Conservative Dentistry and endodontics

1. IMPRINT

Academic Year	2026/2027
Department	Medical and Dental Faculty
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	Obligatory
Form of verification of learning outcomes	Completion
Educational Unit / Educational Units	Department of Conservative Dentistry Medical University of Warsaw 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	Department of Conservative Dentistry 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	Lek.dent. Magdalena Sobecka-Frankiewicz magdalena.sobecka-frankiewicz@wum.edu.pl
Teachers	prof. Agnieszka Mielczarek DDS, PhD - agnieszka.mielczarek @wum.edu.pl Ewa Iwanicka-Grzegorek DDS, PhD - ewa.iwanicka-grzegorek@wum.edu.pl Aniela Brodzikowska DDS, PhD – aniela.brodzikowka@wum.edu.pl Marcin Aluchna DDS, PhD - marcin.aluchna@wum.edu.pl

	Joanna Rudnicka DDS, PhD - joanna.rudnicka@wum.edu.pl Ewa Rusyan DDS, PhD – ewa.rusyan@wum.edu.pl Milena Marcinkowska-Ziemak DDS, PhD – milena.marcinkowska-ziemak@wum.edu.pl Juliusz Kosewski DDS, PhD – Juliusz.kosewski@wum.edu.pl Aneta Zduniak DDS,PhD – aneta.zduniak@wum.edu.pl Konrad Michałowski DDS – konrad.michalowski@wum.edu.pl Anna Haładyj DDS - anna.haladyj@wum.edu.pl Katarzyna Król DDS - katarzyna.krol-barej@wum.edu.pl Anna Kwiatkowska DDS – anna.kwiatkowska@wum.edu.pl Iwona Raczycka DDS – iwona.raczycka@wum.edu.pl Magdalena Sobecka-Frankiewicz DDS – magdalena.sobecka-frankiewicz@wum.edu.pl Jarosław Witecki DDS - jaroslaw.witecki@wum.edu.pl Marcin Zawadziński DDS – marcin.zawadzinski@wum.edu.pl Przemysław Zwierz DDS – przemyslaw.zwierz@wum.edu.pl Katarzyna Buczek DDS – katarzyna.wiecek@wum.edu.pl Tomasz Gajewski DDS, PhD- tomasz.gajewski@wum.edu.pl Karolina Koronowska DDS- karolina.koronowska@wum.edu.pl Karolina Obroniecka DDS- karolina.obroniecka@wum.edu.pl Paulina Korzeniewska DDS- paulina.korzeniewska@wum.edu.pl Marta Ciechowicz DDS- marta.ciechowicz@wum.edu.pl Anna Niedziela-Hejmej DDS- anna.niedziela-hejmej@wum.edu.pl

2. BASIC INFORMATION

Year and semester of studies	III year, V and VI semesters	**Number of ECTS credits**	9

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	18 (e-learning)	0,7
Seminar (S)	28	1,3
Classes (C)	106	4
e-learning (e-L)	-	-
Practical classes (PC)	-	-
Work placement (WP)	-	-
Unassisted student's work		
Preparation for classes and completions	70	3

3. COURSE OBJECTIVES

C1	Organization of dental workplace, basics of ergonomics
C2	Performing an extraoral and intraoral examination of a dental patient
C3	Prophylaxis, diagnosis and treatment of carious and non- carious lesions of dental tissues

C4	Learning basic endodontic concepts
C5	Communication with dental patient

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	**Effects in field of**
Knowledge – Graduate* knows and understands:	
F.W2.	principles of prophylaxis for diseases of the masticatory organ, including oncological prophylaxis;
F.W3.	the role of the oral microbiome;
F.W4	symptoms, course, and management of specific diseases of the oral cavity, head and neck, taking into consideration various age groups;
F.W5.	principles of management of diseases of the pulp and mineralised dental tissues;
F.W6.	principles of management of diseases of periradicular tissues and dental infections;
F.W7.	morphology of dental cavities and principles of endodontic treatment ;
F.W8.	advantages and limitations of dental treatment under magnification;
F.W9.	principles of instrumentation, materials, and pharmacological agents in dental treatment;
F.W15.	ndications and contraindications for conducting restorative dentistry procedures;
F.W16.	causes of complications of diseases of the stomatognathic system and principles of their elimination;
F.W21.	methods of rehabilitation of the masticatory organ;
Skills– Graduate* is able to:	
F.U1.	take a medical and dental history with a patient or their family by following the principles of professional communication;
F.U6.	perform a dental physical examination of the patient;
F.U8.	maintain medical records, make referrals for specialised dental and general medical examinations or treatment;
F.U9.	order additional examinations and interpret their results and schedule consultations;

F.U10.	determine indications and contraindications for a specific dental procedure;
F.U13.	select drugs for dental indications taking into account their interactions and side effects;
F.U18.	establish a plan for preventive and therapeutic management based on an individual risk assessment of oral diseases;
F.U19.	diagnose and treat basic diseases of mineralised tissues;
F.U31.	interpret results of radiological examinations used in dental diagnoses;

5. ADDITIONAL EFFECTS OF LEARNING *(non-compulsory)*

Number of effect of learning	**Effects in field of:**
Knowledge – Graduate knows and understands:	
-	-
Skills– Graduate is able to:	
-	-
Social Competencies – Graduate is ready for:	
-	-

6. CLASSES

Form of class	**Class contents**	**Effects of Learning**
	W.1. Current concepts of pathomechanism and control of carious disease Cavities as a lifestyle-related disease, the dynamics of de- and remineralization processes, biological and socioeconomic factors in the causes of caries, methods for controlling the carious process.	F.W4., F.W5.
	W.2. Epidemiology and prevention of dental caries *The role of epidemiological studies in health policy development, oral health monitoring, indicators, home, and professional caries prevention in different groups of the adult population*	F.W2., F.W3., F.W4..
	W.3. Caries diagnostics *Review and effectiveness of diagnostic methods, processes used in the detection of caries lesions, methods of caries risk assessment, choice of therapeutic management*	F.W4.
	W.4. Treatment of caries Choosing a therapeutic approach, non-invasive and restorative methods - remineralization, indications for restorative treatment, principles of MID for treating carious lesions, the modern concept of treating carious defects	F.W4., F.W5.

	W.5. Non-carious lesions *Etiology, diagnostics, therapy*	F.W4., F.W5.
	W.6. Diseases of the dentine-pulp complex and periradicular tissues *Etiology, symptomatology, classification, differential diagnosis*	F.W4., F.W5., F.W6.
	W.7. Materials used in modern dentistry liners, restorative materials, biologically active materials, materials for root canals obturation, features, indications, disadvantages and advantages	F.W9.
	W.8. Basics of endodontic treatment *Diagnosis and indications for root canal treatment, assessment and preparation of the treatment area, working under magnification*	F.W4., F.W5., F.W7.
	W.9. Verifying test Verification of the knowledge gained on the lectures	F.W2., F.W3., F.W4., F.W5., F.W6.
seminars	S.1. Introduction to the clinical classes conducted in the Department of Conservative *Dentistry, discussion of work regulations in the Department and at the UCS, presentation of the conditions for passing the course, and the use of equipment*	F.U8.
	S.2. Initial test – course coordinator *A colloquium testing students' preparation for beginning clinical classes, based on the knowledge gained during the second year of studies - 25 questions, 3 distractors, 1 correct answer. Obtaining a minimum of 60% of the correct answers (15 questions) is obligatory to pass the test.*	the outcomes specified in the syllabus for the second year of the dental medicine program, in the Integrated Preclinical Learning module
	S.3. The basics of ergonomics in a dental team *Dental team, ergonomics of 4 and 6 hand work position, working in magnification, isolation of the treatment area, working with rubber-dam*	F.W8.
	S.4. The role of saliva in maintaining oral homeostasis *Salivary tests, interpretation, xerostomia, treatment*	F.W3., F.U9., F.U13.
	S.5. Caries risk assessment *Risk factors, preventive factors, Cariogram, Cambra, (ICCMS™)*	F.W2., F.W3., F.W4.
	S.6. Basics of preventing tooth caries in Adult Patients Aims and importance of prevention, the role and mechanism of fluoride action, fluoride preparate and methods of their use, safety and effectiveness	F.W2., F.W3., F.W4.
	S.7. Detection of carious lesions Methods, effectiveness, sensitivity and specificity	F.W4., F.W5.
	S.8. Classification of carious lesions *Classification of carious lesions according to Black, Mount and Hume as modified by Lasfargues, Kaleka and Louis, ICDAS II Classification, ICCMS, active and arrested caries*	F.W4., F.W5.
	S.9. Non-invasive methods of caries treatment *Initial caries, plaque control, methods to stop the progress of the carious process, remineralization of carious lesions - methods, agents, infiltration of carious lesions, fissure sealants in caries therapy*	F.W4., F.W5., F.W9.
	S.10. The MID concept in caries treatment *Options for minimally invasive caries treatment - techniques, systems, indications, contraindications, advantages and disadvantages*	F.W4., F.W5., F.W9., F.W15.
	S.11. The most common mistakes in cavity preparation	F.W4., F.W5., F.W9., F.W15.

Preparation rules, restoring the integrity of the tooth surface, the function and aesthetics, maintaining healthy, vital pulp.	
S.12. Current concepts for deep caries treatment The aim of restorative therapy, current concepts for removing decayed tissue, selective and non-selective methods of removing decayed dentin, the role of adhesion in restorative treatment	F.W4., F.W5., F.W9., F.W15.
S.13. Basics of adhesive tooth tissue reconstruction Goals of tooth restoration, clinical aspects of filling cavities using adhesive materials, methods for compensating polymerization shrinkage	F.W4., F.W5., F.W9., F.W15.
S.14. Principles for reconstructing interproximal surfaces The importance of proper reconstruction of interproximal surfaces for the functioning of the stomatognathic system, types of matrices, forms, and systems for rebuilding contact surfaces	F.W4., F.W5., F.W9., F.W15., F.W21.
S.15. Credit test- organized by the course coordinator *The test includes knowledge presented at the seminars - 25 questions, 3 distractors, 1 correct answer. Obtaining a minimum of 60% of the correct answers (15 questions) is obligatory to pass the test.*	F.W2., F.W3., F.W4., F.W5., F.W8., F.W9.
S.16. Glassionomers and their modifications in dental practice *Chemical structure, division, modification, range of effect of fluoride ions contained in the GIC, advantages and disadvantages*	F.W9.
S.17. Overview of dental composite materials *Division- Compomers, giomers, ormocers, composites, indications, advantages and disadvantages, protocols, application techniques*	F.W9.
S.18. Pathology of the dental pulp *Selected classification of pulp diseases, reversible and irreversible pulpitis*	F.W5.
S.19. Diseases of periradicular tissues *Factors causing inflammation of periapical tissues, classification, diagnosis, treatment*	F.W6.
S.20. Morphology of dental pulp chambers in terms of endodontic procedures- part 1 *Location of the trepanation point in different groups of teeth. Anatomy of the pulp and dentin complex. Location of canal orfices, lateral and accessory canals*	F.W7.
S.21. Morphology of dental pulp chambers in terms of endodontic procedures- part 2 *Location of the trepanation point in different groups of teeth. Anatomy of the pulp and dentin complex. Location of canal orfices, lateral and accessory canals*	F.W7.
S.22. Biomechanical preparation of the canal system *Aims of biomechanical canal preparation, elimination of canal biofilm, working methods and techniques*	F.W5., F.W7.
S.23. Root canal obturation methods and techniques *Influence of proper canal system obstruction on the prognosis of treatment, control methods, indications for revision of canal treatment*	F.W5., F.W6., F.W7.
S.24. Endodontic treatment plan Aim of endodontic treatment, plan as an important part of endodontic therapy, indications and contraindications to root canal treatment, assessment of the difficulty level of endodontic cases	F.W5., F.W6.
S.25. Complications in endodontic treatment	F.W5., F.W6., F.W16.

	Intraprocedural and pastprocedural complications, prevention against complications, treatment of the complications	
	S.26. . Discussion of clinical cases. Part 1. *Presentation of cases with a detailed discussion of the disease history, differential diagnosis, treatment plan proposal, therapeutic procedure, and prognosis*	F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W8., F.W9., F.W15., F.W16.
	S.27. . Discussion about clinical cases. Part 2. *Presentation of cases with a detailed discussion of the disease history, differential diagnosis, treatment plan proposal, therapeutic procedure, and prognosis*	F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W8., F.W9., F.W15., F.W16.
	S.28. . Credit test- organized by the course coordinator	F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W8., F.W9., F.W15., F.W16., F.W21., F.U9., F.U13.
Practical classes	C- Working in a dental team, according to the principles of ergonomics, interwiev 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. Topics of practical classes * C1. - C3. Performing preventive and therapeutic procedures in simulation conditions: 1. Preparation and filling of a cavity specified in the Lasfarguess classification as 2.3 (permanent incisor) 2. Preparation and filling of a cavity specified as 2.3 in the Lasfarguess classification (permanent molar) 3. Preparation and filling of a cavity specified as 3.3 in the Lasfarguess classification (permanent premolar) C4. Work principles in the Department of Conservative Dentistry, maintaining current patient documentation in the KS-Somed program, implementation of introduced updates. C5.- C8. Objective examination of the oral cavity with consideration of potentially malignant conditions, communication with dental patients. C9. – C30. Planning and performing preventive and therapeutic procedures. * * Procedures performed during individual practical classes are adapted to the preventive and therapeutic needs of patients participating in clinical classes.	C1.-C3. - F.U19., C4. - F.U1., F.U8., C5 -C8. - F.U1., F.U6., C9.-C30. - F.U6., F.U8., F.U9., F.U10., F.U13., F.U18., F.U19., F.U31.,

7. LITERATURE

Obligatory

1. Sturdevant's Art&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

Supplementary

1. Pickard's Guide to Minimally Invasive Operative Dentistry 10th Edition by Avit Banerjee (Author), Timothy F. Watson (Author), Oxford University Press, 2015
2. Ole Fejerskov (Editor), Bente Nyvad (Editor), Edwina Kidd (Editor) Dental Caries: The Disease and its Clinical Management, 3rd Edition, Wiley-Blackwell 2015
3. Cohen S., Hargreaves K.M., Pathways of the Pulp, 10th edition, Mosby Elsevier 2011,
4. Torabinejad M., Walton R.E., Endodontics, principles and practice, 5th edition, Saunders Elsevier 2009

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
F.U1., F.U6., F.U8., F.U9., F.U10., F.U13., F.U18., F.U19., F.U31.	Entering clinical classes is possible after passing the preliminary test, verifying the consolidation of knowledge acquired during the pre-clinical classes, conducted in the second year of study as a part of the implementation of the module: integrated pre-clinical classes. The condition for passing the exercises is a positive assessment from the teacher leading the practical classes in a simulation setting, clinical classes, confirming the acquisition of skills in performing specific procedures, reliable maintaining of medical records, and having an appropriate attitude towards patients and medical staff. Required MINIMUM procedures completed in the 3rd year: 5 fillings: - 2 on the occlusal surface - 2 on the cervical surface - 1 on the proximal surface The 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 who conducts clinical classes. Attendance at lectures, seminars and exercises is mandatory. In order to justify absence from classes or exams, the student is required to notify the course coordinator or another person designated by the head of the department by email or in writing no later than three working days after the day when the classes or colloquium took place. Providing a justification later is allowed if the student was unable to submit it for a valid reason; in that case, the document should be provided as soon as the reason for the absence ends. During the academic year, 2 absences from exercises are allowed if justified by a medical certificate. Any additional absence from exercises, confirmed by a medical certificate, requires making up the class. The date and form of making up the exercises should be arranged individually with the leading teacher. Any absence from a seminar must be justified by a medical certificate and requires making up the seminar. The date and form of making up the seminar should be arranged individually with the assistant leading the seminar.	Multiple-choice quizzes (entrance, verifying knowledge from lectures and seminars) consist of 25 questions - 3 distractors and 1 correct answer. Passing requires 60% correct answers (15 points). Grading scale: 15-16 points - 3 17-18 points - 3.5 19-21 points - 4 22-23 points - 4.5 24-25 points - 5
F.W2., F.W3., F.W4., F.W5., F.W6., F.W7., F.W8., F.W9., F.W15., F.W16., F.W21.		

	In the case of a justified absence from an exam, the student has the right to take it at the next date scheduled by the department. An unexcused absence is a reason for recording a failure for the subject on that date. If a student does not pass the subject on the last date set by the department in a given academic year, they do not get credit for the course. If a student receives a failing grade in a subject they are entitled to two retake attempts.	

9. ADDITIONAL INFORMATION

1. The knowledge conveyed in lectures and seminars includes new information and concepts and is assessed in tests and the final exam.
2. If a student gets a failing grade on a course, they are entitled to two retake opportunities. For the second retake, the student can ask the Dean to allow an observer chosen by the student council to be present. The Dean can agree to a committee-led retake if there are justified concerns about how the original assessment was conducted.
3. The supervisor of the course is Magdalena Sobecka- Frankiewicz DDS – magdalena.sobecka-frankiewicz@wum.edu.pl
4. It is required to report to classes on time, comply with sanitary requirements for procedures and personal protective equipment, and disallowed to use cell phones during classes.
5. Student Scientific Club at the Department of Conservative Dentistry, Medical University of Warsaw. Circle supervisor: Dr. n. med. Ewa Rusyan - email: ewa.rusyan@wum.edu.pl.
6. 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.

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ATTENTION

The final 10 minutes of the last class in a block/semester/year should be dedicated to students filling out the Course and Academic Teacher Evaluation Surveys.