-evaluation by students, control of assistants in carrying out practical teaching and assessment of the students' success, as well as the pass rate of students who have passed the course		
22.	Literature				
	22.1.	Required literature			
		Ord. No.	Author	Title	Publisher	Year
		1.	Group of teachers	Clinical Radiology 1	Department of Radiology, Faculty of Medicine, University "Ss. Cyril and Methodius", Skopje	2024
		2.	Subject teachers	Authorized lectures	Department of Radiology, Faculty of Medicine, University "Ss. Cyril and Methodius", Skopje	2019
	22.2.	Additional literature				
		Ord. 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