Faculty of Medicine / MEDICINE / RADIOLOGY AND NUCLEAR MEDICINE

Course:	RADIOLOGY AND NUCLEAR MEDICINE							
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exer cises+Laboratory)				
19	Mandatory	8	6	4+2+0				
Programs	MEDICINE							
Prerequisites	No prerequisites required							
Aims	Introducing in diagnostic radiology and nuclear medicine. Understanding radiological terminology and diagnostic algorithms. Knowledge of the necessary level of manipulation of medical images for non radiology doctors.							
Learning outcomes	1. Knows and understands the physical principles of obtaining images using radiography, ultrasound , CT scans, magnetic resonance imaging and nuclear medicine in diagnosis. 2. Uses and understands radiological terminology hyper – hypo (density, echogenicity, signal). Recognize different types of physiological shadows in radiology. Knows Hausfilds absorption units , and different types of image resolution. 3. Knows basic radiological method of choice in radiology diagnosis of certain diseases. 4. Knows and use the protection of patients from radiation during radiological examination by the ALARA principle. Knows special protection in high-risk group of patients (pregnant women, children). 5. Knows how to make the good communication with the patient during the planning of radiological examination and his surroundings. Knows principle of radiology teamwork. 6. Knows the use of radiological diagnosis in emergency medical states.							
Lecturer / Teaching assistant	Prof. dr. Dragoslav Nnenezić							
Methodology	Lectures and exercises : with the radiology films , the radiological imaging consoles and the manipulation of medical images in a computer room . Three tests. Final exam consultation and pre-examination exercises							
Plan and program of work								
Preparing week	Preparation and registration of the semester							
I week lectures	Introduction to Radiology							
I week exercises	None							
II week lectures	Indications for radiological examinations. Radiation protection							
II week exercises	Organization of radiology department.							
III week lectures	Basic principles in radiological physics							
III week exercises	Basic principle in radiology imaging							
IV week lectures	Physical principles of radiological examination							
IV week exercises	Basic principles of radiography , ultrasound, CT and MRI							
V week lectures	Pulmonary radiology							
V week exercises	Pulmonary radiology							
VI week lectures	Radiology of heart and blood vessels							
VI week exercises	Radiology of heart and blood vessels							
VII week lectures	Gastrointestinal radiology							
VII week exercises	Gastrointestinal radiology							
VIII week lectures	Uroradiology							
VIII week exercises	Uroradiology							
IX week lectures	Radiology of bone and joint							
IX week exercises	Radiology of bone and joint							
X week lectures	Nuclear Medicine							
X week exercises	Nuclear Medicine							
XI week lectures	Nuclear Medicine							
XI week exercises	Nuclear Medicine							

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XII week lect	ures	Radiology of emergencies								
XII week exe	ercises	Radiology of emergencies								
XIII week lec	tures	Pediatric	Pediatric radiology and radiology of breast							
XIII week ex	ercises	Pediatric	Pediatric radiology and radiology of breast							
XIV week led	tures	Neuroradiology								
XIV week ex	ercises	Neuroradiology								
XV week lec	tures	Interventional Radiology								
XV week exe	ercises	Radiotherapy								
Student wo	orkload									
Per week		Per semester								
6 credits x 40/30=8 hours and 0 minuts 4 sat(a) theoretical classes 0 sat(a) practical classes 2 excercises 2 hour(s) i 0 minuts of independent work, including consultations		Classes and final exam: 8 hour(s) i 0 minuts x 16 =128 hour(s) i 0 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 8 hour(s) i 0 minuts x 2 =16 hour(s) i 0 minuts Total workload for the subject: 6 x 30=180 hour(s) Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) 36 hour(s) i 0 minuts Workload structure: 128 hour(s) i 0 minuts (cources), 16 hour(s) i 0 minuts (preparation), 36 hour(s) i 0 minuts (additional work)								
Student obligations			Regular attendance of lectures and exercises . Three tests. Final exam.							
Consultations										
Literature			Prof dr. Goran Nikolić "Radiologija za studente medicine"							
Examination methods			10 points regular attendance and class participation 10 points from tests of radiation physics and protection 10 points from the test lung radiology and radiology KVS 20 points from tests of Nuclear Medicine Final exam 50 points Passing grade 50 points							
Special remarks										
Comment										
Grade:	F	E		D	С	В	А			
Number of points	less than 50 points	gr ec ar pc	reater than or qual to 50 points nd less than 60 oints	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points			