# **DESCRIPTION OF THE EXAM IN PRECLINICAL DENTISTRY 2024/2025**

# General information

# **PLACE AND TIME:**

1st term: 01.07.2025, 9.00 a.m., Krakowska St. 26,

Phantom room (no. 109, 1st floor),

2<sup>nd</sup> term: 03.09.2025, 9.00 a.m., Krakowska St. 26,

Lecture hall of the Faculty of Dentistry (ground floor),

3<sup>rd</sup> term: 08.09.2025, 9.00 a.m., Krakowska St. 26,

Phantom room, (no. 109, 1st floor).

The preclinical dentistry exam is aimed at verifying the student's knowledge acquired from 5 major courses during the first two years of study in the field of Dentistry at Wroclaw Medical University. It is coordinated by the Department of Experimental Dentistry.

### **Courses included in the Preclinical Exam:**

- Dental modeling,
- Dental materials,
- Physiology of the masticatory system,
- Restorative preclinical dentistry,
- Preclinical endodontics.

In the academic year 2024/2025, the exam will be carried out in the form of a test only, without a practical part. Students who have obtained a positive mark in all subjects listed above are allowed to take the exam.

The test consists of 100 questions covering the knowledge from all of the given subjects. For each question, there are 5 possible answers with only 1 correct. The test takes 100 minutes (1 minute per question). If the student fails the exam in the first term, the student is allowed to retake the exam in the re-sit session. This exam is also a test. Additionally, for persons applying for a transfer to WMU from other universities, after passing the written exam, a practical exam is organized (the so-called OSCE, 10 practical tasks aimed to assess practical skills acquired in the 5 previously mentioned major subjects; 10 minutes are allocated to complete each task). The practical part is passed for a minimum of 7 completed tasks. One date for a written exam and one date for a practical exam are scheduled for applicants for transfer from other universities.

The following grading scale will be used during the exam:

Very good (5,0) - 93% to 100% Good plus (4,5) - 85% to 92% Good (4,0) - 77% to 84% Sufficiently good (3,5) - 69% to 76% In case of any doubts or questions regarding these regulations, the final decision is made by the Head of the Department of Experimental Dentistry.

# <u>Description of the courses included in the Preclinical Dentistry Exam:</u>

### I. Dental modeling (year I, semester I)

The aim of the teaching subject and the effect of education - skills and competence: dental anatomy terminology, anatomy of the permanent teeth, anatomy of the dental arches, tooth identification systems, norms of dental occlusion. The essential issues of the subject: carving and drawing of the permanent incisors, canines, premolars, and molars, carving and drawing of the maxillary and mandibular dental arch, recognition of natural teeth according to the anatomical features, forming of occlusal surface of the permanent teeth.

### Basic literature:

- 1. Wheeler's dental anatomy, physiology, and occlusion / Stanley J. Nelson. St. Louis: Elsevier, 2003, 2010, 2020.
- 2. Woelfel's dental anatomy : its relevance to dentistry / Rickne C. Scheid. 7th ed. Philadelphia : Lippincott Williams &Wilkins, cop. 2007.

# II. Physiology of the masticatory system (year II, semester III)

The subject includes proper occlusion, relations between mandible and maxilla, TMJ anatomy, physiology of mucous membrane, saliva and periodontium, mastication, swallowing, breathing and speech, and neuromuscular relations between muscles of mastication and other skeleto-muscular structures.

# Basic literature:

- 1. Management of temporomandibular disorders and occlusion / Jeffrey P. Okeson. 8th edition. St. Louis: Elsevier, 2003,2008, 2013, 2020.
- 2. Functional occlusion : from TMJ to smile design / Peter E. Dawson. St. Louis : Elsevier Mosby, cop. 2007.
- 3. Behavioral dentistry / ed. by David I. Mostofsky, Albert G. Forgione, Donald B. Giddon. Oxford; Ames: BlackwellMunksgaard, cop. 2006.

# Additional literature:

1. Wheeler's dental anatomy, physiology, and occlusion / Stanley J. Nelson. - St. Louis: Elsevier, 2003, 2010, 2020.

# III. Dental materials (year II, semester IV)

The aim of the teaching subject and the effect of education-skills and competence include properties and practical application of dental materials in dental technology used in prosthetic dentistry. Teaching goals: physico-mechanical properties of dental materials, biocompatibility of dental materials, dental technology, dental laboratory organization, dental equipment.

#### Basic literature:

- 1. Craig's restorative dental materials / edited by Ronald Sakaguchi, Jack Ferracane, John Powers. Fourteenth edition. St.Louis : Elsevier, 2006, 2012, 2019.
- 2. Dental materials : properties and manipulation / John M. Powers, John C. Wataha. St. Louis : Elsevier Mosby, 2000-2013.

#### Additional literature:

- 1. Clinical aspects of dental materials: theory, practice and cases / Marcia (Gladwin) Stewart, Michael Bagby. Philadelphia: Wolters Kluwer, 2004, 2009, 2018.
- 2. Phillips' science of dental materials / [ed.] Kenneth J. Anusavice, Chiayi Shen, H. Ralph Rawls. St. Louis: ElsevierSaunders, 2003, 2013.

### IV. Preclinical restorative dentistry (year II, semester III)

Includes knowledge about etiopathogenesis of caries, principles of conventional and adhesive Black Caries Classes, properties of restorative materials and the use of clinical methods restorations, fissure sealing and PRR.

#### Basic literature:

- 1. Sturdevant's art and science of operative dentistry / ed. Theodore M. Roberson, Harold O. Heymann, Edward J. Swift. -6th ed.. -St. Louis: Mosby, 2012.
- 2. Kidd E.A.M. Smith B.G.N., Pickard H.M.: Picard`s Manual of operative dentistry.9. ed. Oxford Medical Publication 2011.
- 3. Kidd E.A.M.. Joyston-Bechal S. : Essentials of dental caries. 3 ed. Oxford University Press, Oxford 2005.
- 4. Powers J.M., Wataha J.C. Dental Materials: Properties and Manipulation, Mosby 2012.

# V. Preclinical endodontics (year II, semester IV)

Includes knowledge of root canal treatment in models, endodontium, and dental pulp diseases, knowledge of endodontic instruments, the stages of root canal treatment, endodontic access, working length, chemo-mechanical preparation and root canal fillings, properties and clinical use of materials, rubber dam.

### Basic literature:

- 1. Tronstad L.: Clinical endodontics. 2<sup>nd</sup> edition. Georg Thieme Verlag, Stutgart 2009.
- 2. Ingle J.I.: Endodontics. Text and CD-ROM for Macintosh and Windows. Decker B.C. 2008.
- 3. Torabinejad M., Walton R.E., Endodontics, principles and practice, 5th edition, Saunders Elsevier 2014.