

# Current trends in endodontic treatment

1. IMPRINT			
Academic Year	2023/2024		
Department	Faculty of Dental Medicine		
Field of study	English Dentistry Division		
Main scientific discipline	Medical sciences		
Study Profile	General academic		
Level of studies	Uniform MSc		
Form of studies	Full time program		
Type of module / course	Non-compulsory		
Form of verification of learning outcomes	Completion		
Educational Unit / Educational Units	Departament of Conservaive Dentistry and Endodontics Medical University of Warsaw Binieckiego str 6, 02-097 Warsaw, phone: +48 22 116 64 46, e-mail: sekretariat.zachowawcza@wum.edu.pl		
Head of Educational Unit / Heads of Educational Units	Prof. Agnieszka Mielczarek PhD, DDS Agnieszka.mielczarek@wum.edu.pl		
Course coordinator	Prof. Agnieszka Mielczarek PhD, DDS Agnieszka.mielczarek@wum.edu.pl		
Person responsible for syllabus	Magdalena Sobecka-Frankiewicz, DDS, magdalena.sobecka-frankiewicz@wum.edu.pl		
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2. BASIC INFORMATION			
Year and semester of studies	emester	Number of ECTS credits	1

FORMS OF CLASSES  Contacting hours with academic teacher		Number	ECTS credits calculation	
		of hours		
Lecture (L)		-	-	
Seminar (S)		5	0,2	
Classes (	Classes (C)		10	0,4
e-learnin	ng (e-L)		-	-
Practical	classes (PC	)	-	-
Work pla	cement (W	P)	-	-
Unassist	ed student	's work		
Preparat	ion for clas	ses and completions	10	0,4
3.	Course	OBJECTIVES		
C1	C1 Improvement of the knowledge and skills in endodontic procedures: working in dental team, providing proper doctor- patient relationship			
C2	Diagnosing and treating diseases of dental hard tissues, pulp and periapical tissues			
С3	C3 Diagnosing and treating coexisting pathologies of pulp and periodontium			
4.	STANDA	RDS OF LEARNING — DETAILED DESCRIPTION	OF EFFECTS OF LEARN	NING
Code and number of the effect of learning in accordance with standards of learning				
Knowled	lge – Gradu	ate* knows and understands:		
F	.W4.	symptoms, course and management in selected diseases of the oral cavity, head and neck, considering age groups		
F	.W5.	principles of management in case of diseases of the pulp and mineralized dental tissues as well as dental and face injuries		
F	.W6.	principles of management in the case of diseases of the periapical tissues		
F	.W7.	morphology of dental cavities and principles of endodontic treatment and instruments used for this treatment		
F	.W8.	principles of management in the case of cysts, precancerous conditions and head and neck cancers		

causes of complications of the stomatognathic system diseases and the principles of management in case of such

F.W12.

complications

:
:

F.U7.	determine indications and contraindications for a specific dental procedure
F.U8.	conduct treatment of acute and chronic, odontogenic and non-odontogenic inflammatory processes within soft tissues of the oral cavity, periodontium and jaws
F.U9.	proceed in case of general and local complications during and after dental procedures
F.U11.	keep current patient records, prescribe referrals for tests or for a specialized dental and medical treatment
F.U15.	establish treatment in diseases of the stomatognathic system tissues

## 5. ADDITIONAL EFFECTS OF LEARNING

Number of effect of learning	Effects in the fields of:
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## Knowledge – Graduate knows and understands:

W.1	Types of new instruments for root canal preparation, principles of choice of the instrument for work in difficult cases of endodontic treatment
W.2	Endodontic microscope application, adjustment
W.3	Nowadays bioceramic materials used in root canal obturation
W.4	Possibilities of CBCT use and interpretation in endodontic treatment
W.5	The need of microinvasive proceeding in endodontic treatment

#### Skills- Graduate is able to:

U.1	Adjust and primary operate endodontic microscope
U.2	Work with engine-driven endodontic instruments
U.3	Obturate root canals with CWT technique and with bioceramic materials
U.4	Lead endodontic treatment with a high respect to dental hard tissues

## Social Competencies – Graduate is ready for:

Working in the dental team while using endodontic microscope

## 6. CLASSES

Form of class	Class contents	Effects of Learning
	S.1. Possibilities and limitations of nowadays endodontics.	F.W4., F.W5., F.W6.,F.W7.,
	Endodontic microscope, new devices and materials introduced into	F.W8., F.W12., W.1, W.2, W.3,
	endodontic treatment.	W.4, W.5
Seminar(S)	S.2. Minimally invasive endodontics.	
	Rules and objectives of minimally invasive endodontics. Planning	
	endodontic treatment and performing procedures on the base of the	
	rules of minimally invasive endodontics. Creating a trepanation point	
	with the respect to dental hard tissues.	

	S.3. Nowadays concepts of the root canal preparation.  New devices and instruments for root canal preparation. Advantages and disadvantages of the instruments. Possibilities of root canal preparation in difficult cases.  S.4. New possibilities of root canal obturation  A presentation of single-cone technique using bioceramic sealer and comparing it with CWT technique  S.5. Additional tests in endodontic treatment  Possibilities and limitations of radiography in the field of endodontics.  Use of CBCT in case of endodontic treatment- indications and its application in difficult cases.	
Practical classes (C)	C.1. Practical presentation of endodontic microscope.  Training adequate position of the operator while working at magnification. Adjusting the microscope to individual circumstances.  Localization of the orifices of the root canals under microscope.  C.2. Creation of minimally invasive trepanation point.  Defining the size and creating a trepanation point on the phantom tooth.  C.3. Chemo- mechanical preparation of root canal system.  Preparation of the root canal system of phantom tooth, using rotary files and ultrasound devices.  C.4. Obturation of root canals with CWT technique.  Obturation of the root canal system of phantom tooth by means of CWT technique, comparing it to single- cone technique with bioceramic sealer  C.5. Diagnosis and treatment plan revision in endodontics, while using cbct. Practical training of diagnosis standing, rate of success estimation and treatment planning using anonymous cbct's of the patients.	F.U7., F.U8.,F.U9., F.U11., F.U15., U.1, U.2, U.3, U.4, K.1

#### 7. LITERATURE

#### **Obligatory**

- 1. Cohen S., Hargreaves K.M., athways of the Pulp, 10th edition, Mosby Elsevier 2011,
- 2. Torabinejad M., Walton R.E., Endodontics, principles and practice, 5th edition, Saunders Elsevier 2009

### Supplementary

1. European Society of Endodontology position statement: "Management of deep caries and the exposed pulp, European Society of Endodontology (ESE), Duncan H.F., Galler K.M., Tomson P.L., Simon S., El-Karim I., Kundzina R., Krastl G., Dammaschke T., Fransson H. https://doi-1org-100001a5d0012.han3.wum.edu.pl/10.1111/iej.13080

#### 8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
F.W4., F.W5., F.W6., F.W7., F.W8., F.W12., W1-W5, F.U7., F.U8., F.U9., F.U11., F.U15., U.1-U.4, K.1	Learning outcomes are verified on the basis of participation in seminars and observation of acquisition of required skills during practical classes	The condition to pass the faculty is active participation in classes and confirmation of the acquisition of the required practical skills by the teacher conducting the clinical courses.

### 9. ADDITIONAL INFORMATION

- 1. Attendance at seminars and clinical courses is mandatory.
- 2. The absences from the course should be justified by a medical exemption.
- 3. Supervisor of the year is Joanna Rudnicka DDS PhD, Joanna.rudnicka@wum.edu.pl

- 4. It is required to report to classes on time, comply with sanitary requirements for procedures and personal protective equipment, do not use cell phones during classes.
- 5. At the Department of Conservative Dentistry of WUM there is a Student Scientific Circle. The supervisor of the is Dr. Ewa Rusyan, M.D.: e-mail: ewa.rusyan@wum.edu.pl
- 6. Unit contact: Department of Conservative Dentistry, WUM, 6 Binieckiego St., 02-097 Warsaw, tel: 22 116 64 46, e-mail: sekretariat.zachowawcza@wum.edu.pl

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#### **ATTENTION**

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of Classes and Academic Teachers