



Prosthetic dentistry

IMPRINT	
Academic Year	2024/2025
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. Binięckiego 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. Binięckiego 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	Krzysztof Majchrzak, DDS, PhD ,kmajchrzak@wum.edu.pl 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		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
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
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Code and number of the effect of learning in accordance with standards of learning	Effects in the field of:
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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;

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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 Prosthesis - 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 Prosthesis - 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 Prosthesis - 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.

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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>S15 Topic: Photography and Digitalization in Prosthetic Treatment. Photography - Procedural Algorithms, Use of Digitalization in Planning and Prosthetic Rehabilitation.</p>	<p>F.W1., FW2., F.W10., F.W11., F.W14., F.W16.</p> <p>F.W1., FW2., F.W10., F.W11., F.W14., F.W16.</p> <p>F.W1., FW2., F.W10., F.W11., F.W14., F.W16.</p> <p>F.W1., FW2., F.W10., F.W11., F.W14., F.W16.</p> <p>F.W1., FW2., F.W10., F.W11., F.W14., F.W16.</p> <p>F.W1., FW2., F.W10., F.W11., F.W14., F.W16.</p>
<p>Practical class</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>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.</p>

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	<p><u>Educational Content:</u></p> <p>E1: Entry Colloquium.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>C.U11., C.U12., C.U13., F.U7., F.U22.</p>
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<p>LITERATURE</p>
<p>Obligatory</p>
<ol style="list-style-type: none"> 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
<p>Supplementary</p>
<ol style="list-style-type: none"> 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	<p>Completion of exercises is based on theoretical preparation for clinical classes, active participation, and the instructor's assessment. The evaluation includes:</p> <p>The accuracy of performed therapeutic procedures.</p> <p>Theoretical knowledge (oral and written quizzes from various sections of prosthetic dentistry), theoretical preparation for clinical classes - oral verification of readiness for each clinical procedure.</p> <p>Attitude towards the patient, assistant, and the therapeutic team.</p> <p>Tests from different sections of prosthetic dentistry include two attempts. In case of failure, the third attempt (commission examination) is conducted by a committee comprising a professor of the Prosthetics Department and one of selected teachers. Failure of this attempt examination results in failing the subject.</p> <p>Attendance at all exercises is mandatory – even excused absences require makeup sessions.</p> <ol style="list-style-type: none"> 1. Lack of preparation for 3 exercises in a semester lowers the final grade for the academic year. 2. Absences must be made up, arranged with the assistant, despite a medical exemption. 3. Behavior not in accordance with exercise regulations: lateness, lack of identification badge, use of a mobile phone during exercises, etc., results in a recorded lack of preparation by the teacher, which, if it occurs 3 times, lowers the final grade for the academic year, as stated in point 1. 4. Preparing a presentation or a review article based on current literature and available resources can earn a "+," which: <ul style="list-style-type: none"> • Offsets the lack of preparation noted in point 3, or • Provides an additional point in the "partial" test during the semester. 	<p>Assessment criteria</p> <p>Written tests:</p> <p>2.0 (failed) <60%</p> <p>3.0 (satisfactory) 60-65%</p> <p>3.5 (rather good) 66-70%</p> <p>4.0 (good) 71-75%</p> <p>4.5 (more than good) 76-80%</p> <p>5.0 (very good) > 80%</p> <p>Oral tests:</p> <p>2.0 (failed) <60%</p> <p>3.0 (satisfactory) 60-65%</p> <p>3.5 (rather good) 66-70%</p> <p>4.0 (good) 71-75%</p> <p>4.5 (more than good) 76-80%</p> <p>5.0 (very good) > 80%</p>
	<p>The passing grade for the fifth year consists of three components:</p> <ol style="list-style-type: none"> 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. <p>The grade is an average of points 1, 2, and 3.</p>	<p>Assessment criteria points 1,2,3</p> <p>Written tests:</p> <p>2.0 (failed) <60%</p> <p>3.0 (satisfactory) 60-65%</p> <p>3.5 (rather good) 66-70%</p> <p>4.0 (good) 71-75%</p> <p>4.5 (more than good) 76-80%</p> <p>5.0 (very good) > 80%</p> <p>Oral tests and points 1,2,3:</p> <p>5.0- student interested in the subject, theoretical basics mastered to a very good</p>

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	<p>Final Diploma Practical Examination</p> <p>The assessment of clinical skills acquired during practical teaching in the Department of Prosthetic Dentistry in the third, fourth, and fifth years is done through the verification of learning outcomes in the categories of knowledge and skills related to communication and manual procedures, as well as procedural algorithms. This assessment involves direct observation of students demonstrating their skills during a traditional clinical exam, which includes performing a procedure on a patient and a theoretical component consisting of oral responses to two randomly selected questions. Alternatively, it can also be conducted through a standardized Objective Structured Clinical Examination (OSCE).</p>	<p>degree, with good manual skills, well-mannered, correct approach to the patient, technician, teacher.</p> <p>He applies the acquired knowledge in practice, makes correct diagnoses, logically formulates conclusions regarding the planning and course of treatment.</p> <p>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</p>
	<p>Final Diploma Test Examination</p> <p>The theoretical test exam consists of 100 single-choice questions. A minimum score of 60% is required to pass the theoretical test exam.</p>	<p>Pass mark is 60%, and grades are determined after evaluating the test results.</p>
	<p>Final Diploma Exam Final grade</p> <p>The final assessment is the average of grades from:</p> <ul style="list-style-type: none"> • Exercises in the fourth and fifth years (20%) • Practical exam (30%) • Theoretical test exam (50%) <p>Failure to pass any part of the diploma exam (clinical exam, written test) results in receiving a failing grade and the need to take the diploma exam a second time. If a student receives a failing grade on the practical exam, the second attempt is scheduled individually before the written test so that the student can take the written exam. A failing grade on the second attempt of the practical exam is equivalent to a commission exam for the subject.</p> <p>A failing grade on the written test results in a second attempt in oral form. Failure to pass the second attempt is equivalent to a commission exam for the subject.</p> <p>An earlier date for the oral diploma exam is available for students who have achieved an average grade of 4.8 in the IV and V years, including a grade of 5.0 for practical exercises in the V year, and who have participated in student research groups with a published paper. This earlier date is considered the first attempt, replacing the written test. The material covered in the exam includes topics from lectures, seminars, and exercises conducted in the III, IV, and V years.</p>	

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).

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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.

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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