

<b>Study program:</b> Integrated academic studies in Medicine			
<b>Type and level of the study program:</b> integrated academic studies			
<b>Course title: General radiology (M3-GRAD)</b>			
<b>Teacher:</b> Kozić B. Duško, Koprivšek M. Katarina, Lovrenski D. Jovan, Lučić A. Miloš, Nikolić R. Olivera, Prvulović Bunović M. Nataša, Stojanović S. Sanja, Til E. Viktor			
<b>Course status:</b> compulsory			
<b>ECTS Credits: 4</b>			
<b>Condition:</b> -			
<b>Course aim</b> Students are acquainted with radiology physics and radiographic anatomy. In practical classes students are instructed of diagnostic imaging modalities, radiography, ultrasound, computerized tomography and magnetic resonance imaging, as well as angiographic procedures.			
<b>Expected outcome of the course:</b> Student will be introduced to the spectrum of imaging methods, their basic principles and utilization. Particular attention is paid to accurate indications and becoming accustomed with the diagnostic options of particular categories of radiological examination. Student will accomplish necessary skills to perform X-ray, ultrasonography examination, to analyze radiography images, computed tomography and MR images and to demonstrate particular techniques of interventional radiology. Detailed knowledge of the anatomical details in each diagnostic modality will be required.			
<b>Course description</b> <i>Theoretical education</i> <ul style="list-style-type: none"> <li>– Basics of medical application of ionizing radiation; physics of imaging methods (X-ray, ultrasound, computed tomography, magnetic resonance imaging); interventional radiology;</li> <li>– Application and indications for radiological examinations (X-ray, computed tomography, ultrasound, magnetic resonance imaging);</li> <li>– Basic principles and indications for invasive diagnostic and intervention-radiology methods;</li> </ul> <i>Practical education: exercises, other forms of education, research related activities</i> <ul style="list-style-type: none"> <li>– Demonstration of radiology-imaging equipment and instruments and their operations;</li> <li>– Analysis of radiology images and scans (X-ray, CT, MR);</li> <li>– Practical work with ultrasound; image analysis;</li> <li>– Practical work with magnetic resonance; image analysis;</li> <li>– Observing particular techniques in interventional radiology.</li> <li>– Detailed identification of the anatomical structures on each diagnostic modality</li> </ul>			
<b>Literature</b> <i>Compulsory</i> <ol style="list-style-type: none"> <li>1. Gunderman RB. Essential Radiology: Clinical Presentation, Pathophysiology, Imaging. Thieme, 2014.</li> <li>2. Herring W. Learning Radiology: Recognizing the Basics, 3e. Elsevier Science, 2015.</li> <li>3. Wicke L. Atlas of Radiologic Anatomy. Saunders, 2004.</li> </ol>			
<b>Number of active classes</b>			Other:
Lectures: 15	Practice: 30	Other types of teaching:	
			Research related activities:
<b>Teaching methods</b> Lectures, practical work			
<b>Student activity assessment (maximally 100 points)</b>			
<b>Pre-exam activities</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Lectures	5	Written	60
Practices	5	Oral	
Colloquium	30		
Essay			