

Study program: Integrated academic studies in Dentistry			
Type and level of the study program: integrated academic studies			
Course title: RADIOLOGY (DIIR-RAD)			
Teacher: Vučaj Ćirilović A. Viktorija, Kozić B. Duško, Koprivšek M. Katarina, Lovrenski D. Jovan, Lučić A. Miloš, Nikolić R. Olivera, Nićiforović D. Dijana, Stojanović S. Sanja, Til E. Viktor			
Course status: compulsory			
ECTS Credits: 5			
Condition: General and oral pathology; Dental disease - preclinics (exam)			
Course aim Introducing students to the diagnostic image modalities that are applied in modern medicine, introduction to x-ray methods and principles of working in the dento-maxillofacial region.			
Expected outcome of the course: The task is to define a set of diagnostic data based on the data necessary for understanding radiological information. Special attention should be paid to proper selection of indications and radiological methods. Students should master the art review on the X-ray apparatus, ultrasonographic examination, analysis of X-ray films, recordings, Understanding basic principles of computed tomography and magnetic resonance imaging.			
Course description <i>Theoretical education</i> 1. Fundamentals of medical application of ionizing radiation and the physics of image methods (X-ray, ultrasound, computerized tomography, magnetic resonance imaging), and intervention radiology 2. Principles of radiological examination (intraoral, extraoral, standard x-ray methods and special techniques, endoradiographic methods), 3 Implementation and indications for X-ray examination methods, computer tomography, ultrasound, magnetic resonance imaging, 4. Basic principles and indications for intraoral, standard extraoral radiographical methods, special techniques of radiography and interventional radiology, 5. Radiographic anatomy on different radiologic modalities 6. Radiological anatomy and symptoms in dento-maxillofacial region, dental anomalies 7. Congenital jaw anomalies, teeth and jaw diseases, x-ray diagnosis of facial bones and teeth fractures, radiological diagnosis of expansive jaw process, radiology of paranasal cavities, temporomandibular joints, salivary glands <i>Practical education: exercises, other forms of education, research related activities</i> 1. Demonstration of X-ray appearance of standard apparatus and X-ray device for radiography of dental and maxillofacial region with insight into their work and monitoring the protected area. , 2. Roentgenography and images obtained with computed tomography, 3. Practical work on ultrasound and image analysis, 4. Work on magnetic resonance analysis of the obtained scans, 5. Observing certain interventional radiology techniques			
Literature <i>Compulsory</i> 1. Drage N. Essentials of Dental Radiography and Radiology. Churchill Livingstone, 2013. <i>Additional</i> 1. Gunderman RB. Essential Radiology: Clinical Presentation, Pathophysiology, Imaging. Thieme, 2014. 2. Herring W. Learning Radiology: Recognizing the Basics, 3e. Elsevier Science, 2015. 3. Wicke L. Atlas of Radiologic Anatomy. Saunders, 2004			
Number of active classes			Other:
Lectures: 45	Practice: 45	Other types of teaching: Research related activities:	
Teaching methods Theoretical and practical classes			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures	5	Written	60
Practices	5	Oral	-
Colloquium	30	
Essay	-		