



Prosthetic Dentistry

| 1. IMPRINT | |
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| Academic Year | 2023/2024 |
| Department | Faculty of Medicine and Dentistry |
| Field of study | Medicine and Dentistry |
| Main scientific discipline | Medical science |
| Study Profile | General academic |
| Level of studies | Uniform MSc |
| Form of studies | Extramural study (paid) |
| Type of module / course | Obligatory |
| Form of verification of learning outcomes) | Completion |
| Educational Unit / Educational Units | Department of Dental Propaedeutics and Prophylaxis 59 Nowogrodzka Str., 02-006 Warsaw, phone: 22 625 66 02 e-mail: zpips@wum.edu.pl |
| Head of Educational Unit / Heads of Educational Units | Leopold Wagner DDS, PhD |

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| Course coordinator | Prof. Jolanta Kostrzewa DDS, PhD, jolanta.kostrzewa-janicka@wum.edu.pl |
| Person responsible for syllabus | Renata Lenkiewicz DDS, rlenkiewicz@wum.edu.pl |
| Teachers | Renata Lenkiewicz DDS, rlenkiewicz@wum.edu.pl |

2. BASIC INFORMATION

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|---|-----------------------|-------------------------------|---------------------------------|
| Year and semester of studies | II year, III semester | Number of ECTS credits | 4,0 |
| FORMS OF CLASSES | | Number of hours | ECTS credits calculation |
| Contacting hours with academic teacher | | | |
| Lecture (L) | | - | - |
| Seminar (S) | | 40 | 1,4 |
| Discussions (D) | | - | - |
| e-learning (e-L) | | - | - |
| Practical classes (PC) | | - | - |
| Work placement (WP) | | - | - |
| Unassisted student's work | | | |
| Preparation for classes and completions | | 80 | 2,6 |

3. COURSE OBJECTIVES

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| O1 | Acquiring knowledge in the field of functional anatomy and biomechanics of the stomatognathic system; anatomical details of teeth regarding their function and alignment; criteria of optimal functional occlusion; mechanisms of compensation, adaptation and feed-back control within the system. |
| O2 | Acquiring knowledge in the field of etiology and mechanisms of selected temporomandibular disorders and their impact on general health; general considerations of occlusal therapy and principles of masticatory system rehabilitation; occlusal disorders in malocclusions and general principles of malocclusions' prophylaxis and rehabilitation. |
| O3 | Acquiring ability to define and explain complex mechanisms leading to occlusal disturbances, general symptoms, and consequences of these disorders. |
| O4 | Acquiring ability of 3D modelling of permanent teeth crowns in plastic material, concentrating especially on occlusal surfaces' details. |

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

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| Code and number of effect of learning in accordance with standards of learning | Effects in the field of morphological, preclinical and clinical science as well as the scientific foundations of medicine. |
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Knowledge – Graduate* knows and understands:

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| A.W1 | human body structures: cells, tissues, organs and systems with particular emphasis on the dental system |
| B.W8 | mechanics of the masticatory apparatus |
| C.W12 | concepts of homoeostasis, adaptation, immunity, predisposition, vulnerability, compensation mechanisms, feedback and “vicious circle” mechanism |
| F.W1 | occlusal norms at different stages of development and deviations from the norms |
| F.W12 | causes of complications in diseases of the stomatognathic system and principles of management in case of such complications |
| F.W14 | methods of masticatory apparatus rehabilitation |

Skills– Graduate* is able to:

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|-------|--|
| C.U4 | predict and explain complex pathomechanisms of disorders leading to diseases |
| C.U5 | analyse the clinical course of diseases in pathological processes |
| C.U12 | replicate anatomical occlusal relations and perform occlusal analysis |

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

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

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|-------------------------------------|------------------------------------|
| Number of effect of learning | Effects of learning in time |
|-------------------------------------|------------------------------------|

Knowledge – Graduate knows and understands:

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|----|---|
| W1 | - |
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Skills– Graduate is able to:

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| U1 | - |
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Social Competencies – Graduate is ready for:

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| K1 | - |
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| 6. CLASSES | | |
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| Form of class | Class contents | Effects of Learning |
| S1- seminar 1-3 | Components and functions of the stomatognathic system; anatomical and functional relationships within the system; static and dynamic occlusion. | A.W1, B.W8 |
| S2 – seminar 4-6 | Mandibular articulation: compensative curves, rest position of mandible, vertical dimension of occlusion and methods of its determination, centric relation occlusion vs habitual occlusion, methods of determination of centric relation position of mandible, mandibular guidance; mutually protected occlusion; TMJs biomechanics | B.W8, F.W1 |
| S3 – seminar 7-9 | Norms of occlusion: ideal occlusion vs. optimal one, occlusal contacts and occlusal surfaces of teeth, occlusal forces and their distribution within the stomatognathic system, concepts of occlusion in natural dentition and complete dentures, consequences of uniaxial teeth loads, simplified occlusion concept. | F.W1 |
| S4 – seminar 10-12 | Reflex mechanisms within the stomatognathic system: compensation and adaptation mechanisms associated with changes of occlusion; premature contacts; necessary conditions for maintaining occlusal stability and consequences of unstable occlusion; compensatory mechanisms in reduced dentition; modes of adaptation to occlusal disturbances. | C.U5 |
| S5 – seminar 13-15 | Prevention of TMDs: parafunctional activity of masticatory system, etiological factors and symptoms of dysfunctions, compensated and not compensated dysfunctions, functional analysis of the masticatory system, principles and methods of occlusal rehabilitation, prophylaxis of TMDs in dentistry | F.W12,F.W14, C.U4, C.U5 |
| S6 – seminar 16-18 | Occlusion in malocclusions: general mechanisms of development of occlusion during developmental period and factors influencing tooth position in the post-developmental period, the non-conflict zone concept, simplified classification of malocclusions. Compendium of etiology, prevention and general concepts of malocclusions rehabilitation. | F.W1, C.U4 |
| S7 – seminar 19-21 | Articulators: types of face-bows and articulators, procedures of face-bow records and programming of semi-adjustable articulators. | F.W14 |
| S8 – seminar 25-40 | Functional aspects of teeth morphology - 3D modeling of selected representatives of incisors, canines, premolars and molars in plastic material, regarding especially functional occlusal aspects of teeth surfaces. | C.U12 |

| 7. LITERATURE |
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| Obligatory |
| <ol style="list-style-type: none"> 1. Wheeler's Dental Anatomy, Physiology and Occlusion. Nelson S.J., Ash M.M. Saunders/Elsevier 2020 2. Management of Temporomandibular Disorders and Occlusion. Okeson J.P. Mosby/Elsevier 2019 |
| Supplementary |
| <ol style="list-style-type: none"> 1. Sturdevant's Art and science of operative dentistry. Ritter A.V., Boushell L.W., Walter R. Elsevier Books 2018 2. Applied occlusion. Wassel R., Naru A., Steele J., Nohl F. 2015 Quintessence Publishing |

| 8. VERIFYING THE EFFECT OF LEARNING |
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| Code of the course effect of learning | Ways of verifying the effect of learning | Completion criterion |
|--|--|---|
| A.W1, B.W8, F.W1, F.W12, F.W14, C.U4, C.U5 | MCQ test – 50 questions | Achieving the expected learning outcomes - at least 55% |
| C.U12 | Observation and assessment of practical skills | Completion of each task |

9. ADDITIONAL INFORMATION (*information essential for the course instructor that are not included in the other part of the course syllabus
e.g. if the course is related to scientific research, detailed description of, information about the Science Club*)

Completion of the course: no grade. Completion form: MCQ test, one retake - written test, open questions.
The teaching supervisor of the subject: Renata Lenkiewicz DDS, rlenkiewicz@wum.edu.pl
Presence on all seminars is obligatory to be admitted to the final test. The absence is excused providing medical certificate in 7 days – a form of completing the class is determined by the teacher. Being late more than 15 min. is treated as an absence.
Seminars are stationary classes with sanitary regime.
Students are required to change their shoes and leave the outer garments in the cloakroom. Students in the classroom must wear a medical (surgical) apron with a stand-up collar, knee-length 100 cm, tied at the back with strings.
It's forbidden to use cell phones and other electronic devices during classes.
Department website: <https://propedeutyka-stomatologiczna.wum.edu.pl>

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ATTENTION

The final 10 minutes of the last class in the block/semester/year should be allocated to students'
Survey of Evaluation of Classes and Academic Teachers