

## COURSE SYLLABUS

<p><b>Semmelweis University, Faculty of Dentistry, Doctor of Medicine in Dentistry Program</b></p>
<p><b>Name of the course in Hungarian:</b> ESZTÉTIKUS TÖMÉSKÉSZÍTÉSI TECHNIKÁK I. <b>In English<sup>1</sup>:</b> DIRECT AESTHETIC COMPOSITE RESTORATIONS COURSE I <b>In German<sup>1</sup>:</b> Direkte ästhetische Kompositrestaurationstechniken I.</p> <p><b>Credits:</b> 1 <b>Number of hours:</b> <u>14</u>, of which lectures: 7, practicals: 7, seminars: 0 <b>Course type:</b> compulsory compulsory elective <u>elective</u> <b>Semester in which the course is offered, according to the curriculum:</b> 8. semester <b>Frequency of announcement:</b> per year <b>The educational research unit teaching the course:</b> Department of Restorative Dentistry and Endodontics</p>
<p><b>Academic year:</b> 2025/2026 – 2nd semester</p>
<p><b>Neptun code of the course:</b> FOSVKFK167_1A</p>
<p><b>Course coordinator:</b> Prof. János Vág DMD, PhD <b>Position:</b> clinical head, university professor <b>Workplace, contact:</b> Department of Restorative Dentistry and Endodontics, H-1088 Budapest, Szentkirályi street nr 47. <b>Phone:</b> +361-317-1598 <b>E-mail:</b> <a href="mailto:helyreallito.fogaszat@semmelweis.hu">helyreallito.fogaszat@semmelweis.hu</a></p>
<p><b>Course objectives and role within the Dental Curriculum:</b> This subject guides students in the more aesthetic preparation of direct restorations. Our goal is to enable students to transfer the functional foundations received in education aesthetically into their practice based on detailed practical instructions through a complex composite system.</p>
<p><b>Location of instruction (lecture hall, seminar room, etc.):</b> Dental Educational Center, Preclinical Skill lab 1088 Budapest, Szentkirályi u. 47.</p>
<p><b>Competencies acquired upon successful completion of the course:</b> The students will gain the ability to recognize and recreate the detailed anatomy of front teeth, including the surface texture and form. They get familiar with the layering technique and evaluation of the esthetics of direct restorations by using a complex composite system and polishing kit.</p>
<p><b>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:</b> Restorative Dentistry and Endodontics II.</p>
<p><b>Enrollment requirements: minimum and maximum number of students, and selection</b></p>

<b>criteria:</b> 15-40 students
<b>How to apply for the course:</b> Neptun system
<p><b>Detailed course content<sup>2</sup>:</b> The course is divided into two blocks. The theoretical part (7 hours) and a hands-on part (7 hours) with making direct restorations under the supervision.</p> <p><b>Lectures:</b></p> <ul style="list-style-type: none"> <li>• Tooth shade and inner structure of teeth</li> <li>• Morphology of front teeth</li> <li>• The physical, chemical, and optical properties of direct restorative materials</li> <li>• Functional stability of front teeth, making of wax-up</li> <li>• The role and preparation of silicone index</li> <li>• The structural changes of front teeth by aging</li> <li>• The layering technique at front restorations</li> <li>• Finishing and polishing</li> </ul> <p><b>Hands-on part:</b></p> <ul style="list-style-type: none"> <li>- The composite layering of a complete direct veneer on a 3D-printed upper central incisor with a simplified technique</li> </ul> <p>The composite layering of Class 4 filling in a 3D-printed upper central incisor using the layering technique</p>
<p><b>Related courses covering overlapping or interdisciplinary topics (including both compulsory and elective courses) with possible overlapping areas of the course curriculum:</b> With the completion of the course, the student patient care becomes more confident and independent within the framework of both the Restorative Dentistry and Endodontics and the Clinical Dentistry subjects, and the acquired knowledge will gradually expand.</p>
<p><b>The application of artificial intelligence in teaching of the course:</b> The education is primarily based on the textbook, lectures, seminars, and practical training materials. The student may use artificial intelligence during the education, but must consult with his/her practical supervisor about the authenticity of the information received.</p>
<b>Specific academic requirements for successful course completion<sup>3</sup>:--</b>
<p><b>Attendance requirements and make-up policy:</b> The topics covered by the lectures are inevitable to accomplish the practical work. Participation in practice is obligatory; the</p>

absence for any reason may not exceed 25% of the practices. We cannot provide an opportunity to replace a practice. Absence does not need to be justified.
<b>Methods of assessment during the study period<sup>4</sup>:</b> Practical work made by the students is supervised and evaluated by the practice teacher. The results of the evaluations are included in the end-of-semester qualification.
<b>Requirements for semester completion and signature:</b> A minimum of 75% attendance is required at the practices; absences should not exceed 25% of the practices. The condition for signing the semester is appropriate theoretical knowledge and practical performance.
<b>Type of examination:</b> practical mark
<b>Examination requirements<sup>5</sup>:</b> --
<b>Grading method and type<sup>6</sup>, the option for grade offer and its conditions:</b> The grade of the practice is five levels. The practice supervisor determines the practical mark based on the practical performance, also taking into account the student's attitude towards the subject and his/her mates.
<b>Examination registration procedure:</b> --
<b>Rules for examination retake:</b> --
<p><b>Recommended printed, electronic, and online study materials, textbooks, and references (include URLs for online materials):</b></p> <ol style="list-style-type: none"> <li>1. Ritter AV, Boushell LW, Walter R: Sturdevant's Art and Science of Operative Dentistry. 7th ed. St. Louis, Mosby, 2018.</li> <li>2. Manauta J, Salat A: Layers: An Atlas of Composite Resin Stratification. 1st ed. Surrey, United Kingdom, Quintessence Publishing 2012.</li> </ol>

<b>Signature of course lecturer (course coordinator):</b> Prof. János Vág DMD, PhD
<b>Signature of the head of coordinating department:</b> <b>Prof. János Vág DMD, PhD</b> Head of department, professor
<b>Date of submission:</b> 2025.08.27.

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

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

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

<sup>3</sup> E.g., fieldwork, case report analysis, conducting a survey, etc.

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

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

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