Prosthetic dentistry

IMPRINT	
Academic Year	2025/2026
Department	Faculty of Medicine and Dentistry
Field of study	English Dentistry Division
Main scientific 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	Exam
Educational Unit / Educational Units	Department of Prosthetic Dentistry St. Binieckiego str. 6, 02-097 Warsaw Phone: 22 116 64 70 Mail: katedraprotetyki@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Jolanta Kostrzewa-Janicka, DDS, PhD,
Course coordinator	Prof. Jolanta Kostrzewa-Janicka, DDS, PhD, St. Binieckiego str. 6, 02-097 Warsaw Phone: 22 116 64 70 Mail: katedraprotetyki@wum.edu.pl
Person responsible for syllabus	Department of Prosthetic dentistry (DPD) Krzysztof Majchrzak, DDS, PhD
Teachers	Magdalena Rączkiewicz DDS,PhD, mraczkiewicz@wum.edu.pl

BASIC INFORMATION			
Year and semester of studies	V, IX and X semester	**Number of ECTS credits**	10

FORMS OF CLASSES **Contacting hours with academic teacher**	**Number of hours**	**ECTS credits calculation**
Lecture (L)	0	
Seminar (S)	15	0,52
Classes (C)		
e-learning (e-L)		
Practical classes (PC)	125	4,31
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	150	5,17

COURSE OBJECTIVES	
O1	Acquiring knowledge of the morphology and physiology of stomatognathic system in terms of interdisciplinary rehabilitation, taking into account occlusion in individual prosthetic restorations depending on the stage of the patient's individual development.
O2	Acquiring knowledge about planning and preparation for prosthetic treatment, establishing an individual treatment plan and multi-specialist cooperation in holistic dental care, including the correct keeping of medical records
O3	Acquiring knowledge about the types of prosthetic restorations, indications and contraindications to their use as well as clinical and laboratory procedures in the implementation of these restorations, including procedures in the field of aesthetic dentistry and implantology
O4	Acquiring the ability to choose dental materials when providing all types of prosthetic restorations
O5	Acquisition of clinical management skills in simple clinical cases of prosthetic rehabilitation of patients with morphological disorders of the stomatognathic system, design of prosthetic restorations and cooperation with technician
O6	Acquiring the ability to diagnose functional disorders of the stomatognathic system and treatment algorithms depending on the type of disorder.
O7	Preparing students for independent practice in the field of prosthetic rehabilitation of patients and interdisciplinary treatment of patients in a multidisciplinary team, taking into account the doctor's behavior pattern, the way of

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 the field of:**
Knowledge – Graduate* knows and understands:	
F.W1.	occlusal norms at various stages of individual development and deviations from the norms
F.W2.	mechanisms leading to organ and systemic pathologies (including infectious, invasive, autoimmune, immunodeficiency, metabolic and genetic diseases)
F.W10.	indications and contraindications for treatment with the use of dental implants;
F.W11.	indications and contraindications for esthetic dentistry procedures;
F.W14.	causes and rules of conduct in the case of complications of the stomatognathic system diseases
F.W16.	methods of rehabilitation of the masticatory system
Skills– Graduate* is able to:	
B.U1	relate chemical phenomena to the processes taking place in the oral cavity;
B.U2	interpret physical phenomena occurring in the masticatory organ
C.U11	select restorative, prosthetic and bonding biomaterials based on the properties of the materials and clinical conditions;
C.U12	reproduce anatomic occlusal relations and analyze the occlusion;
C.U13	design prosthodontic restorations in accordance with the principles of their laboratory preparation;
D.U5	take actions to improve the patient's quality of life and prevent its deterioration in the future;
E.U11	diagnose headaches and face pains as well as neurological diseases of adults and children that pose problems in dental practice;
F.U1	conduct a medical interview with the patient or his family;
F.U2	conduct a dental physical examination of the patient;
F.U3	explain to the patient the essence of his ailments, establish the treatment method confirmed by the patient's informed consent and the prognosis;
F.U6	interpret the results of additional tests and consultations;
F.U7	determine indications and contraindications for a specific dental procedure;
F.U9	proceed in the event of general and local complications during and after dental procedures;

F.U10	prescribe medications taking into account their interactions and side effects;
F.U11	know the rules of conduct in the event of general and local complications during dental procedures and after dental procedures
F.U16	use appropriate medications during and after dental surgery to relieve pain and anxiety;
F.U22	perform prosthodontic rehabilitation in simple cases including clinical and laboratory procedures;

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

CLASSES

Form of class	Class contents	Effects of Learning
Seminars	S1 Topic: Patient Examination - Interview, Extraoral and Intraoral Examination, Additional Tests - Components of the Treatment Plan. Common Errors in Examination and Treatment Planning.	F.W1., F.W2., F.W10., F.W11., F.W14., F.W16.
	S2 Topic: Principles of Occlusion, Occlusal Norms at Different Stages of Individual Development and Deviations - The Importance of Occlusion in Prosthetic Treatment, Articulatory States of the Mandible, Occlusal Determinants.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S3 Topic: The Use of the Articulator and Facebow in Diagnostic and Prosthetic Treatment - Types of Articulators and Facebows Used in Diagnostics and Prosthetic Treatment. Definitions, Construction, Functions.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S4 Topic: Clinical and Laboratory Procedures in the Fabrication of Complete Dentures - Definition, Indications, Procedure Stages, Possible Complications.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S5 Topic: Clinical and Laboratory Procedures in the Fabrication of Partial Removable Dentures - Definition, Indications, Contraindications, Types of Restorations, Procedure Stages, Possible Complications.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S6 Topic: Clinical and Laboratory Procedures in the Fabrication of Skeletal Dentures - Definition, Indications, and Contraindications. Structural Elements, Procedure Stages, Possible Complications.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S7 Topic: Clinical and Laboratory Procedures in the Fabrication of Fixed Prostheses - Post and Core Restorations. Definition, Indications, Contraindications, Types. Procedure Stages, Possible Complications.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S8 Topic: Clinical and Laboratory Procedures in the Fabrication of Fixed Prostheses - Crowns. Definition, Indications, Contraindications, Types. Procedure Stages, Abutment Tooth Preparation, Impressions, Temporary Restorations, Cementation, Possible Complications.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
	S9 Topic: Clinical and Laboratory Procedures in the Fabrication of Fixed Prostheses - Bridges. Definition, Indications, Contraindications, Types. Procedure Stages, Abutment Teeth Preparation, Impressions, Temporary Restorations, Cementation, Possible Complications.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16.

	S10 Topic: Disorders of the Masticatory System - Classification, Therapeutic Management. Definition, Classification, Diagnostic Principles, Indications for Therapy. Symptoms and Consequences of Masticatory System Disorders - Therapeutic Management. S11 Topic: Indications and Contraindications for Treatment Using Dental Implants. Definition, Characteristics, Types of Implants and Implant Abutments. Indications, Contraindications for Implant Treatment, Types of Restorations. Clinical Procedures, Possible Complications. S12 Topic: Indications and Contraindications for Aesthetic Dentistry Procedures. Therapeutic Goals and Functions of Modern Prosthetic Dentistry with Emphasis on Aesthetic Dentistry. Patient Examination and Treatment Planning. Interdisciplinary Patient Preparation. Types of Procedures and Restorations. S13 Topic: Therapeutic Management for Juvenile Patients. Goals of Prosthetic Treatment for Juvenile Patients. Causes and Classification of Stomatognathic System Disorders. Age Categories and Prosthetic Solutions for Different Age Groups. S14 Topic: Interdisciplinary Treatment. Treatment Planning and Preparation for Prosthetic Rehabilitation Considering Interdisciplinary Consultations. Indications, Clinical Cases. Sequence of Procedures, Protocols. Common Errors in Planning. S15 Topic: Photography and Digitalization in Prosthetic Treatment. Photography - Procedural Algorithms, Use of Digitalization in Planning and Prosthetic Rehabilitation.	F.W1., FW2., F.W10., F.W11., F.W14., F.W16. F.W1., FW2., F.W10., F.W11., F.W14., F.W16. F.W1., FW2., F.W10., F.W11., F.W14., F.W16. F.W1., FW2., F.W10., F.W11., F.W14., F.W16. F.W1., FW2., F.W10., F.W11., F.W14., F.W16. F.W1., FW2., F.W10., F.W11., F.W14., F.W16.
Practical class	C1-C33. Topic: Prosthetic Rehabilitation of patients using various types of prosthetic restorations depending on indications, condition of the prosthetic base, and patient's age Classes are held twice a week, with clinical sessions lasting 4 didactic hours, conducted over two semesters. The course focuses on the holistic prosthetic rehabilitation of patients using various types of prosthetic restorations, depending on indications, changes in the prosthetic field, overall health condition, and patient age. Optimal selection of prosthetic restorations based on the condition of the prosthetic field, using all types of prosthetic restorations. Implant treatment with OVD-type prostheses. Interdisciplinary treatment. Diagnostics of functional disorders of the masticatory system. Practical sessions with patients and phantoms. E34-E35 Topic: High-fidelity simulator sessions - learning to prepare abutments for a porcelain-fused-to-metal bridge for teeth 24-26. Comparison of prepared teeth with a reference model.	B.U1., B.U2., C.U11., C.U12., C.U13., D.U5., E.U11., F.U1., F.U2., F.U3., F.U6., F.U7., F.U9., F.U10., F.U11., F.U16., F.U22.

	Educational Content: E1: Entry Colloquium. E2-E4: Patient examination, analysis of the morphological and functional state of the masticatory system, and additional tests. Creating diagnostic models, facebow registration, model analysis in the articulator. Presentation and discussion of possible treatment plans, determining the optimal treatment plan considering indications and contraindications for specific prosthetic restorations. E5-E13: Examination of edentulous patients, analysis of the morphological and functional state of the masticatory system. Indications for additional tests. Clinical and laboratory procedures in the fabrication of complete dentures considering individual stages. Team collaboration and follow-up care. Stomatopathies - classification and treatment. E14-E20: Patient examination, analysis of the morphological and functional state of the masticatory system considering types of disorders, classification of deficiencies, changes in the prosthetic field, overall health condition, and patient age. Indications for additional tests. Pre-prosthetic patient preparation. Clinical and laboratory procedures in the fabrication of removable dentures considering individual stages, depending on the type and structure of the prosthetic restoration (partial dentures, immediate dentures, skeletal dentures, OVD dentures). Team collaboration and follow-up care. Repairs of removable restorations. E21-E30: Working with patients or phantoms. Examination of the patient, analysis of the morphological and functional state of the masticatory system considering types of disorders, classification of deficiencies, changes in the prosthetic field, overall health condition, and patient age. Indications for additional tests. Pre-prosthetic patient preparation. Clinical and laboratory procedures in the fabrication of fixed prostheses considering individual stages, depending on the type and structure of the prosthetic restoration. Team collaboration and follow-up care. E31-33: Diagnostics of functional disorders of the masticatory system. Patient examination, analysis of the morphological and functional state of the masticatory system, and additional tests. Creation of diagnostic models, facebow registration, model analysis in the articulator. Differential diagnostics. Presentation of diagnosis according to the current classification, discussion of possible treatment plans, considering occlusal therapy. Initial therapeutic procedures. E34-E35: High-fidelity simulator sessions - learning to prepare abutments for a porcelain-fused-to-metal bridge for teeth 24-26. Comparison of prepared teeth with a reference model.	B.U1., B.U2., C.U11., C.U12., C.U13., D.U5., E.U11., F.U1., F.U2., F.U3., F.U6., F.U7., F.U9., F.U10., F.U11., F.U16., F.U22. C.U12., C.U13., D.U5., F.U1., F.U2., F.U3., F.U6., F.U7., F.U9., F.U10., F.U11., F.U16., F.U22. B.U1., B.U2., C.U11., C.U12., C.U13., D.U5., E.U11., F.U1., F.U2., F.U3., F.U6., F.U7., F.U9., F.U10., F.U11., F.U16., F.U22. B.U1., B.U2., C.U11., C.U12., C.U13., D.U5., E.U11., F.U1., F.U2., F.U3., F.U6., F.U7., F.U9., F.U10., F.U11., F.U16., F.U22. B.U1., B.U2., C.U11., C.U12., C.U13., D.U5., E.U11., F.U1., F.U2., F.U3., F.U6., F.U7., F.U9., F.U10., F.U11., F.U16., F.U22. C.U11., C.U12., C.U13., F.U7., F.U22.

LITERATURE

Obligatory

1. Mierzwińska-Nastalska E., Kochanek Leśniewska A.: Fundamentals of prosthodontics.
2.I. Hayakawa: Principles and Practices of Complete Dentures. Quintessence Publ. Co Ltd 2001.
3. H.T. Shillingburg: Fundamentals of Fixed Prosthodontics. Quintessence Publ. Co Ltd 1997.
4. A.B. Carr, G.P Mc Ginvey, D.T. Brown: McCracken's Removable Partial Prosthodontics. St. Louis: Mosby 2004.
5. R.G. Craig, J. M Powers: Restorative Dental Materials. Mosby 2002

Supplementary

1. R.M. Basker, J.C. Davenport: Prosthetic Treatment of the Edentulous Patient. Blackwell Munksgaard 2002.
2. J.A. Hobkirk, R.M. Watson, L. Searson: Introducing Dental Implants. Churvhill Livingstone 2003.

VERIFYING THE EFFECT OF LEARNING		
Code of the course effect of learning	**Ways of verifying the effect of learning**	**Completion criterion**
F.W1, F.W2, F.W10, F.W11, F.W14, F.W16	Seminar evaluations are based on attendance, theoretical preparation, and active participation in the seminars.	Active participation in seminars
B.U1, B.U2, C.U11, C.U12, C.U13, D.U5, E.U11, F.U1, F.U2, F.U3, F.U6, F.U7, F.U9, F.U10, F.U11, F.U16, F.U22	Passing the practical classes is based on theoretical preparation for clinical sessions, active participation, and the assessment of the supervising teacher. The assessment includes: the correctness of performed clinical procedures, theoretical knowledge (oral and written quizzes covering various fields of prosthetic dentistry), theoretical preparation for clinical sessions – oral verification of readiness before each clinical procedure, attitude towards the patient, the assistant, and the clinical team. Each quiz from the different areas of prosthetics includes two scheduled attempts. If not passed, a third attempt (commission exam) is conducted by a board consisting of a faculty member from the Department of Prosthodontics and the supervising assistant. Failure to pass the commission exam is equivalent to failing the course. Attendance at all clinical sessions is mandatory – even justified absences must be made up. In the case of a justified absence or up to two unjustified absences, the student may arrange the date and form of making up the missed classes, unless the number of absences prevents this (decision made by the Head of the Unit). Failure to pass the practical classes will result in failing the subject. 1. Lack of preparation for three clinical sessions in a semester will lower the final grade for the academic year. 2. Absences must be made up – even in the case of medical leave, following an agreement with the supervising assistant. 3. Behavior inconsistent with class regulations – being late, not wearing an ID badge, using a mobile phone during classes, etc. – will be noted by the assistant as "lack of preparation." Accumulating three such notes will result in a lower final grade for the academic year, as outlined in point 1. 4. Preparing a presentation or a review article based on current literature and available publications allows you to earn a "+", which can: • compensate for the lack of preparation mentioned in point 3, or • provide an additional credit point on the "partial" quiz during the semester.	**Assessment criteria** **Written tests:** 2.0 (failed) <60% 3.0 (satisfactory) 60-65% 3.5 (rather good) 66-70% 4.0 (good) 71-75% 4.5 (more than good) 76-80% 5.0 (very good)> 80% **Oral tests:** 2.0 (failed) <60% 3.0 (satisfactory) 60-65% 3.5 (rather good) 66-70% 4.0 (good) 71-75% 4.5 (more than good) 76-80% 5.0 (very good)> 80%

	The passing grade for the fifth year consists of three components: 1. Theoretical knowledge - oral or written tests. 2. Practice (clinical work with patients, performing various types of prosthetic procedures). 3. Attitude towards patients, teachers, and technicians. The grade is an average of points 1, 2, and 3.	Assessment criteria points 1,2,3 Written tests: 2.0 (failed) <60% 3.0 (satisfactory) 60-65% 3.5 (rather good) 66-70% 4.0 (good) 71-75% 4.5 (more than good) 76-80% 5.0 (very good)> 80% Oral tests and points 1,2,3: 5.0- student interested in the subject, theoretical basics mastered to a very good degree, with good manual skills, well-mannered, correct approach to the patient, technician, teacher. He applies the acquired knowledge in practice, makes correct diagnoses, logically formulates conclusions regarding the planning and course of treatment. 4.5- meets the above criteria to an over good degree 4.0 - meets the above criteria to a good degree 3.5- meets the above criteria to a fairly good degree 3.0- meets the above criteria sufficiently 2.0- insufficient knowledge of the learning outcomes, does not meet the above criteria
	Diploma Examination – Written Test The (theoretical) written test consists of 100 single-choice questions. The minimum score required to pass the exam is 60%. According to the Test Examination Regulations of the Medical University of Warsaw (WUM): 1. Students must report for the exam at the time designated by the department, at least 20 minutes before the scheduled start of the exam. 2. Members of the Examining Board will verify the identity of students based on a photo ID and assign seats in the examination hall according to the list of students admitted to the exam. 3. Students taking the exam must leave all notes, notebooks, textbooks, bags, briefcases, backpacks, as well as mobile phones, tablets, or other electronic devices (including smartwatches) in the area designated by the Examining Board. All electronic devices must be turned off. 4. During the exam, it is strictly forbidden to possess electronic devices capable of copying or transmitting information (particularly mobile phones, smart glasses, and/or other devices with access to ChatGPT or similar tools). 5. Cheating during the exam (using assistance from others or devices, reference materials, engaging in conversation with other students, copying answers, or providing help to others, etc.) is strictly prohibited. 6. Students are not allowed to leave the examination room during the test without the permission of the Examining Board. Violation of the above rules may result in the termination of the student's exam and the assignment of a failing grade. The decision in such a case is made by the Head of the Examining Board, in consultation with its members.	
	Final Diploma Test Examination The theoretical test exam consists of 100 single-choice questions. A minimum score of 60% is required to pass the theoretical test exam.	Pass mark is 60%, and grades are determined after evaluating the test results.
	Diploma Examination – Final Grade	

	The final grade is calculated as the weighted average of: • practical classes in the 4th and 5th year (20%), • the practical exam (30%), • the written (test) exam (50%). Failure to pass any part of the diploma examination (practical or test exam) results in a failing grade and the necessity to take the exam during the second session. In the case of a failing grade on the practical exam, the second attempt is scheduled individually before the written test, so the student may still take the written exam. Failure on the second attempt of the practical exam results in a commission exam in the subject. A failing grade on the written test results in a second attempt in oral form. Failure to pass the second attempt is also equivalent to a commission exam in the subject. _____ An early diploma oral exam date is possible for students who meet all of the following criteria: have an average grade of 4.8 or higher from the 4th and 5th year and the practical exam (including a grade of 5.0 in 5th-year practical classes), and have participated in student research group activities with a published paper as a result. In such a case, the early oral exam replaces the written test and is considered the first attempt. The scope of the diploma exam includes the content of lectures, seminars, and practical classes conducted during the 3rd, 4th, and 5th year.	

ADDITIONAL INFORMATION

1. The person responsible for conducting the curriculum in the fifth year is Krzysztof Majchrzak DDS, PhD.
2. Student Scientific Association - Supervisors: Kamila Wróbel-Bednarz, MD, PhD - kwrobel@wum.edu.pl, Marcin Szerszeń, MD, PhD - mszerszen@wum.edu.pl.
3. Information about the diploma exam (see table, point 8).
4. All absences from exercises must be made up for after prior arrangement with the supervising assistant regarding the date and form (duty).
5. Students on an individual study path are required to coordinate with their year supervisor to set the dates for classes (according to the student schedule in the Prosthetics Department) before the start of the academic year.
6. A student has the opportunity to attempt the partial test twice.
7. Students should wear protective clothing (including separate footwear) and have an ID badge with information about their student status, year, name, and surname. Bags should be stored in lockers located in clinical rooms.
8. Non-compliance with safety and hygiene rules is not permitted
9. Please arrive punctually for classes. Being more than 15 minutes late is considered an absence
10. Using mobile phones during classes and in clinical rooms is not allowed.
11. Simulation exercises – the date will be announced at the beginning of the academic year.
12. During the diploma test exam, students should leave all accessories and devices (phones, watches, headphones, bags) in the designated area.

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