

UNIVERSITY OF BELGRADE
FACULTY OF MEDICINE
PhD STUDIES

NAME OF THE MODULE: RADIOLOGY AND NUCLEAR MEDICINE

CONTENT OF THE PROGRAM:

Basic principles and physics of standard and digital X-ray diagnostics, mammographs, ultrasound, computerized tomography and magnetic resonance imaging. Contrast agents and types. Indications for the use of contrast radiological methods. Interventional diagnostic methods, nonvascular and vascular (recanalization of blood vessels and nonvascular organs, transcatheter embolization techniques, percutaneous drainage, scleroembolic methods), indications. Diagnostic protocols for mammography, computed tomography and magnetic resonance imaging of the head and spine, chest, abdomen, pelvis, musculoskeletal system. Fundamentals of physical principles in nuclear medicine. Diagnostic devices. Hybrid systems. Application of nuclear medicine in neurology, endocrinology, pulmonology, cardiology, musculoskeletal diagnostics, nephrourology, oncology, gastroenterohepatology, hematology, oncology and infection and inflammation. Positron emission tomography. Teranostics. Radionuclide therapy.

During the course, special attention is on the radiological and nuclear medical examinations of thorax, abdomen, pelvis, musculoskeletal pathology, interventional radiology, application of hybrid imaging and theranostic principles of diagnostics and radionuclide therapy.

ADMISSION REQUIREMENTS:

GENERAL:

- The average grade from all previous levels of study to be at least 8.00
- Knowledge of English
- Appropriate computer skills
- Recommendations related to scientific research (desirable)

SPECIFIC:

- Students with completed integrated academic studies in medical sciences lasting 6 years (360 ECTS), who have shown a sense of scientific research work in the relevant field, as evidenced by publications in which the candidate is the author (one paper in a journal cited in the Medline database in which the candidate is the author)

MEMBERS OF THE ADVISORY BOARD:

Prof. dr Dragana Šobić Šaranović
Prof. dr Ruža Stević
Prof. dr Vera Artiko
Prof. dr Aleksandra Đurić-Stefanović

OBLIGATORY COURSES:

Radiologic methods

Nuclear medicine methods

ELECTIVE COURSES:

Radiological and nuclear medical examinations of thorax

Radiological and nuclear medical examinations of abdomen and pelvis

Musculoskeletal examinations in radiology and nuclear medicine

Interventional radiology

Hybrid systems and applications

Theranostic principles of diagnostics and radionuclide therapy