

<b>Study program:</b> Integrated Academic Studies in Medicine			
<b>Course title:</b> Interventional Radiology			
<b>Teacher:</b> Sanja S. Stojanović, Viktor E. Till, Dijana D. Nićiforović			
<b>Course status:</b> elective			
<b>ECTS Credits:</b> 3			
<b>Condition:</b> Radiology			
<b>Course aim</b> Introducing students to utilization of contemporary interventional radiology methods of examinations and procedures in diagnosis and treatment of patients.			
<b>Expected outcome of the course:</b> Evaluation of indications for utilization of different interventional procedures, devices and materials used for these procedures, introduction to different interventional techniques, recognition of pathological changes, reporting, therapeutic procedures, i.e. performing vascular and non-vascular interventional procedures.			
<b>Course description</b> <i>Theoretical education</i> Short history of interventional radiological methods, division to vascular and non-vascular interventions, imaging modalities in interventional radiology (angiography room, CT, US), basic physical principles, radiation protection of patients and interventional team, advantages and limitations of different modalities, patient preparation for the intervention (general and specific, medications used). Vascular interventional radiology: vascular diagnostics (clinical vascular examination, non-invasive vascular diagnostics, invasive vascular diagnostics), materials and instruments, contrast agents, access points in vascular interventions, Seldinger puncture technique, percutaneous transluminal angioplasty, artery stenting, aortic stent graft, cava filter, embolization, intraarterial chemical and mechanical thrombolysis, intracranial vascular interventions, coronarography, , percutaneous transluminal angioplasty of coronary arteries and stenting. Non-vascular interventional radiology: non-vascular diagnostics, materials and instruments, cyst punctions and sclerozation, CT and US guided biopsy, biliary drainage and stents, percutaneous nephrostomy and ureteral stents, vertebroplasty, osteoplasty, tumor ablation (RFA, microwave, cryoablation), ozone therapy.  <i>Practical education</i> Practical classes are identical to methodic units of theoretical classes.			
<b>Literature</b> <i>Compulsory</i> 1. Richard B. Gunderman. Essential Radiology: Clinical Presentation, Pathophysiology, Imaging. Thieme 2014. <i>Additional</i> 1. Mathew D. Tam, Weiping Wang. Radiology Case Review Series: Interventional Radiology. McGraw Hill 2014.			
<b>Number of active classes</b>		<b>Theoretical classes:</b> 15	<b>Practical classes:</b> 30
<b>Teaching methods</b> Theory classes. Demonstration of materials used in interventional radiology. Demonstration of selected interventional radiology procedures.			
<b>Student activity assessment</b>			
<b>Pre-exam activities</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Lectures	20	Written	30
Practices	20	Oral	30