



## Prosthetic dentistry

| 1. 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             | completion  |
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| Head of Educational Unit / Heads of Educational Units | Prof. Jolanta Kostrzewa-Janicka, DDS, PhD,<br>Leopold Wagner, DMD, PhD  |
| Course coordinator                                    | Prof. Jolanta Kostrzewa-Janicka, DDS, PhD,<br>St. Binińskiego str. 6, 02-097 Warsaw Phone: 22 116 64 70<br>Mail: katedraprotetyki@wum.edu.pl  |
| Person responsible for syllabus                       | <sup>1</sup> Department of Prosthetic dentistry (DPD)<br>Krzysztof Majchrzak, DDS, PhD<br><sup>2</sup> Department of Dental Propaedeutic and Prophylaxis<br>Krzysztof Wilk, DDS, PhD krzysztof.wilk@wum.edu.pl  |
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| <b>2. BASIC INFORMATION</b>                   |                             |                                 |      |
|---|-----------------------------|---------------------------------|------|
| <b>Year and semester of studies</b>           | III year, V and VI semester | <b>Number of ECTS credits</b>   | 8.00 |
| <b>FORMS OF CLASSES</b>                       | <b>Number of hours</b>      | <b>ECTS credits calculation</b> |      |
| <b>Contacting hours with academic teacher</b> |                             |                                 |      |
| Lecture (L)                                   | 10( 10 e-learning)          | 0,4                             |      |
| Seminar (S)                                   | 22( 12-elearning)           | 0,9                             |      |
| Classes (C)                                   |                             |                                 |      |
| e-learning (e-L)                              |                             |                                 |      |
| Practical classes (PC)                        | 120                         | 4,8                             |      |
| Work placement (WP)                           |                             |                                 |      |
| <b>Unassisted student's work</b>              |                             |                                 |      |
| Preparation for classes and completions       | 48                          | 1,9                             |      |

| <b>3. COURSE OBJECTIVES</b> |   |
|-----------------------------|---|
| O1                          | Acquiring knowledge about the use of basic and auxiliary materials as well as procedures of technical and laboratory fabrication of prosthetic restorations. (ZPIPS)  |
| O2                          | Acquiring the ability to choose materials used in dental prosthetics. (ZPIPS)   |
| O3                          | Acquiring the ability to design prosthetic restorations and reproduce anatomical occlusal conditions. (ZPIPS)   |
| O4                          | Acquiring the skill of designing prosthetic restorations and replicating anatomical occlusal conditions. (ZPIPS)  |
| O5                          | Acquiring knowledge of the morphology and physiology of the stomatognathic system in terms of interdisciplinary rehabilitation, taking into account occlusal principles and conditions in individual prosthetic restorations depending on the stage of the patient's individual development. Acquiring the ability to design prosthetic restorations and reproduce anatomical occlusal conditions |
| O6                          | Acquiring knowledge about planning and preparation for prosthetic treatment, including proper keeping management of medical records   |
| O7                          | Acquiring knowledge about the types of prosthetic restorations, indications and contraindications for their use as well as clinical and laboratory procedures in the implementation of these restorations.  |
| O8                          | Acquisition of clinical management skills in the prosthetic rehabilitation of edentulous patients.  |
| O9                          | Encouraging students to practice in the field of prosthetic rehabilitation of edentulous patients, taking into account the dentist behavior pattern, the way of building trust and approach to the patient and other team members participating in the treatment process.   |

#### 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 the field of: |
|--|--------------------------|
|  |                          |

##### Knowledge – Graduate\* knows and understands:

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| B.W8.  | mechanics of the masticatory apparatus;   |
| C.W23. | dental office equipment and instruments used in dental procedures;  |
| C.W24. | definition and classification of basic and auxiliary dental materials;  |
| C.W25. | composition, structure, method of bonding, properties, purpose and method of using dental materials;  |
| C.W28. | basic clinical procedures of tooth hard tissue reconstruction and endodontic treatment as well as methods and technical I and laboratory procedures for prosthodontic restorations; |
| F.W1.  | occlusal norms at various stages of individual development and deviations from the norms;   |
| F.W14. | methods of rehabilitation of the masticatory apparatus;   |

##### Skills– Graduate\* is able to:

|        |   |
|--------|---|
| B.U2.  | interpret the physical phenomena occurring in the masticatory system;   |
| C.U2.  | interpret the results of microbiological, serological and antibiogram tests;  |
| 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;                      |
| F.U1.  | conduct a medical interview with the patient or his family;   |
| F.U2.  | conduct a dental physical examination of the patient;   |
| F.U6.  | interpret the results of additional tests and consultations;  |
| F.U7.  | determine indications and contraindications for a specific dental procedure;  |
| F.U9.  | what to do in case of general and local complications during and after dental procedures;                                 |

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| F.U22. | perform prosthetic rehabilitation in simple cases within the scope of clinical and laboratory procedures; |
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\* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

| <b>5. CLASSES</b>                      |  |                            |
|--|--|----------------------------|
| <b>Form of class</b>                   | <b>Class contents</b>  | <b>Effects of Learning</b> |
| S1– seminar 1-10                       | Fixed prosthesis - crown and dental post: indications, contraindications, preparation of the crown and root part of teeth, methods of dental post modeling and laboratory fabrication procedures, prosthetic crowns - classification, indications and contraindications, methods of tooth preparation, impression, laboratory procedure depending on the type of crown, prosthetic bridges - classification, indications and contraindications, types of spans and their 3d relation to the ridge, rules of abutment preparation, impressions, laboratory procedures, pin models, modeling of crowns and spans.  | C.W28., F.W14.             |
| Practical Classes<br>E1 – classes 1-30 | Complete dentures – occlusal rims fabrication, establishing proper vertical dimension of occlusion on the phantom model, mounting models in the articulator, setting the teeth according to the Gysi method, modeling the denture plates   | C.U12., C.U13              |
| E2 – class 31                          | Fixed prosthetics. Performing training tasks in the field of fixed prosthetics and tooth preparation for full-ceramic crowns using Simodont simulators.  | C.U12., C.U13              |
| E3 – classes 32-55                     | Fixed prosthesis - preparation of a tooth for an all-ceramic crown, preparation of abutment a dental post, modeling of an acrylic dental post, laboratory procedure for dental post fabrication, fitting and insertion of a post, fabrication and cementation of a temporary crown, preparation of abutments 14-16 for the bridge (porcelain fused to metal), performing double-layer impressions, fabricating a pin model, modeling the crowns (classes on phantom models).   | C.U12., C.U13.             |
|  | <sup>1</sup> Department of Prosthetic dentistry  |                            |
| <b>Form of class</b>                   | <b>Class contents</b>  | <b>Effects of Learning</b> |
| W. 1.                                  | Lectures are held in semester VI once a week in the form of e-learning classes.<br>W1- Lecture 1- Discussion of issues related to planning prosthetic treatment with the use of fixed restorations<br>- an interview,<br>- patient examination,<br>- types of additional tests used,<br>- photographic documentation,<br>- development of a treatment plan.<br>Preparation of the oral cavity for prosthetic treatment with the use of fixed restorations with specific clinical cases<br>- in the field of dental surgery,<br>- in the field of conservative dentistry and endodontics,<br>- in the field of periodontics, - in the field of orthodontics. Classification of missing teeth according to Galasińska in the discussion of the | B.W8., F.W1., C.W28.       |

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|       | possibility of using selected types of fixed restorations and the type of material and technology of their implementation - presentation of selected clinical cases illustrating the types of restorations as well as the technology and material of their implementation.  |  |
| W. 2. | <p>W2- Lecture 2 - Inlays, onlays, root posts, posts in prosthetic dentistry.</p> <p>Post and core</p> <p>Division</p> <p>Materials</p> <p>Indications, contraindications</p> <p>Advantages, disadvantages</p> <p>Clinical procedure</p> <p>Clinical cases</p> <p>Root post</p> <p>Materials</p> <p>Indications, contraindications</p> <p>Advantages, disadvantages</p> <p>Clinical procedure</p> <p>Clinical cases</p> <p>Inlays, Onlays, Overlays</p> <p>Materials</p> <p>Indications, contraindications</p> <p>Advantages, disadvantages</p> <p>Clinical procedure</p>   | B.W8., C.W23., C.W24., C.W25., F.W14.        |
| W. 3. | <p>W3- Lecture 3</p> <p>Division of prosthetic crowns</p> <ul style="list-style-type: none"> <li>- overview of the division of crowns,</li> <li>- indications and contraindications for the use of crowns,</li> <li>- overview of the types of crowns (temporary, longterm, telescopic).</li> </ul> <p>Preparation of the abutment tooth for the crown</p> <ul style="list-style-type: none"> <li>- preparation principles,</li> <li>- types of the gingival margin,</li> <li>- gingival retraction.</li> </ul> <p>Crown impressions</p> <ul style="list-style-type: none"> <li>- materials used for impressions,</li> <li>- types of impression trays,</li> <li>- impression techniques.</li> </ul> <p>Color analysis</p> <ul style="list-style-type: none"> <li>- color selection rules,</li> <li>- types of shade guides,</li> <li>- factors influencing the shade of the restoration.</li> </ul> <p>Technologies in crown fabrication.</p> <ul style="list-style-type: none"> <li>- technology overview,</li> <li>- metallurgical materials science.</li> </ul> <p>Types of combined crowns</p> <ul style="list-style-type: none"> <li>- acrylic veneered crowns,</li> <li>- composite veneered crowns,</li> <li>- porcelain veneered crowns.</li> </ul> <p>Galvanoforming</p> <ul style="list-style-type: none"> <li>- technology overview,</li> <li>- possible applications,</li> <li>- advantages and disadvantages of this technology.</li> </ul> | B.W8., C.W23., C.W24., C.W25., F.W14.        |
| W. 4. | <p>W4 – Lecture 4</p> <p>History of the use of ceramic materials</p> <p>Characteristics of ceramic materials</p> <ul style="list-style-type: none"> <li>- mechanical properties of ceramics,</li> <li>- structure of ceramic materials,</li> <li>- division of ceramic materials.</li> </ul> <p>Classification of ceramic systems</p> <p>Indications and contraindications for the use of ceramic restorations</p> <p>Types of ceramic restorations</p> <p>Overview of the technology of fabricating ceramic restorations</p>   | B.W8., C.W23., C.W24., C.W25., F.W1., F.W14. |

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|       | <ul style="list-style-type: none"> <li>- conventional ceramics,</li> <li>- cast ceramics,</li> <li>- pressed ceramics,</li> <li>- infiltration ceramics,</li> <li>- ceramics made in the CAD / CAM system.</li> <li>- milling,</li> <li>- overview of selected CAD / CAM systems</li> </ul>  |   |
| W. 5. | <p>CAD/CAM Systems</p> <ul style="list-style-type: none"> <li>-Clinical and Laboratory Procedure Procedures</li> <li>-Scanning</li> <li>-Milling</li> <li>-Discussion of Selected CAD/CAM Systems</li> </ul> <p>Ceramic Veneers</p> <ul style="list-style-type: none"> <li>-Indications and Contraindications</li> <li>-Clinical Procedures</li> <li>-Types of Techniques and Materials for Making Veneers</li> <li>-Selected Clinical Cases</li> </ul> <p>Ceramic Inlays</p> <ul style="list-style-type: none"> <li>-Indications and Contraindications</li> <li>-Clinical Procedures</li> <li>-Types of Techniques and Materials for Making Inlays</li> </ul> <p>Ceramic Crowns</p> <ul style="list-style-type: none"> <li>-Indications and Contraindications</li> <li>-Clinical Procedures</li> <li>-Types of Techniques and Materials for Making Crowns</li> </ul> <p>Ceramic Bridges</p> <ul style="list-style-type: none"> <li>-Indications and Contraindications</li> <li>-Clinical Procedures</li> <li>-Types of Techniques and Materials for Making Bridges</li> </ul> <p>Types and Characteristics of Cements</p> <p>Adhesive Cementation</p> <ul style="list-style-type: none"> <li>-Types of Adhesive Cements</li> <li>-Preparation of Ceramic Surfaces for Adhesive Cementation</li> <li>-Preparation of Tooth Surfaces for Adhesive Cementation</li> <li>-Silanization</li> <li>-Selected Cementation Schemes for Different Types of Ceramics</li> <li>-Advantages and Disadvantages of Adhesive Cementation</li> </ul> | B.W8., C.W23., C.W24., C.W25.,<br>F.W1., F.W14. |
| W. 6. | <p>W6- Lecture 6</p> <p>Definition of dental bridges</p> <p>Classification of bridges according to:</p> <ul style="list-style-type: none"> <li>- their location,</li> <li>- to the method of fixing,</li> <li>- to the technology of fabrication,</li> <li>- the type of material.</li> </ul> <p>Indications for the use of bridges</p> <p>Contraindications to the use of bridges</p> <p>Basics of bridge design</p> <p>Clinical procedure in bridges management:</p> <ul style="list-style-type: none"> <li>- impressions,</li> <li>- color selection,</li> <li>- jaw relations recording,</li> <li>- cementing of bridges.</li> </ul> <p>Special bridges</p> <p>Methods of making ceramic bridges</p>   | B.W8., C.W23., C.W24., C.W25.,<br>F.W1., F.W14. |

**Appendix No 4C for the procedure of development and periodical review of syllabuses.  
(in accord with appendix to the Regulation of MUW's Rector dated 18.04.2024 r.)**

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| W. 7. | <p>W7 – Lecture 7</p> <p>The concept of osseointegration</p> <p>Types of implant loads</p> <p>Construction of implants</p> <p>Indications and contraindications for the use of implants</p> <p>Overview of surgical procedures for implant bone placement</p> <ul style="list-style-type: none"> <li>- traditional method,</li> <li>- immediate implantation method.</li> </ul> <p>Exposing the implants</p> <p>Stages of prosthetic treatment</p> <ul style="list-style-type: none"> <li>- types of impression transfers,</li> <li>- types of impressions and the impression trays used,</li> <li>- implant analogs,</li> <li>- types of connectors,</li> <li>- types of prosthetic restorations.</li> </ul> <p>Types of fixed restorations supported on implants</p> <p>Clinical cases of permanent implant-supported restorations.</p> <p>Lectures on the e-learning platform available for 1 week from the date of the lecture announced by the Dean's Office</p> | B.W8., C.W23., C.W24., C.W25., F.W1., F.W14. |
|       | <p>Seminars are held in semester V, once a week, classes last 9 weeks.</p> <p>The subject of the seminars is prosthetic rehabilitation of patients with the use of complete dentures.</p>   |  |
| S.1   | <p>Aims and tasks of prosthetic dentistry.</p> <p>Methods of edentulous patients treatment. Clinical and laboratory stages of fabricating complete dentures. Subject and physical examination of the patient - analysis of the prosthetic foundation.</p>   | C.W23., C.W24., C.W25.                       |
| S.2   | <p>Factors influencing the maintenance of complete dentures.</p> <p>Materials and devices used in the treatment of an edentulous patient.</p> <p>Anatomical impressions, preliminary models - clinical and laboratory management.</p> <p>Custom trays – laboratory management</p>   | F.W1., F.U1., F.U2., C.U11.                  |
| S.3   | <p>Custom trays adjustment- Herbst Tests. Functional impressions - clinical management</p>  | F.W14, C.W25, C.U12                          |
| S.4   | <p>Preparation of master casts. Occusal wax rims - laboratory procedure.</p> <p>Articulation of the lower jaw. The concept of a central occlusion.</p> <p>Articulators - construction, application</p>  | F.W14., C.W25., F.U22., C.U12.               |
| S.5   | <p>Methods and techniques for determining the central occlusion - clinical procedures</p>   | F.W1., C.W24., C.W25.                        |
| S.6   | <p>Rules for the selection of artificial teeth. Mounting cast in the articulator. Types of artificial teeth. Methods and principles of setting artificial teeth - laboratory procedures</p>   | F.W14., C.U13., F.U22.                       |
| S.7   | <p>Try- in denture control. Relief and sealing</p>  | F.W14. F.U22.                                |
| S.8   | <p>Flasking, replacing wax with acrylic, processing, finishing ready-made prostheses - laboratory procedures. Delivery of ready-made prostheses - clinical procedure</p>  | F.W1., F.W14., F.U22.                        |

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| S.9 | Adaptation of the patient to dentures. Denture corrections. Repairs and relinings  | F.W1., F.W14., F.U22.  |
|     | <p>In the 5th semester, practical exercises take place in two-week training blocks, five times a week. The subject of the exercises in the 5th semester is the fundamentals of dental prosthetics and the planning of prosthetic treatment based on patient interviews, clinical examinations, and additional tests, including the analysis of diagnostic models.</p> <p>Educational content includes:</p>   |  |
| E.1 | <p>Stomatognathic system:</p> <ol style="list-style-type: none"> <li>1. The stomatognathic system <ul style="list-style-type: none"> <li>- definition,</li> <li>- components,</li> <li>- temporomandibular joint.</li> </ul> </li> <li>2. Changes in US in the course of tooth loss</li> <li>3. Classification of missing teeth according to Galisińska and discussion of clinical cases <ul style="list-style-type: none"> <li>- 1st class,</li> <li>- 2nd class,</li> <li>- 3rd class,</li> <li>- IV class,</li> <li>- 5th class.</li> </ul> </li> <li>4. Examination of the patient: <ul style="list-style-type: none"> <li>- interview,</li> <li>- clinical trial,</li> <li>- additional tests,</li> <li>- diagnostic models,</li> <li>- photographic documentation.</li> </ul> </li> <li>5. Preparation for prosthetic treatment</li> </ol> | F.W1., B.U2., C.U2., F.U9. F.U22.  |
| E.2 | <p>Aims of prosthetic dentistry:</p> <ol style="list-style-type: none"> <li>1. Consequences of tooth loss.</li> <li>2. Aims of prosthetic dentistry.</li> <li>3. Functions of prosthetic dentistry. <ul style="list-style-type: none"> <li>a / treatment and rehabilitation</li> <li>b / preventive</li> <li>c / aesthetic.</li> </ul> </li> <li>4. Prosthetic treatment of patients in developmental age.</li> <li>5. Treatment of patients after surgery.</li> <li>6. Principles of work in prosthetic dentistry office.</li> <li>7. Principles of cooperation with a dental technician.</li> </ol>  | F.W1., B.U2., C.U2., C.U11., C.U13., F.U1., F.U2., F.U6., F.U7. F.U9. F.U22., C.U12. |
| E.3 | <p>Fixed prostheses:</p> <ol style="list-style-type: none"> <li>1. Definition of fixed prosthetic restorations.</li> <li>2. Indications and contraindications for fixed dentures.</li> <li>3. Division of fixed restorations <ul style="list-style-type: none"> <li>a / single-unit, multi-unit</li> <li>b / temporary, long-term</li> <li>c / uniform, combined.</li> </ul> </li> <li>4. Types of pillars for fixed restorations.</li> <li>5. Materials for fixed dentures.</li> <li>6. General principles of making fixed dentures</li> <li>7. Methods and materials used when taking impressions for fixed prosthetic restorations</li> <li>8. Establishing a central relation when performing fixed restorations.</li> </ol>   | F.W1., F.W14., F.W18. B.U2., C.U2., C.U11., C.U13., F.U2., F.U6., F.U7. F.U9. F.U22. |
| E.4 | <p>Facebows, articulators, and intraoral scanners:</p> <ol style="list-style-type: none"> <li>1. Arbitrary and kinematic facebows</li> </ol>   | F.W14., C.U2., C.U11., C.U12., C.U13., F.U2., F.U6., F.U7., F.U9., F.U22.            |



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|     | 2. Reference planes - course and determination<br>3. Principles of transferring data to the articulator and model mounting<br>4. Types of articulators and their mechanics  |  |
| E.5 | Clinical use of facebows:<br>1. Principles for the use of facebow<br>2. Transfer of the determined values to the articulator  | F.U2., F.U6.   |
| E.6 | Removable dentures:<br>1. Removable dentures - definition<br>2. Division of removable dentures due to the method of transmission of chewing forces<br>- complete dentures,<br>- partial dentures.<br>3. Division of partial dentures<br>4. Indications for the use of partial dentures<br>5. Frame dentures<br>- indications,<br>- structure and elements of skeletal dentures,<br>- clinical cases of using skeletal dentures.<br>6. Partial dentures<br>- indications,<br>- clinical cases of the use of partial dentures.<br>7. Complete dentures<br>8. Overdenture dentures supported by teeth<br>9. Prophylactic procedures in the use of removable dentures   | F.W14., C.U2., C.U11., C.U12., C.U13., F.U2., F.U6., F.U7., F.U9., F.U22.                      |
| E.7 | Planning prosthetic treatment:<br>1. Overview of the prosthetic treatment planning process including<br>a. Personal and physical examination of the patient<br>b. Radiological examinations<br>c. Mycological and bacteriological research<br>d. Analyzes of diagnostic models<br>e. Consultation of doctors of other dental and general medical specialties<br>f. Expectations and economic considerations of the patient<br>2. Discussion of the components of the prosthetic treatment plan<br>a. Initial Treatment Plan<br>b. Pre-prosthetic preparation<br>c. Choice of prosthesis design<br>d. Work schedule<br>e. Cost estimate<br>3. Presentation of the Galasińska-Landsberger classification<br>4. Presentation of sample prosthetic structures with attached clinical cases<br>a. 1st class<br>i. Conservative restorations<br>ii. Prosthetic reconstructions (veneers, crowns, inlays, dental posts)<br>b. 2nd class<br>i. Bridges<br>ii. Restorations on implants<br>iii. Removable restorations<br>c. 3rd class<br>i. Removable restorations<br>ii. Restorations on implants<br>d. IV class<br>i. Removable restorations<br>ii. Fixed + removable restorations<br>iii. Restorations on implants<br>e. 5th class<br>i. Complete dentures<br>ii. Complete overdentures supported on implants<br>iii. Fixed restorations on implants | F.W18., F.W8., B.U2., C.U2., C.U11., C.U12., C.U13., F.U1., F.U2., F.U6., F.U7., F.U9., F.U22. |

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|------|--|--|
| E.8  | <p>Preparation for prosthetic treatment</p> <p>Overview of treatments in various dental specialties used in preparation for prosthetic treatment with attached clinical cases</p> <ol style="list-style-type: none"> <li>Conservative dentistry and endodontics <ol style="list-style-type: none"> <li>treatment of caries</li> <li>treatment of cavities of non-carious origin</li> <li>treatment of pulp and periapical tissue diseases</li> <li>endodontic treatment for prosthetic indications</li> <li>replacement of fillings</li> <li>reconstruction of the chewing surfaces</li> <li>conservative reconstruction with the use of paraplegic pins</li> </ol> </li> <li>Dental surgery <ol style="list-style-type: none"> <li>extractions</li> <li>resections</li> <li>hemisections</li> <li>extraction of impacted teeth</li> <li>elimination of sharp bone margins</li> <li>bone augmentation</li> <li>implantological procedures</li> <li>deepening of the oral vestibule</li> <li>removal of fibrous folds</li> <li>plastic surgery of the frenulum</li> </ol> </li> <li>Periodontology <ol style="list-style-type: none"> <li>removal of tartar and plaque</li> <li>open curettage</li> <li>gingivectomy</li> <li>covering gingival recessions</li> <li>guided bone regeneration</li> <li>treatment of diseases of the mucosa</li> <li>treatment of bacterial and mycological infections</li> </ol> </li> <li>Orthodontics <ol style="list-style-type: none"> <li>treatment of malocclusion</li> <li>bringing the impacted teeth into the arch</li> <li>moving and changing the position of the tooth axis</li> </ol> </li> <li>Initial prosthetic preparation <ol style="list-style-type: none"> <li>alignment of the occlusal plane</li> <li>corrective grinding</li> <li>therapy with the use of temporary overlay prostheses and relaxation splints</li> <li>tooth preparation in order to create support places for a skeletal denture</li> <li>removal of damaged and incorrectly made prosthetic restorations</li> </ol> </li> </ol> | C.U11., F.U2., F.U6., F.U7., F.U9., F.U22.                         |
| E.9  | <p>Photography and CAD / CAM technologies in dental prosthetics:</p> <ol style="list-style-type: none"> <li>Principles of photographic documentation in prosthetic dentistry</li> <li>Hardware</li> <li>Division of photos taken to document the course of treatment</li> <li>Rules for taking extraoral photos</li> <li>Principles of taking intraoral photos</li> <li>Pictures of diagnostic models</li> <li>CAD-CAM technologies in prosthetic dentistry</li> </ol>   | F.W14., C.U2., C.U11., C.U12., C.U13., F.U6., F.U7., F.U9., F.U22. |
| E.10 | <p>The use of cameras in clinical practice:</p> <ol style="list-style-type: none"> <li>Extraoral photos</li> <li>Intraoral photos</li> <li>Pictures of diagnostic models</li> </ol>  | C.W23., F.U2.  |
|      | <p>Practical classes in the sixth semester take place once a week for 11 weeks. The subject of the exercises in the sixth semester is the prosthetic rehabilitation of edentulous patients.</p>  |  |
| E.1  | <p>Initial test. Methods of edentulous patients treatment. Clinical and laboratory stages of fabrication of complete dentures.</p>   | F.W1., F.U1., F.U2., F.U7., F.U22.                                 |

|      |   |  |
|------|---|--|
| E.2  | <p>Subject and objective examination of the patient - analysis of the prosthetic foundation.</p> <ul style="list-style-type: none"> <li>• Examination of the patient (subjective - interview, physical examination)</li> <li>• Edentulous patient: features and general characteristics</li> <li>• Prosthetic foundation- definition</li> <li>• Analysis of the prosthetic foundation.</li> <li>• Masticatory system.</li> </ul> <p>Classification of the prosthetic foundation according to Supple</p> <ul style="list-style-type: none"> <li>• The concept of a neutral space</li> <li>• Factors influencing the maintenance and efficiency of complete dentures</li> <li>• Stabilization of dentures</li> <li>• Denture retention</li> </ul> | F.W14., F.U22., C.U12.   |
| E.3  | Standard trays. Anatomical impressions, diagnostic models - clinical and laboratory execution   | F.W14., F.U22., C.U12.   |
| E.4  | Individual trays, customization of Individual trays - Herbst tests. Selection of the impression material. Functional impressions - clinical management  | F.W14., F.U22.   |
| E.5  | Master casts, occlusal wax rims, methods of establishing central occlusion Principles of proper artificial teeth shade selection  | C.U13., F.U22.   |
| E.6  | Face bow and articulator  | F.W14., F.U22.   |
| E.7  | Principles of setting artificial teeth  | C.U13., F.W14., F.U22.   |
| E.8  | Control of trial dentures, sealing and relief. Procedure in case of exceeded or to low vertical dimension of occlusion.   | F.U7., F.U22.  |
| E.9  | Dentures delivery, indications  | C.U5., F.U6., F.U9., F.U22.  |
| E.10 | Check-ups, follow-up care and stomatopathies.   | B.W8., C.W23., C.W24., C.W25., F.W14., F.W18., B.U1., CU2., C.U11., C.U12., C.U13. |
| E.11 | Completion of exercises   | F.U1., F.U2., F.U7., FU9., F.U22., C.U2., C.U22.                                   |

## 6. 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. McGinvey, 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. Churhill Livingstone 2003.

| <b>7. VERIFYING THE EFFECT OF LEARNING</b>  |   |   |
|---|---|---|
| <b>Code of the course effect of learning</b>  | <b>Ways of verifying the effect of learning</b>   | <b>Completion criterion</b>   |
|   | <sup>2</sup> <b>Department of Dental Propaedeutic and Prophylaxis</b>   |   |
| C.W28., F.W14   | Written test<br>(5 descriptive questions)   | Each question is assessed on a scale of 1 to 3 points. To pass, student must obtain at least 9 points |
| C.U12., C.U13.  | Observation and assessment of practical skills.   | Completion of each given task   |
|   | <sup>1</sup> <b>Department of Prosthetic dentistry</b>  |   |
| B.W8., C.W23.,<br>C.W24., C.W25.,<br>C.W28., F.W1.,<br>F.W14.   | Completion of the seminars is based on the active participation and evaluation of the tutor.<br>The assessment concerns:<br>verification of theoretical knowledge. Absence, even when excused, results in an essay on a given topic   | <b>Achieving the expected learning outcomes of at least 60%</b>                                       |
| B.W8., C.W23.,<br>C.W24., C.W25.,<br>C.W28., F.W1.,<br>F.W14., B.U2., C.U2.,<br>C.U11., F.U1., F.U2.,<br>F.U6., F.U7., F.U9.,<br>F.U22., C.U12., C.U13. | Demonstration classes credit is given on the base of active participation and theoretical knowledge verification – test. To start exercisers in VI semester, it is required to pass an entrance test concerning clinical and laboratory steps in complete denture prosthodontics Required range of knowledge from seminars, lectures and classes.<br>Attendance at all classes is obligatory.   | <b>Achieving the expected learning outcomes of at least 60%</b>                                       |
|   | <b>Evaluation criteria</b>  |   |
| 2.0 (failed)  | Insufficient knowledge of the learning outcomes ( $\leq 60\%$ )   |   |
| 3.0 (satisfactory)  | Meets the above criteria sufficiently (61-65%)  |   |
| 3.5 (rather good)   | Meets the above criteria to a fairly good degree (66-70%)   |   |
| 4.0 (good)  | Meets the above criteria to a good degree (71-75%)  |   |
| 4.5 (more than good)  | Meets the above criteria to an over good degree (76-80%)  |   |
| 5.0 (very good)   | Meets the above criteria to a very good degree. (>80%) 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 the correct diagnosis, logically formulates conclusions about the planning and course of treatment.<br><br>He applies the acquired knowledge in practice, makes correct diagnoses, logically formulates conclusions regarding the planning and course of treatment. |   |

| <b>8. ADDITIONAL INFORMATION</b>                                      |
|---|
| <sup>2</sup> <b>Department of Dental Propaedeutic and Prophylaxis</b> |

Completion of the course: credit without grade

The didactic tutor of the subject in the 5th and 6th semester is Krzysztof Wilk, DDS, PhD

A student may be absent once, provided that he / she completes all the planned tasks in the next week of classes or makes up for classes with another group, he may also report to the teacher during his duty hours.

In a justified situation, a student may be late for classes up to 15 minutes.

It is forbidden to use cell phones or other electronic devices during the classes, the student may bring to the classroom only things permitted by the teacher. A student in the training room must wear an apron, disposable gloves, a surgical mask, pinned hair or a cap, and changed footwear.

Department's website: <https://propedeutyka-stomatologiczna.wum.edu.pl>

#### **<sup>1</sup>Department of Prosthetic dentistry**

Lectures are held in semester VI once a week in the form of e-learning classes. Lectures on the e-learning platform available for 1 week from the date of the lecture announced by the Dean's Office. We pay special attention to the obligation to participate in lectures in the form of e-learning because they present the latest knowledge in the field of permanent restorations, which is required in the later years of study.

Seminars are held in semester V once a week, classes last 9 weeks. The subject of the seminars is the prosthetic rehabilitation of patients with the use of complete dentures.

The seminars cover the content related to the clinical and laboratory work of the above-mentioned prosthetic restorations. Attendance at all seminars is obligatory. In the case of a justified absence, it is necessary to write an essay on the topic of the seminar.

Classes in semester V are held in 2-week training tutorials 5 times a week.

The subject of exercises in semester V are the basics of prosthetic dentistry and prosthetic treatment planning based on an interview, clinical examination of the patient and additional tests including the analysis of diagnostic models.

Practical Classes in Semester VI

The practical classes in semester VI are held once a week for 11 weeks.

The subject of the classes in semester VI is prosthetic rehabilitation of edentulous patients.

During the first class, a preliminary test (colloquium) is required. Passing this test is a condition for being allowed to participate in further clinical work.

In order to begin the classes in semester VI, students must pass an entry colloquium covering the clinical and laboratory procedures of complete denture fabrication.

Students are allowed two attempts to pass the preliminary colloquium. If both attempts are unsuccessful, one commission-based (retake) colloquium will be conducted.

Mobile phones are strictly prohibited during classes and in the clinical areas.

Attendance is mandatory for all practical classes. Even justified absences must be made up.

In the case of excused absences or up to two unexcused absences, the student may agree on the date and form of making up the missed classes — unless the total number of absences prevents it (decision of the Head of the Unit).

Failure to complete the practical classes will result in failure to pass the subject.

Lack of preparation for three classes in a semester lowers the final grade for the academic year.

Any missed class must be made up, in agreement with the assistant, even with a medical certificate.

Behavior that violates the rules of the classes — such as arriving late, not wearing an ID badge, using a mobile phone during class, etc. — will be noted by the assistant as lack of preparation.

Three such notes result in a lower final grade for the academic year.

**Students scientific trustee: Kamila Wróbel DDS, PhD**

**3rd year tutor: Krzysztof Majchrzak, DDS, PhD [kmajchrzak@wum.edu.pl](mailto:kmajchrzak@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