

# Conservative dentistry and endodontics

1. IMPRINT			
Academic Year:		2024/2025	
Faculty:		Faculty of Medicine and Dentistry	
Field of Study:		English Division Dentistry	
Leading Discipline		Medical science	
Study Profile		General academic	
Level of studies		Uniform MSc	
Form of studies		Full time program	
Type of module / course		Obligatory	
Form of verification of learning	outcomes	Completion	
Educational Unit / Educational Units		Department of Conservative Dentistry  Medical University of Warsawa  Binieckiego str 6, 02-097 Warsaw, tel.: +48 22 116 64 46 e-mail: sekretariat.zachowawcza@wum.edu.pl	
Head of Educational Unit / Heads of Educational Units  Course coordinator		Prof. Agnieszka Mielczarek PhD, DDS agnieszka.mielczarek@wum.edu.pl	
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Person responsible for syllabus		Karolina Koronowska DDS karolina.koronowska@wum.edu.pl	
Teachers	Department of Conservative Dentistry prof. Agnieszka Mielczarek DDS, PhD - agnieszka.mielczarek @wum.edu.pl Aniela Brodzikowska DDS, PhD - aniela.brodzikowka@wum.edu.pl Joanna Rudnicka DDS, PhD - joanna.rudnicka@wum.edu.pl Ewa Rusyan DDS, PhD - ewa.rusyan@wum.edu.pl Marta Ciechowicz DDS - marta.ciechowicz@wum.edu.pl Anna Haładyj DDS - anna.haladyj@wum.edu.pl Karolina Koronowska DDS - karolina.koronowska@wum.edu.pl Paulina Korzeniewska DDS - paulina.korzeniewska@wum.edu.pl Juliusz Kosewski DDS - juliusz.kosewski@wum.edu.pl Sylwia Kozikowska DDS - sylwia.kozikowska@wum.edu.pl Anna Kwiatkowska DDS - anna.kwiatkowska@wum.edu.pl Konrad Michałowski DDS - konrad.michalowski@wum.edu.pl Magdalena Sobecka-Frankiewicz DDS - magdalena.sobecka-frankiewicz@wum.edu.pl Katarzyna Więcek DDS - katarzyna.wiecek@wum.edu.pl Aneta Zduniak DDS - aneta.zduniak@wum.edu.pl		

	Voor and commeter	of studies	IV year VIII and VIIII samestar	North and C. TOTO	n
	Year and semester	of studies	IV year, VII and VIII semester	Number of ECTS credits	8
FORMS OF CLASSES  Contacting hours with academic teacher		Number of hours	ECTS credits calculat	tion	
	Lecture (L)		10	0,3	
	Seminar (S		20	0,7 4,7	
	Practical classes		140		
	Work placement	· ·	-	-	
Jnassiste	d student work	· ·			
reparatio	n for classes and com	pletions	60	2,3	
3	3. Course of	BJECTIVES			
01	Acquisition and corpatient.	nsolidation of knowledg	ge and skills in dental teamwork, formi	ng a proper relationship betwee	n doctor a
02	Ability to diagnose	and treat diseases of the hard dental tissues, dental pulp and periapical tissues.			
03	Ability to pain cont	rol in dentistry.			
	Ability to pain conti	ioi iii deiitisti y.			
04 <b>4.</b> §	Understanding the	problems of dental tre	escription of Effects of Learni	·	y people.
4. S  Code and i	Understanding the	problems of dental tre		·	y people.
4. Scode and earning ir	Understanding the  STANDARDS OF LEA  number of effect of accordance with of learning	problems of dental tre  RNING — DETAILED D  Effects in time		·	y people.
4. Scode and earning ir	Understanding the STANDARDS OF LEAD number of effect of accordance with	problems of dental tre  RNING — DETAILED D  Effects in time  and understands:		NG ()	
4. Scode and earning iretandards	Understanding the  STANDARDS OF LEAR  number of effect of accordance with of learning  e – Graduate* knows	problems of dental tre  RNING — DETAILED D  Effects in time  and understands:  principles of prophyloevelopment;	ESCRIPTION OF EFFECTS OF LEARNI	NG ()  pparatus diseases at different st	
4. S  Code and earning ir standards	Understanding the  STANDARDS OF LEAR  number of effect of accordance with of learning  e – Graduate* knows  F.W2.	erroblems of dental trees and understands:  principles of prophylodevelopment;  viral, bacterial and fu	escription of Effects of Learni	oparatus diseases at different st	ages of
4. Scode and earning iretandards	Understanding the  STANDARDS OF LEAR  number of effect of accordance with of learning  e – Graduate* knows  F.W2.  F.W3	effects in time  Effects in time  and understands:  principles of prophyloevelopment;  viral, bacterial and fursymptoms, course an age groups;	escription of Effects of Learni actics and treatment of masticatory appropriate and the oral cavity and its imp	oparatus diseases at different statements.  portance; the oral cavity, head and neck in	ages of
4. Scode and earning iretandards	Understanding the  STANDARDS OF LEAD  number of effect of accordance with of learning  e – Graduate* knows  F.W2.  F.W3  F.W4.	erroblems of dental trees and understands:  principles of prophylodevelopment;  viral, bacterial and further symptoms, course an age groups;  procedure for pulp dispersion of the symptome of	actics and treatment of masticatory appropriate and the oral cavity and its important displayment of specific diseases of	oparatus diseases at different statement of the oral cavity, head and neck in and injuries to teeth and face be	ages of n different ones;
4. Scode and earning ir	Understanding the  STANDARDS OF LEAR  number of effect of accordance with of learning  e – Graduate* knows F.W2.  F.W3 F.W4.  F.W5.	erroblems of dental trees and understands:  principles of prophylogevelopment;  viral, bacterial and fures and geroups;  procedure for pulp disknows the principles	actics and treatment of masticatory and actics and treatment of masticatory and actics and the oral cavity and its important of the oral cavity and its importa	oparatus diseases at different stroortance; the oral cavity, head and neck in and injuries to teeth and face be esthesia of masticatory organ tis	ages of n different ones; sues;
4. Scode and earning iretandards	Understanding the  STANDARDS OF LEAR  number of effect of accordance with of learning  e – Graduate* knows  F.W2.  F.W3  F.W4.  F.W5.  F.W6.	erroblems of dental treers and understands:  principles of prophylogevelopment;  viral, bacterial and fures and groups;  procedure for pulp dicenses the principles morphology of dentat treatment;	actics and treatment of masticatory appropriate of the oral cavity and its important dispersion of the oral cavity and its important dispersion of specific diseases of seases and mineralised dental tissues related to administration of local anaests.	oparatus diseases at different stroortance; the oral cavity, head and neck in and injuries to teeth and face be esthesia of masticatory organ tis	ages of n different ones; sues;
4. S  Code and learning ir standards	Understanding the  STANDARDS OF LEAR  number of effect of accordance with of learning  e – Graduate* knows  F.W2.  F.W3  F.W4.  F.W5.  F.W6.  F.W7.	Effects in time  Effects in time  and understands:  principles of prophyldevelopment;  viral, bacterial and fusymptoms, course an age groups;  procedure for pulp diknows the principles morphology of dentatreatment;  knows the procedure	escription of Effects of Learning actics and treatment of masticatory appropriate actics and treatment of masticatory appropriate actics and treatment of masticatory appropriate actics and treatment of specific diseases of management of specific diseases of seases and mineralised dental tissues related to administration of local anaelicavities and principles of endodontic	oparatus diseases at different statement and instruments use	ages of n different ones; sues;
4. S  Code and learning ir standards	Understanding the  STANDARDS OF LEAD  number of effect of accordance with of learning  e – Graduate* knows F.W2.  F.W3 F.W4.  F.W5. F.W6. F.W7.	Effects in time  Effects in time  and understands:  principles of prophyldevelopment;  viral, bacterial and fusymptoms, course an age groups;  procedure for pulp diknows the principles morphology of dentatreatment;  knows the procedure indications and contri	escription of Effects of Learning actics and treatment of masticatory and actics and treatment of masticatory and actics and the oral cavity and its imputed management of specific diseases of seases and mineralised dental tissues related to administration of local anaerolatic actions and principles of endodontic in case of periapical diseases;	oparatus diseases at different stroortance; the oral cavity, head and neck in and injuries to teeth and face be esthesia of masticatory organ tist treatment and instruments use atments;	ages of n different ones; sues; d in this

	F.W16.	principles of anaesthesia in dental procedures and basic pharmaceuticals;		
	<b>F.W19.</b> pathomechanism of oral disease impact on general health;			
	F.W20.	pathomechanism of general disease or applied therapies impact on the oral cavity;		
	F.W21. prevention of oral disease;			
	<b>F.W22.</b> procedure for diseases of masticatory apparatus tissues, injuries to teeth and jaw bones;			
	F.W23.	characteristics of dental care for patients with a general illness and the principles of cooperation with a medical doctor treating the underlying disease.		
	C.W25.	composition, structure, bonding, properties, application and use of dental materials;		
	E.W12.	principles of dental care for pregnant women;		
Skills- Grad	luate* is able to:			
	F.U7.	determine indications and contraindications for a specific dental procedur	e;	
	F.U8.	treat acute and chronic, odontogenic and non-odontogenic inflammatory the oral cavity, periodontium and jawbone;	processes in soft tissues of	
	F.U9.	provide treatment in the event of general and local complications during a	and after dental procedures;	
	F.U11. keep current patient records, make referrals for dental and general medical examination or treatment			
	F.U15. advise treatment of diseases of stomatognathic system tissues;			
	F.U16. use appropriate medications during and after the dental procedure to reduce pain and anxiety;			
C.U10. use adhesive techniques;				
	C.U11	select restorative, prosthetic and bonding biomaterials based on the proper clinical conditions;	erties of the materials and	
5. <i>A</i>	ADDITIONAL EF	FECTS OF LEARNING (NON-COMPULSORY)		
Number o	f effect of learning	Effects of learning i time		
Knowledge	– Graduate knows a	and understands:		
	W.1	knows rules of surgery field magnification in dental p	procedures	
Skills- Grad	luate is able to:			
	-	<del>-</del>		
Social Com	oetencies – Graduat	e is ready for:		
	-	-		
6. C	LASSES			
Form of class	Class contents		Effects of Learning	
Lectures	Types of pain, diffe	I disorders and methods of its control rential diagnosis, methods of pain elimination, methods and techniques of sused in anaesthetics	F.W2., F.W16.	

	W.2. Permanent tooth injuries in adult patients  Classification of permanent teeth injuries; causes, diagnosis and management of the patient after the injury; assessment of prognosis; possible short-term and long-term complications; differentiation in management of dental injuries in young people and geriatric patients	F.W22.
	W.3. Complications in endodontic treatment  Methods of removal of broken root canal instruments, closing of coronal and root perforations - indications, prognosis, endodontic surgery	F.W7., F.W8., F.W12.
	W.4. Modern concepts for the restoration of hard dental tissues  Direct and indirect restoration methods, indications, techniques, materials, monitoring, prognosis	F.W11., F.W12., F.W22., C.W25.
	W.5. Patient with a systemic disease in a dental office  Current standards of management, indications and contraindications for treatment of patients with systemic disease, protective antibiotic therapy	F.W8., F.W13., F.W19., F.W20., F.W23.
	S.1. Endodontic instruments, working at magnification  Use of endodontic microscope and dental loupes in dental practice, principles and techniques	F.W7.
	S.2.Verifying test (basics of endodontics) – course coordinator  Verification of knowledge of the basics of endodontics before the start of practical classes  Test - 35 questions, 60 % of the correct answers (21 points)  Scale of marks: below 21 points - 2, 21-23 points - 3, 24-26 points - 3.5, 27-30 points - 4, 31-33 points - 4.5, 34-35 points - 5	the effects specified in the syllabus for the third year of dental studies: C.W.23, E.W2., F.W2., F.W3., F.W.4., F.W5., F.W6., F.W7., F.W14., F.W21., F.W22., F.W23., G.W.18., G.W.34., F.U1., F.U2., F.U3., F.U4., F.U6., F.U7., F.U11., F.U14.
	<b>S.3. Current concepts for biological methods of pulp treatment</b> Mechanism, indications, methods, effectiveness, prognosis	F.W4., F.W5., F.W7.
Seminars	S.4. Immediate dental intervention Inflammation of the pulp and periapical tissues, injuries, treatment procedures	F.W5., F.W6., F.W7., F.W8., F.W12., F.W13., F.W16.,F.W19., F.W22., E.W12.
	S.5. Difficulties in endodontic treatment  Anatomical limitations, accessory canals, obliteration, dentinomas, drug treatment in endodontics	F.W7., F.W13., F.W22.
	S.6. Internal and external tooth resorption Etiology, classification, prevention, treatment	F.W4., F.W6., F.W7., F.W22.
	S.7. Re-endodontic treatment Indications, Prognosis, Clinical management, Instrumentation	F.W4., F.W6., F.W7., W13., F.W22, F.W23.
	S.8. Endodontic-periodontal lesions Classification of diseases affecting the marginal and apical periodontium, management and prognosis	F.W2., F.W3., F.W4., F.W21.

<b>S.9. Discussion of clinical cases</b> Discussion of selected clinical cases in order to prepare for practical usage of the knowledge gained in the seminars	E.W12., F.W2., F.W3., F.W4 F.W5., F.W6., F.W7., F.W8. F.W12., F.W13., F.W16., F.W19., F.W21., F.W22., F.W23.
S.10. Credit test from lectures and seminars – course coordinator  A test consisting of 35 questions - 4 distractors, 1 correct answer. It is 60 % correct answers (21 points)  The scale of the ratings: 21-23 points -3, 24-26 points -3.5, 27-30 points -4, 31-33 points 4.5, 34-35 points - 5	E.W12., F.W2., F.W3., F.W4 F.W5., F.W6., F.W7., F.W8. F.W12., F.W13., F.W16., F.W19., F.W21., F.W22., F.W23.
S.11. Application of adhesive systems in various clinical cases  Total etch and self-etch systems - indications, advantages and disadvantages, selection of the optimal system for the clinical case	F.W11., C.W25.,
<b>S.12. Selection of the restoration material in conservative dentistry</b> Characteristics and indications for the use of different restorative materials, principles for material selection, use of material characteristics for specific clinical cases	F.W11. ,C.W25.,
S.13. The longevity of dental restorations Factors determining the durability of restorations: patient-related, material-related, physician-related, filling replacement and repair - qualification	F.W2., C.W25.
<b>S.14. Extensive reconstructions of hard dental tissues after root canal treatment</b> Current recommendations for pulp-free tooth restoration, biomechanical properties of root dentin	F.W7., F.W22., C.W25.
S.15. Prevention and dental treatment of pregnant women Principles of dental treatment of pregnant women, influence of progesterone and estrogen on oral tissues, modification of saliva composition, prescription of drugs	F.W2., E.W12.
S.16. Bleaching of vital and nonvital teeth Etiology of hyperpigmentation, home and dental office bleaching methods, preparations, indications and contraindications, limitations, complications, legal basis	F.W11.
S.17. Patient with a systemic disease in a dental office - clinical cases  Treatment of a cardiac patient, diabetic patient, cancer patient, transplantation patient - patient preparation for treatment procedure, indications, contraindications, standards of treatment procedures	F.W13. ,F.W19., F.W20., F.W23.
S.18. Patient with cancer in dental office Oncological vigilance. Post-oncological treatment before, during and after therapy	F.W3., F.W8., F.K13.,F.W19 F.W20., F.W21., F.W23.
<b>S.19. Patient with a viral infection in a dental office</b> Treatment of a patient with HIV infection, hepatitis B and C, tuberculosis and herpes - patient preparation for treatment procedure, indications, contraindications, standards of treatment procedures	F.W3., F.W19., F.W20., F.W23.

	<b>S.20.</b> Verifying test checking the knowledge gained in the seminars – course coordinator A test consisting of 35 questions - 4 distractors, 1 correct answer. It is 60 % correct answers (21 points). The scale of the ratings: 21-23 points -3, 24-26 points -3.5, 27-30 points -4, 31-33 points -4.5, 34-35 points - 5	C.W25., C.W25., E.W12., F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W8., F.W11., F.W12., F.W13., F.W16., F.W19., F.W21., F.W22., F.W23.
	<b>C-</b> Working with the dental team, according to the principles of ergonomics, subjective and physical examination of the patient, assessment of the risk of caries and establishing a treatment plan, performing prophylactic procedures in hard dental tissues, diagnosis and treatment of caries and non-carious lesions, keeping medical records.	F.U7., F.U8., F.U9., F.U11., F.U15., F.U16., C.U10., C.U11.
Clinical Classes	Clinical classes topics*:  C1 C 5. Diagnosis and non-invasive treatment of initial caries.  C6 C24. Diagnosis and treatment of cavity caries using various restorative materials.  C25 C28. Diagnosis and treatment of root caries  C29 C38. Symptomatology, diagnosis and treatment of dental pulp diseases  C39 C43. Symptomatology, diagnosis and treatment of diseases of peri-root tissues  C44 C45. Teeth whitening  C46 C48. Injuries of permanent teeth - diagnosis, treatment management.  C49 C.52. Internal and external resorptions- diagnosis and treatment.  C.53 C.56. Planning dental treatment in a patient with systemic disease.	
	*Procedures performed during individual clinical classes are adapted to the preventive and therapeutic needs of patients.	

## 7. LITERATURE

## **Obligatory**

- 1. Sturdevant's Art and Science of Operative Dentistry, 7th edition, Roberson T.M., Heymann H.O., Swift E.J., Mosby, St. Louis 2018,
- 2. Essentials of Dental Caries. Fourth Edition Edwina Kidd and Ole Fejerskov, Oxford University Press, Oxford 2016
- 3. Clinical endodontics: a textbook. Tronstadt L., 3rd edition, Georg Thieme Verlag, 2009
- 4. Textbook of Endodontology, Bjørndal L., Kirkevang L-L., Whitworth J., 3rd Edition Wiley-Blackwell, 2018

# Supplementary

- 1. Pickard's Guide to Minimally Invasive Operative Dentistry, Avit Banerjee A., Watson T.F., 10th Edition, Oxford University Press, 2015
- 2. Dental Caries: The Disease and its Clinical Management, Fejerskov O Nyvad B, Kidd E. 3rd Edition, Wiley-Blackwell, 2015
- 3. Pathways of the Pulp, Berman L.H., Hargreaves K.M., 12th edition, Elsevier, 2020,
- 4. Endodontics, principles and practice, Torabinejad M., Walton R.E., 5th Edition, Saunders Elsevier, 2009

### 8. VERIFYING THE EFFECT OF LEARNING

Code of the course	Ways of verifying the effect of learning	Completion
effect of learning		criterion

C.W25., C.W25., F.W12., F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W8., F.W11., .W12., F.W13., .W16., F.W19., .W21., F.W22., .W23. **To participate in clinical classes** is possible after passing a test verifying the consolidation of knowledge of endodontics, acquired during the classes, conducted during the third year of study in the implementation of the subject of conservative dentistry and endodontics.

A condition for passing the clinical classes is a positive assessment by the teacher conducting clinical classes, confirming the acquisition of the ability to perform specific procedures, reliable maintenance of medical records and a proper attitude towards the patient and medical staff.

A condition for passing lectures and seminars is attendance at lectures, active participation in seminars, passing colloquia in the field of knowledge presented at lectures and seminars.

**Credit for the course** is given on the basis of active participation in seminars, passing the colloquium in the field of knowledge presented at lectures and seminars, as well as after receiving a positive evaluation from the teacher conducting clinical classes.

During the academic year, 2 absences from clinical classes, justified by a medical exemption, are allowed. Additional absences from clinical classes, confirmed by a medical exemption, require making up the classes. The date and form of credit for the exercises should be determined individually with the teacher of the class. Any absence from the seminar must be justified by a medical exemption and requires a passing grade. The date and form of credit for seminars should be determined individually with the dental teacher.

Multiple-choice test quizzes: Entrance test, Verifying knowledge from lectures, Seminars: consist of 25 questions -3 distractors and 1 correct answer To pass, a minimum of 60% correct answers is required (15 points). Grading scale: 15-16 points: grade 3, 17-18 points: grade 3.5, 19-21 points: grade 4, 22-23 points: grade 4.5,

24-25 points: grade 5.

### 9. ADDITIONAL INFORMATION

- 1. The knowledge conveyed in lectures and seminars includes new information and concepts and is assessed in quizzes and the final exam.
- 2. In order to complete the course, it is necessary to pass the clinical classes, pass the colloquium of seminars and lectures. The first term of the colloquium is in the test form. The second term of the colloquium oral (or test) credit at the teaching assistant. In case of failure to pass the 1st and 2nd terms- the final, 3rd way of verifying knowledge is an oral colloquium at the head of the Department, by prior arrangement. A negative result of the colloquium will result in failure of the course.
- 3. 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.
- 4. Student Scientific Circle at the Department of Conservative Dentistry, Medical University of Warsaw. Circle supervisor: Ewa Rusyan DDS, PhD email: ewa.rusyan@wum.edu.pl.
- 5. Contact: Department of Conservative Dentistry, Medical University of Warsaw, Binieckiego 6, 02-097 Warsaw. Tel.: 22 116 64 46. E-mail: sekretariat.zachowawcza@wum.edu.pl
- 6. The supervisor of the course is Karolina Koronowska DDS Karolina.koronowska@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

Załącznik nr 4A do Procedury opracowywania i okresowego przeglądu programów studiów (stanowiącej załącznik do zarządzenia nr 68/2024 Rektora WUM z dnia 18 kwietnia 2024 r.)