

	UNIVERSITY OF BANJA LUKA FACULTY OF MEDICINE				
	UNDERGRADUATE STUDIES				
	Study Programme of:	MEDICINE			
Course unit name	Ultrasound Diagnostics				
Type of course unit	Applied Professional				
Course unit code	Course unit status	Semester	Class Workload	Number of ECTS credits	
TO BE DESIGNATED	COMPULSORY	VII	1L +1P	2	
Members of Staff	Prof. Sasa Vujnovic, PhD, Full Professor; Prof. Dragan Stojanov, PhD, Full Professor; Prof. Sladjana Petrovic, PhD, Full Professor; Prof. Djordjije Saranovic, PhD; Prof. Milos Lucic, PhD, Full Professor				
Eligibility Requirements			Form of Requirements		
All course units from the previous academic year having been passed			In accordance with I Cycle Academic Studies Rules of Studying		
Goals of the Course Unit:					
Acquisition of knowledge from ultrasound diagnostics that will enable students to understand how images are created. Independent performance regarding ultrasound examinations of various organs and organ systems. Knowledge about ultrasound anatomy and knowledge of basic pathological findings. Independent performance concerning basic ultrasound-guided interventional radiological procedures.					
Learning Outcomes (acquired knowledge):					
The students will have been able to understand how ultrasound devices operate and introduced to ultrasound examinations techniques. The students will have mastered independent performance as regards ultrasound examinations and been able to independently interpretebasic pathological processes of abdominal organs, pelvic organs, and the neck.					
Contents of the Course Unit:					
<u>Theoretical Lectures:</u> Parts of ultrasound devices. Physics of ultrasound. History of development of and current types of ultrasound devices. Types and sorts of ultrasound sondes. B-Mode ultrasound, M-Mode ultrasound, Doppler ultrasound, Colour Doppler ultrasound, Power Doppler ultrasound. Preparation of patient for examination of various organ systems. Specific features of ultrasound examination in pediatric patients. Positioning of patients for certain ultrasound examinations. Techniques of performing percutaneous and intra-cavity ultrasound examination. Ultrasound-guided interventional procedures.					
<u>Practicals:</u> Operating ultrasound devices of various producers. Preparation of patients for various ultrasound examinations. Positioning of patients for various ultrasound examinations. Observation and independent performance of ultrasound examinations. Fundamentals of operating Doppler mode. Ultrasound-guided interventional procedures.					
Teaching Methods:					
The classes are given in the form of lectures and practical classes, with continuous revision through practicals, seminars, midterms, office hours, and independent students' work.					
Literature:					

1. Практикум клиничке радиологије: за студенте медицине, 3. измењено и допуњено издање Петар Бошњаковић, Драган Стојанов, Зоран Радовановић, Слађана Петровић. Дата Статус, Београд 2016.
2. Основи радиологије : Клиничка слика, патофизиологија, имиџинг, 3. издање, Ричард Гундерман, Дата Статус, Београд 2016.
3. Ultrasound for Primary Care Hardcover – Illustrated, Dr. Paul Bornemann 2020, LWW Lippincott Williams and Wilkins

Examination Forms:

Pre-Exam Duties		Final Exam		Total Points
Attendance	10	Oral / Written	50	100
Midterms	25			
Seminar Paper	15			

Note for the Course Unit:

Syllabus designer: Prof. Sasa Vujnovic, PhD, Full Professor