

## Study program: Integrated Academic Studies in Dental Medicine

### **Course title: General Radiology**

**Teacher:** Sanja S. Stojanović, Viktor E. Till, Duško B. Kozić, Miloš A. Lučić, Katarina M. Koprivšek, Viktorija A. Vučaj-Ćirilović, Olivera R. Nikolić, Jovan D. Lovrenski, Dijana D. Nićiforović, Nataša M. Prvulović Bunović, Marijana Basta D. Nikolić, Jasmina M. Boban, Aleksandar N. Spasić

Course status: compulsory

#### ECTS Credits: 3

**Condition:** Anatomy; Dental Anatomy

### Course aim:

Introducing students to the diagnostic image modalities that are applied in modern medicine, introduction to X-ray methods and principles of working in the dento-maxillofacial region.

## Expected outcome of the course:

The task is to define a set of diagnostic data based on the data necessary for understanding radiological information. Special attention should be paid to proper selection of indications and radiological methods. Students should master the art of X-ray and ultrasonographic examination, as well understand basic principles of computed tomography and magnetic resonance imaging.

### **Course description**

### Theoretical education

1. Fundamentals of medical application of ionizing radiation and the physics of image methods (X-ray, ultrasound, computerized tomography, magnetic resonance imaging), and intervention radiology; 2. Principles of radiological examination (intraoral, extraoral, standard X-ray methods and special techniques, endoradiographic methods); 3 Implementation and indications for X-ray examination methods, computerized tomography, ultrasound, magnetic resonance imaging; 4. Basic principles and indications for intraoral, standard extraoral radiographical methods, special techniques of radiography and interventional radiology; 5. Radiographic anatomy on different radiologic modalities 6. Radiological anatomy in dento-maxillofacial region.

### Practical education

Demonstration of X-ray appearance of standard apparatus and X-ray device for radiography of dental and maxillofacial region with insight into their work and monitoring the protected area; 2. Roentgenography and images obtained with computed tomography; 3. Practical work on ultrasound and image analysis; 4. Work on magnetic resonance analysis of the obtained scans; 5. Observing certain interventional radiology techniques.

### Literature

Compulsory

1. Nicholas Drage. Essentials of Dental Radiography and Radiology. Churchill Livingstone 2013

Additional

- 1. Richard B. Gunderman. Essential Radiology: Clinical Presentation, Pathophysiology, Imaging. Thieme 2014.
- 2. William Herring.Learning Radiology: Recognizing the Basics, 3e. Elsevier Science 2015.

# 3. Lothar Wicke. Atlas of Radiologic Anatomy. Saunders 2004

Number of active classes	Theoretical classes: 30		Practical classes: 15
Teaching methods			
Theoretical and practical classes			
	Student activity asse	essment (maximally 100 poi	ints)
Pre-exam activities	points	Final exam	points
Lectures	5	Written	60
Practices	5	Oral	-
Colloquium	30		