



Faculty of Medicine in Rijeka

Curriculum 2021/2022

For course

Radiology

Medical Studies in English (R)

Study program: University integrated undergraduate and graduate study

Department: Department of Radiology

Course coordinator: prof. dr. sc. Miletić Damir, dr. med., redoviti profesor u trajnom zvanju

Year of study: 4
ECTS: 3.5
Incentive ECTS: 0 (0.00%)

Foreign language: Possibility of teaching in a foreign language

Course information:

Course objective is to teach medical students the fundamental principles of diagnostic radiology and image-guided interventions for clinically important and common disorders in different clinical settings. It includes basics of radiation physics, radiation protection, imaging modalities and use of contrast media in different radiological modalities. Course of Radiology aims to explain typical imaging patterns and features and to train students typical radiological features on clinical cases: consolidations, nodules, hyperlucencies, hyperinflation, air bronchogram in thoracic imaging; microcalcifications and masses in breast imaging; filling defects, outpouchings, obstructions, stenoses in gastrointestinal imaging; cystic and solid focal lesions on cross-sectional imaging modalities; osteolysis, sclerosis and periosteal reaction in musculoskeletal imaging; mass effect, haemorrhagic and ischaemic lesions in neuroradiology; occlusions, pathologic vessels, aneurysms, dissections in vascular imaging; patterns of contrast imbibition and others. Common indications, contraindications and limitations of different imaging techniques should be discussed for each organ system. Another objective is to explain the value of radiological examinations in different clinical settings in context of evidence-based medicine. Along with diagnostic radiology procedures, students should observe basic interventional procedures such as catheterization techniques and arteriographies, image-guided biopsy sampling and drainages.

List of assigned reading:

- 1. Elsayes KM, Oldham SAA. Introduction to Diagnostic Radiology. McGraw-Hill Education, 2014.
- 2. Mettler FA. Essentials of Radiology, Fourth Edition. Elsevier 2019.

List of optional reading:

Chen MYM, Pope TL, Ott DJ. Basic Radiology, 2nd Edition, McGraw-Hill Companies, 2011.

Curriculum:

Student obligations:

- 1. Attending all forms of classes.
- 2. Preparing and presenting seminars in front of colleagues and teachers with topic discussion.
- 3. Active participation in practicals with prior theoretical preparation, practical use of theoretical knowledge
- 4. Taking written and oral exam.

Exam (exam taking, description of the written/oral/practical part of the exam, point distribution, grading criteria):

Evaluation is structured in accordance with the regulations for students' evaluation at the Faculty of Medicine, University of Rijeka.

Students' activities and work will be evaluated **during the course and in the final exam**. Out of a total of 100 points, a student can earn 50 points during classes and the remaining 50 points on the final exam.

Out of the maximum 50 grade points which can be obtained during classes, the student must collect at least 25 (50%) grade points to take the final exam.

The student acquires grade points by preparing the **seminar** and **during practicals** where theoretical knowledge, practical application on images, recognition of the type of examination and typical radiological signs, connection of radiological concepts with clinical data, interest and activity are assessed.

During classes, a student can earn a maximum of 50 grade points.

The student's seminar work is evaluated in the range of 3 to 10 points. A student can achieve a maximum of 10 grade points with a seminar.

The **activity** in the exercises is evaluated according to the achievement of clinical skills, which are checked continuously during the rotation of a particular group of students. Class activity, understanding of basic radiological terms, demonstration a radiological method in the image, demonstration and description of typical anatomical and pathological characteristics of organs and tissues are evaluated. In this category, a student can achieve a maximum of 40 points (range 15-40 points).

According to the regulations, students who have obtained at least 25 or more points (25-50 points) can take the final exam.

At the final exam, the student receives 50% of the final grade. The final exam consists of a **written** knowledge test and an **oral** knowledge test (theoretical and practical knowledge test on radiological images) from all course topics.

In the written exam, the student gains a maximum of 20 grade points (range 7-20).

In the **oral exam**, the student can obtain a maximum of 30 points (range 10-30).

The **final grade** represents the sum of points during classes and on the final exam, expressed by the corresponding numerical grade, letter of the alphabet and percentage.

Other notes (related to the course) important for students:

All educational content for students will be available at the Merlin platform.

COURSE HOURS 2021/2022

Radiology

List of lectures, seminars and practicals:

EXAM DATES (final exam):