

Faculty of Medicine / MEDICINE / RADIOLOGY AND NUCLEAR MEDICINE

Course:	RADIOLOGY AND NUCLEAR MEDICINE			
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exercises+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 Hausfelds 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 Nnenezic			
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			

XII week lectures	Radiology of emergencies					
XII week exercises	Radiology of emergencies					
XIII week lectures	Pediatric radiology and radiology of breast					
XIII week exercises	Pediatric radiology and radiology of breast					
XIV week lectures	Neuroradiology					
XIV week exercises	Neuroradiology					
XV week lectures	Interventional Radiology					
XV week exercises	Radiotherapy					
Student workload						
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	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	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