

# UNIVERSITY OF BANJA LUKA FACULTY OF MEDICINE

#### UNDERGRADUATE STUDIES

Study Programme of:

Medicine



Academic Studies Rules of

Studying

Course unit name	Radiology					
Type of course unit	Applied Professional					
Course unit code	Course unit status	Semester	Class Workload	Number of ECTS credits		
TO BE DESIGNATED	COMPULSORY	VII	2L +2P	4		
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, Full Professor; Prof. Milos Lucic, PhD, Full Professor					
Eligibility Requirements F				Form of Requirements		
All course units from	In accordance with I Cycle					

#### **Goals of the Course Unit:**

Acquiring knowledge about radiological modalities, about protection against radiation, and about methods of radiological examinations of respective organ systems and anatomical regions. Acquiring knowledge about radiological anatomy, as well as about basic pathological findings and interventional radiological techniques.

## **Learning Outcomes (acquired knowledge):**

The students will have been able to understand how radiological devices operate and to use radiological protective equipment properly. They will have been introduced to techniques of radiological examinations, to positioning patients, and to using contrast agents. In addition, they will have been to independently interprete basic pathological processes gained by means of radiographic, CT, and MR imaging of musculoskeletal, respiratory, cardio-vascular, gastro-intestinal, and genito-urinary systems, as well as of abdominal tract, breasts, and CNS. The students will have been able to use the acquired knowledge to choose an appropriate radiological examination for respective diseases and clinical conditions and to assess what interventional radiological methods yield the best results concerning respective pathological conditions.

#### **Contents of the Course Unit:**

#### **Theoretical lectures:**

Fundamentals of radiological devices. Protection from radiation. Methods of radiological examinations of respective organ systems. Manner of preparation of patient, performance technique, indications and counterindications for certain radiological examinations. Fundamentals of vascular and non-vascular interventional radiology. Radiological anatomy and basic pathological findings. Algorithms of radiological examinations.

#### **Practicals:**

Introduction to radiological devices and radiological information system. Introduction to examination techniques of respective organ systems and to basic pathological findings. Introduction to and observation of basic vascular and non-vascular interventional radiological procedures. Practising radiological anatomy and basic pathological findings by means of collection of videos.

#### **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:

Essential Radiology: Clinical Presentation, Pathophysiology, Imaging by Richard B. Gunderman, 3rd Edition, 2014 (ISBN 9781604065732)

# **Examination Forms:**

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

## **Note for the Course Unit:**

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