Name of the course	**Diagnostic Imaging Options in Neuro and Musculoskeletal Injuries and Diseases**			***Code***	MSESES08
Type of study program:	Integrated university study program, Medicine			***Year of study***	4
Credits (ECTS):	1.5	***Semester:***	VII	***Number of hours per semester (l+s+e)***	25 (19+6+0)
Status of the course:	elective	***Preconditions:***	Passed 3rd years exams	***Comparative conditions:***	/
Access to course:	Fourth year students			***Hours of instructions:***	According to schedule

Course teacher:	Ass.prof. Vedran Markotić
Consultations:	As agreed with students
E-mail address and phone number:	vedranmarkoticz@gmail.com, +387 63 349 280
Associate teachers	Dorijan Radančević, senior assistant
Consultations:	As agreed with students
E-mail address and phone number:	vedranmarkoticz@gmail.com, +387 63 349 280
The aims of the course:	The aim of the course is to introduce students to the latest diagnostic imaging in neurological and musculoskeletal injuries and diseases.
Learning outcomes (general and specific competences):	General outcomes: Applying the independent learning throughout the course by using critical and self-critical judgment of scientific truths. Remembering the possession of personal qualities (team work and personal involvement, curiosity, active listening and building positive relationship with team members). Specific outcomes: Understanding the basic of radiology diagnostic imaging possibilities in neurological and musculoskeletal injuries and diseases. Outcomes will be evaluated through continuous examinations, seminar tests, practical examinations, active studying through lectures and seminars and final oral examination.
Course content:	This course consists lectures and seminars divided in 2 separate units. Lecture units: - Diagnostic imaging options in neuro injuries and diseases - Diagnostic imaging options in musculoskeletal injuries and diseases Seminars units: - Circle of Willis aneurysms, possibilities of interventional radiology - Cerebrovascular stroke, possibilities of interventional radiology

Format of instruction: (mark in bold)	**Lectures**	Exercises	**Seminars**	Independent assignments
	Consultations	Work with mentor	Field work	Other
Student responsibilities:	All students are required to regularly attend lectures (as prescribed by the regulations of the faculty), and records will be kept. All students who miss some of the lectures will be required to pass the colloquium from the missing part of the material, as a prerequisite for taking the exam (all students will be notified in a timely manner, considering this subject). All students are obliged to respect the schedule and working places, to come to the lectures properly prepared and to inform the teacher or the head of the department if there are any ambiguities. Students are divided into 2 (two) seminar groups. Each group works on 1 (one) seminar topics (theme titles), jointly on searching the literature and making a presentation, and choose one representative who presents the work on the day of the seminar. The seminars themselves are coordinated by teacher who can ask questions to the presenter and members of the seminar group (which is desirable, in order to determine the activity of the whole group), and finally give a grade for the seminar group, from 1 to 5, which will be taken into account at the exam) and enter it on the record list. All students are required to attend seminars (as prescribed by the regulations of faculty), and records will be kept. All students who miss the same are required to pass the colloquium from the missing part of the material, as a			

	prerequisite for taking the exam (all students will be notified in a timely manner, considering this subject). When making presentations, use previously established rules (introduction, basics, pathology...). Students will be evaluated based on: - Active participation in seminars - Preparing materials for seminars - Oral examination (discussing imaging findings)			
Screening student work(mark in bold)	**Class attendance**	**Class participations**	**Seminar essay**	Practical training
	Oral exam	Written exam	**Continuous assessment**	Essay

Detailed evaluation within a *European system of points*

STUDENTS RESPONSIBILITIES	**HOURS**	**PROPORTIONS OF ECTS CREDITS**	**PROPORTIONS OF GRADE**
Class attendance and participations	25	0.9	0%
Seminar essay	10	0.3	50%
Oral exam	10	0.3	50%
Total	**45**	**1.5**	**100%**

Further clarification:

Course examination is based on seminar ond oral exam.
Students with full attendance record (seminars and lectures) have the the right to take the oral examination.
Students should demonstrate knowledge in radiologic anatomy and radiologic pathology of neurological and musculoskeletal system.
Final evaluation is descriptive (pass/fail)

Required literature:	1. William Herring, Learning Radiology: Recognizing the Basics, 4th edition, Elsevier, 2020. 2. Lecture and seminars presentation materials
Optional literature:	
Additional information about the course:	

Annexes: calendar classes

The number of teaching units	**TOPICS AND LITERATURE**
I.	Title: Diagnostic imaging options in neuro injuries and diseases
	Short description: Diagnostic imaging options in neuro injuries and diseases
	Literature: required
II.	Title: Diagnostic imaging options in musculoskeletal injuries and diseases
	Short description: Diagnostic imaging options in musculoskeletal injuries and diseases
	Literature: required