



Dental Radiology

1. IMPRINT	
Academic Year	2022/2023
Department	Faculty of Dental Medicine
Field of study	English Dentistry Division
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical sciences
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level / 2nd level / uniform MSc)</i>	Uniform MSc
Form of studies	Full-time program
Type of module / course <i>(obligatory / non-compulsory)</i>	Obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	Completion
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	Department of Dental and Maxillofacial Radiology Medical University of Warsaw ul. Binieckiego 6, 02-097 Warszawa; tel. 22 116 64 10 e-mail: zrs@wum.edu.pl

Head of Educational Unit / Heads of Educational Units	Professor Kazimierz Szopiński MD, PhD
Course coordinator (title, First Name, Last Name, contact)	Anna Pogorzelska DMD, PhD, anna.pogorzelska@wum.edu.pl
Person responsible for syllabus (First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)	Piotr Regulski DMD, PhD, piotr.regulski@wum.edu.pl
Teachers	Professor Kazimierz Szopiński MD, PhD , kazimierz.szopinski@wum.edu.pl Piotr Regulski DMD, PhD, piotr.regulski@wum.edu.pl Anna Pogorzelska DMD, PhD, anna.pogorzelska@wum.edu.pl Stanisław Jalowski DMD, stanislaw.jalowski@wum.edu.pl Dominika Piątek MD, dominika.piatek@wum.edu.pl Monika Syczewska DMD, monika.syczewska@wum.edu.pl

2. BASIC INFORMATION

Year and semester of studies	3 rd year, 6 th semester	Number of ECTS credits	2.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		8	0,26
Discussions (D)		27	0,9
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		25	0,84

3. COURSE OBJECTIVES

O1	To familiarize with the fundamental methods of diagnostic imaging used in dentistry - indications for radiological examination, radiological anatomy, radiological symptoms of common pathologies. To acquire practical skills in performing intraoral and extraoral radiographs on phantoms and patients.
O2	To acquire practical skills in radiological and differential diagnosis of the teeth, alveoli and facial pathologies.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

<p>Code and number of effect of learning in accordance with standards of learning (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</p>	<p>Effects in time</p>
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Knowledge – Graduate* knows and understands:

B.W9.	methods of tissue and organ imaging and the principles of operation of diagnostic equipment for this purpose
E.W20.	cases in which the patient should be referred to the hospital
F.W18.	principles of radiological diagnosis
G.W34.	the principles of keeping, storing and providing access to medical records and of personal data protection

Skills– Graduate* is able to:

A.U1.	interpret anatomical relations illustrated by basic diagnostic methods in radiology (plain scans and scans after contrast agent administration)
E.U1.	perform differential diagnosis of the most common diseases
E.U3.	plan the diagnostic and therapeutic treatment of the most common diseases
E.U5.	identify normal and pathological structures and organs in additional imaging (X-ray, ultrasound, computed tomography – CT)
F.U17.	diagnose and provide basic treatment of periodontal diseases
F.U23.	describe dental and panoramic photographs
G.U26.	keep medical records

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

<p>Number of effect of learning</p>	<p>Effects of learning i time</p>
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Knowledge – Graduate knows and understands:

K1	
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Skills– Graduate is able to:

S1	
Social Competencies – Graduate is ready for:	
SC1	

6. CLASSES		
Form of class	Class contents	Effects of Learning
Seminars	<p>S1 - Principles of referring for imaging examinations, principles of keeping, storing and providing access to medical records; intraoral X-rays: types, techniques of taking, indications. Atomic law (Act and Regulations of the Minister of Health). Discussion of the diagnosis of intraoral X-ray imaging.</p> <p>S2 - Radiologic symptomatology and differential diagnosis of caries. Radiologic symptomatology of the periodontal disease Discussion of normal imaging and radiographic symptoms of pathology in marginal periodontitis and dental hard tissues.</p> <p>S3 - Radiological diagnosis in endodontic treatment. Parallax (Clark's rule). Radiological symptoms of periapical periodontitis. Discussion of normal imaging and radiographic symptoms of periapical periodontal pathology. Projections to facilitate diagnosis during endodontic treatment.</p> <p>S4 - Symptomatology of disease processes taking place in the dental alveolar processes.</p>	<p>B.W9., E.W20., F.W18., G.W34.,</p> <p>A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.</p> <p>A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.</p> <p>A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.</p>
Classes	<p>C1 - Identification and X-ray anatomy of intraoral and panoramic radiographs. Correct radiological anatomy of intraoral and on panoramic radiographs.</p> <p>C2 and C3 - Radiological diagnosis of cavities in mineralized tooth tissues. Radiological symptoms of pathology in the hard tissues of the tooth.</p> <p>C4 and C5 - Differential diagnosis of chronic periapical tissue inflammation. Radiological symptoms of pathology in the periapical periodontium.</p> <p>C6 - Symptomatology of chronic inflammation of periodontal tissues. Radiologic manifestations of pathology in the periapical periodontium.</p> <p>C7 - Technique of taking intraoral radiographs - examination on a phantom. Discussion of theoretical and technical aspects of intraoral imaging and exercises on a phantom.</p> <p>C8 - Examination of the patient: the technique of taking intraoral images and chemical treatment of films in the darkroom. Discussion of practical aspects of intraoral imaging and taking intraoral radiographs.</p>	<p>A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.</p> <p>A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.</p> <p>A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.</p> <p>A.U1., E.U3., E.U5., G.U26.</p> <p>A.U1., E.U3., G.U26.</p>

7. LITERATURE
Obligatory
<ol style="list-style-type: none"> Whaites E., Drage N. Essentials of Dental Radiography and Radiology. Churchill Livingstone Elsevier 2013 White SC., Pharoah MJ. Oral Radiology — principles and interpretation. Elsevier Mosby 2013 Langlais RP., Miller C. Exercises in Oral Radiology and Interpretation Elsevier 2017

Supplementary

1. Coulthard P, Horner K, Sloan P, Theaker E. Master dentistry, volume one: Oral and maxillofacial surgery, radiology, pathology and oral medicine. Churchill Livingstone Elsevier 2008

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
B.W9., E.W20., F.W18., G.W34., A.U1., E.U1., E.U3., E.U5., F.U17., F.U23., G.U26.	<p>The colloquium is organized by the Office of Quality and Innovation It consists of three parts (60 min for all parts):</p> <p>1. multiple choice test, 30 questions, 3 - 5 distractors, 1 possible answer (30pts) Up to 10 questions one answer scheme:</p> <p>a) all; b) II c) III d) I and II e) I and III</p> <p>2. 10 short answer questions - anatomy (10 points) - terminology according to "Exercises in Oral Radiology and Interpretation" Robert P. Langlais, Craig Miller.</p> <p>3. Report: 1 panoramic radiograph (with one anatomical structure marked), 1 intraoral radiograph (with one anatomical structure marked); (20 points) The first and second term of the colloquium is performed in a form of test. In case of failing the test, the student is allowed to retake the test once with the consent of the Head of Department.</p>	<p>Colloquium - passing over 60% of points</p> <p>Passing all the exercises (if the student is unprepared for the classes, the assistant may fail the classes! - should be passed with another group or in writing (paper, test / written test on a given issue - the assistant decides).</p> <p>Students are obliged to pass all e-learning radiological courses as an unassisted student's work.</p> <p>90% attendance is required (3 delays are treated as one absence!)</p>

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Classes are held in the classrooms of the Department of Dental and Maxillofacial Radiology MUW and synchronously online via Microsoft Teams.

An apron is required for the practical "patient examination" exercises.

Person responsible for didactics: Anna Pogorzelska; anna.pogorzelska@wum.edu.pl

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