

COURSE SYLLABUS

<p>Semmelweis University, Faculty of Dentistry,</p> <p>Doctor of Medicine in Dentistry Program</p>
<p>Name of the course in Hungarian: Restauratív fogászati propedeutika I.</p> <p>In English¹: Restorative dentistry pre-clinical I.</p> <p>In German¹: Zahnerhaltungskunde Propädeutik I.</p> <p>Credits: 3</p> <p>Number of hours: 42, of which lectures: 0 practicals: 14x3 seminars: 0</p> <p>Course type: <u>compulsory</u> compulsory elective elective</p> <p>Semester in which the course is offered, according to the curriculum: 4th Semester</p> <p>Frequency of announcement: per year</p> <p>The educational research unit teaching the course:</p> <p>Department of Restorative Dentistry and Endodontics</p>
<p>Academic year: 2025/26 2nd Semester</p>
<p>Neptun code of the course: FOKOKFK355_1A</p>
<p>Course coordinator: Beáta KERÉMI DMD, PhD</p> <p>Position: associate professor</p> <p>Workplace, contact:</p> <p>Department of Restorative Dentistry and Endodontics</p> <p>H-1088 Budapest, Szentkirályi street 47.</p> <p>Phone: +36-1-317-1598</p> <p>E-mail: helyreallito.fogaszat@semmelweis.hu</p>
<p>Course objectives and role within the Dental Curriculum:</p> <p>This subject establishes basic knowledge of Restorative Dentistry with a special focus on direct restoration. The goal is to acquire theoretical and practical knowledge that can be used to treat patients in clinical practice.</p> <p>During practice, the students learn:</p> <ul style="list-style-type: none">• the anatomy and histology of the tooth• the nature, progression, development, diagnosis, and therapy of the caries• the types of instruments used in restorative dentistry and their application technique• the main characteristics of the different filling materials and their application technique• the design rule of cavity types and their preparation techniques• the steps of restoring cavities with different filling materials• the use of different matrix systems• the methods of isolation – especially attention to the absolute isolation

<p>Location of instruction (lecture hall, seminar room, etc.):</p> <p>Dental Clinical and Training Centre, Pre-clinical labs; H-1088 Budapest, Szentkirályi street 47.</p>
<p>Competencies acquired upon successful completion of the course:</p> <p>Upon successful completion of the course, the student will master the anatomy of the tooth, the development, circumstances, diagnosis, and therapy of tooth decay, will know and use the instruments, equipment necessary for restorative dental treatments, will be able to apply the rules of cavity preparation and will know the properties of the filling materials, and the student will be able to restore teeth with different filling materials.</p> <p>Prepares/gets ready for clinical patient care.</p>
<p>Prerequisites and eligibility requirements for enrollment and completion, in the case of a multiple-semester course, is continuous enrollment (“course rollover”) allowed, and if so, under what conditions:</p> <ul style="list-style-type: none"> - General dental preclinical practice - Macroscopic anatomy and embryology II - Odontotechnology and Prosthodontics Pre-clinical I
<p>Enrollment requirements: minimum and maximum number of students, and selection criteria: ---</p> <p>compulsory subject</p>
<p>How to apply for the course: in the Neptun system</p>
<p>Detailed course content²:</p> <p>This subject includes three hours of practice per week.</p> <p>During practice, the task is to prepare cavities for composite fillings on plastic teeth in phantom heads with continuous monitoring of theoretical and practical knowledge.</p> <p>The topic for the practices (week-by-week – consultations; practices):</p> <ol style="list-style-type: none"> 1. General tooth anatomy, Mühlreiter's signs, tooth marking systems, instruments for dental hard tissue preparation 2. Black classification, general rules of preparation, tooth preparation terminology (nomenclature); Preparation of Class I cavities 3. Caries – definition, clinical characteristics, progression, histopathology, zones, Position of the patient and the operator during treatment; Foramen coecum cavities preparation 4. Types of cavity preparation; Class V cavity preparation 5. Relative isolation; Class I and V cavities preparation 6. Matrix systems and wedges; Class II cavities preparation 7. Midterm test 1 – cavity preparation, nomenclature, marking systems, caries, isolation, matrix systems; Class II cavities preparation 8. Absolute isolation; Class II cavities preparation

<p>9. Removing amalgam fillings, preparing modified conventional cavities, treatment of discoloured dental hard tissue</p> <p>10. Steps of composite filling; composite filling in the posterior region</p> <p>11. Composite – materials; composite filling in the posterior region</p> <p>12. Midterm test 2 – making of composite filling, composite material; composite filling in the anterior region</p> <p>13. Composite filling in the posterior and anterior region</p> <p>14. Practicing absolute isolation, finishing, and polishing</p>
<p>Related courses covering overlapping or interdisciplinary topics (including both compulsory and elective courses) with possible overlapping areas of the course curriculum:</p> <ul style="list-style-type: none"> - Preventive dentistry - Restorative dentistry pre-clinical II <p>This subject establishes the knowledge and competence for Restorative Dentistry and Endodontics, and Clinical Dentistry subject, so the knowledge acquired here will expand</p>
<p>The application of artificial intelligence in teaching of the course:</p> <p>The course is primarily based on textbooks, lectures, seminars, and practical exercises. Students may use artificial intelligence (ChatGPT) during the course, but they must consult with their instructor regarding the reliability of the information obtained.</p>
<p>Specific academic requirements for successful course completion³:</p> <p>Students are required to arrive prepared for each practice.</p> <p>They should be familiar with the content of the teaching aids uploaded to the Moodle platform.</p>
<p>Attendance requirements and make-up policy:</p> <p>The materials of lectures and practices are essential for completing the practical work and passing the exam.</p> <p>Attendance at the practices is compulsory, and absences for any reason may not exceed 25% of the total number of practices. In the case of the practice scheduled on a national holiday, that practice will not be held and cannot be replaced. Consequently, the total number of practices in the particular semester decreased. Therefore, the 25% is calculated from the decreased number.</p> <p>After three instances of arriving late by less than 15 minutes, it will be counted as one absence. On the other hand, if you arrive late to the practice by more than 15 minutes, it will be directly counted as an absence. It is important to note that missed practices cannot be made up, regardless of whether it was a late arrival or an absence. Additionally, in the case of an absence, there is no need to provide a certificate.</p>
<p>Methods of assessment during the study period⁴:</p> <p>Students must arrive in the practice with knowledge of the material related to the scheduled program available on Moodle website. On one occasion during the semester, the subject of the</p>

examination is tooth recognition on extracted teeth.

During the semester, small tests take place weekly. **Two midterms will be written, one on the 7th week (cavity preparation, nomenclature, marking systems, caries, isolation, matrix systems) and the second on the 12th week (making composite filling, composite material).**

The topic includes the material of the lectures and practices. If a student does not pass the tooth recognition or midterm exam the first time, the exam can be retaken in two weeks. A maximum of two additional attempts for the retake will be provided. It will be assessed following the procedure laid down in the Study and Examination Regulations of Semmelweis University. The weekly small test cannot be retaken.

The practice leaders will monitor and assess the work carried out on the practices at each stage. The practical work is graded at the end of each type of task. The results of the evaluations are included in the semester rating.

Requirements for semester completion and signature:

A minimum of 75% attendance is required at the practices, and absence may not exceed 25% of the practices regardless of the reason (please refer to **Attendance on practices and lectures, replacement in case of missed sessions**).

For the signature of the semester, a sufficient level of continuous and consistent theoretical preparation in practice and a sufficient level of practical performance are required. The average grade of the theoretical part and the average grade of the practical part must reach the 2.0 grade separately. The theoretical part comprises the weekly test and the midterms. Each midterm must reach a 2.0 grade. The tooth recognition must reach a 2.0 grade.

The type tasks indicated in Moodle (e.g. Class 3 cavities preparation, Class IV composite fillings, etc.) are min. 75% of the type tasks must be completed. Completely missing a specific assignment/task will result in a refusal to sign the end-of-semester.

Type of examination: practical mark

Examination requirements⁵: ---

At the end of the semester, students will receive a practical grade; there will be no exam.

Grading method and type⁶, the option for grade offer and its conditions:

The practical grade is based on a five-point scale. The supervisor determines the practical grade based on the student's oral and written theoretical and practical performance in the practicals, considering the student's attitude towards the subject and his/her peers.

For the signature of the semester, a sufficient level of continuous and consistent theoretical preparation in practice and a sufficient level of practical performance are required. The average grade of the theoretical part and the average grade of the practical part must reach the 2.0 grade separately. The theoretical part comprises the weekly test and the midterms. Each midterm must reach a 2.0 grade. The tooth recognition must reach a 2.0 grade.

Examination registration procedure: ---

Rules for examination retake: ---
Recommended printed, electronic, and online study materials, textbooks, and references (include URLs for online materials): 1. Ritter AV, Boushell LW, Walter R: Sturdevant's Art and Science of Operative Dentistry 7th ed. or higher, St. Louis, Mosby, 2018 2. Teaching materials uploaded to the Moodle site
Signature of course lecturer (course coordinator): Beáta Kerémi DMD, PhD associate professor
Signature of the head of coordinating department: János Vág DMD, PhD, DSc full professor, head of department
Date of submission: 2025.08.27.

Opinion of the Committee on Education and Credit Transfer:
Notes from the Dean's Office:
Signature of Dean:

¹ This section must be completed only if the course is offered in the given foreign language.

² Theoretical and practical instruction must be listed separately, broken down by hours (weeks) and numbered accordingly. Attachments are not permitted.

³ E.g., fieldwork, case report analysis, conducting a survey, etc.

⁴ E.g., homework, in-class presentations, midterm tests. Please specify topics and dates, as well as possibilities for make-up and retake.

⁵ For a theoretical exam, please include the list of exam topics, for a practical exam, specify the scope and format of the examination.

⁶ Description of how the theoretical and practical exams are weighted in the final grade. Description of midterm assessments contribute to the final grade.