

Semmelweis University, Faculty of Dentistry - single, long-cycle medical training - Undivided, one-tier training in dentistry

Name of the host institution (and any contributing institution):

Helyreállító Fogászati és Endodonciai Klinika

Name of subject in Hungarian: Restauratív fogászati propedeutika I.

Name of subject in English: Restorative Dentistry, Pre-clinical I.

Name of subject in German: Zahnerhaltungskunde, Propädeutik I

Credit value of the course: 4

Semester: 4th semester

(in which the subject is taught according to the curriculum)

Weekly hours	Lecture	Practice	Seminar
3.0	0.0	3.0	0.0

Semester hours	Lecture	Practice	Seminar
42.0	0.0	42.0	0.0

Type of course:

obligatory

Academic year:

2026/27

Language of instruction (for optional and elective subjects):

English

Course code:

FOKOKFK355_1A

(in the case of a new course, to be completed by the Dean's Office, following approval)

Course coordinator name: Dr. Kerémi Beáta

Course coordinator location of work, telephone availability: Department of Restorative Dentistry and Endodontics; +36-1-317-1598

Course coordinator position: associate professor

Course coordinator Date and number of habilitation: 2024.05.28.; 09/2024.

Objectives of the course, and its place in the curriculum of the medical training program:

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.

During practice, the students learn:

- 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

Format of the course (lectures, group work, practical lessons, etc.):

hands-on practice, small-group instruction

Competencies acquired through completion of course:

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.

Prepares/gets ready for clinical patient care.

Course outcome (names and NEPTUN ID of related subjects):

FOKOKFK355_2A, FOKOKFK357_1A, FOKOKFK357_2A, FOKOKFK357_3A, FOKOKFK357_4A, FOKOKFK357_5A, FOSVKFK167_1A, FOSVKFK403_1A

Prerequisites for course registration and completion: (NEPTUN ID):

General Dental Preclinical Practice, Odontotechnology and Prosthodontics Pre-clinical I.
Macroscopic anatomy and embryology II.

In the case of multi-semester courses, position on the possibility of and conditions for concurrent registration:

concurrent registration is not possible

The number of students required to start the course (minimum, maximum), method of selecting participants:

compulsory course - based on the current number of students

Detailed course syllabus (if the course can be divided into modules, please indicate):
(Theoretical and practical instruction must be broken down into hours (weeks), numbered separately; names of instructors and lecturers must be listed, indicating guest lecturers/instructors. It cannot be attached separately! For guest lecturers, attachment of CV is required in all cases!)

This subject includes three hours of practice per week.

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.

The topic for the practices (week-by-week - consultations; practices):

1. General tooth anatomy, Mühldreiter'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 I cavities preparation
5. Relative isolation; Class V cavities preparation
6. Matrix systems and wedges; Class I and V cavities preparation
7. **Midterm test 1 - cavity preparation, nomenclature, marking systems, caries, isolation, matrix systems;** Class I cavity preparation
8. Absolute isolation; Class II cavities preparation
9. Class II cavities preparation
10. Composite - materials, Steps of composite filling; composite filling in absolute isolation - foramen coecum cavities
11. Composite filling in absolute isolation - Class I and V cavities
12. **Midterm test 2 - making of composite filling, composite material;** composite filling in absolute isolation - Class I and V cavities
13. Removing amalgam fillings, preparing modified conventional cavities, treatment of discoloured dental hard tissue; Composite filling in absolute isolation - Class I and V cavities
14. Practicing absolute isolation, finishing, and polishing

Other courses with overlapping topics (obligatory, optional, or elective courses) in interdisciplinary areas. To minimize overlaps, topics should be coordinated. NEPTUN ID(s) of courses (to be provided):

FOKOKFK355_2A, FOKOKFK357_1A, FOKOKFK357_2A, FOKOKFK357_3A, FOKOKFK357_4A, FOKOKFK357_5A, FOSVKFK167_1A, FOSVKFK403_1A

Requirements for attendance, options for making up missed sessions, and method of absence justification:

The materials of lectures and practices are essential for completing the practical work and passing the exam.

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.

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.

Assessment methods during semester (number, topics, and dates of midterms and reports, method of inclusion in the course grade, opportunities for make-up and improvement of marks):

(number, topics, and dates of midterms and reports, method of inclusion in the course grade, opportunities for make-up and improvement of marks)

Practices - general informations:

- During the designated weeks, **practical work will be assessed separately (tooth marking (week 2), tooth recognition (week 5))** (graded 1-5) - If unsuccessful, them must be repeated!
- The tasks completed during the practical work will be assessed at the end of each practice
- In specific weeks, there will be a special assessment of **test drilling and test filling (weeks 4, 7, 9, 13)**.
- **2 module closing tests on 7th and 12th weeks** (midterms) - it is obligatory to write, only the unsuccessful midterm can be corrected

Grading of tests:

- 0-50% - (1) fail
- 51-62,5% - (2) satisfactory
- 63-75% - (3) average
- 76-87,5% - (4) good
- 88-100% - (5) excellent

The results of the theoretical and practical assessments count toward the end-of-semester grade.

Number and type of individual assignments to be completed, submission deadlines:

none

Requirements for the successful completion of the course:

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. Each exam preparations and exam fillings must individually achieve a grade of 2.0.

The type tasks indicated in Moodle (e.g. Class 2 cavities preparation, Class V 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 assessment:
five-stage term grade

Exam requirements (list of topics, topics of the test exam, and the optional project topics accepted as an exam)

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

Clear, specific minimum requirements for assessment. (The list of mandatory concepts, parameters, diagrams, calculations, and practical skills required to obtain a passing grade, as well as the criteria for the completion and evaluation of project assignments accepted as an exam.) A link published on the department's website referring to the minimum requirements of the course.

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- The tasks completed during the practical work will be assessed at the end of each practice
- In specific weeks, there will be a special assessment of **test drilling and test filling (weeks 4, 7, 9, 13)**. - If unsuccessful, it must be corrected
- **2 module closing tests on 7th and 12th weeks** (midterms) - it is obligatory to write, only the unsuccessful midterm can be corrected

Grading of tests:

- 0-50% - (1) fail
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- 88-100% - (5) excellent

The results of the theoretical and practical assessments count toward the end-of-semester grade.

The course's current Moodle page contains detailed information organized by week.

Method and type of grading (Share of theoretical and practical examinations in the overall evaluation. Inclusion of the results in the end-of-term assessment. Possibilities of and conditions for offered grades.): (Share of theoretical and practical examinations in the overall evaluation, Inclusion of the results in the end-of-term assessment, Possibilities of and conditions for offered grades)

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. Each exam preparations and exam fillings must individually achieve a grade of 2.0.

Artificial intelligence systems used in the teaching of the subject and the manner of their application

The course is primarily based on textbooks, lectures, seminars, and practical exercises. Students may use artificial intelligence during the course, but they must consult with their instructor regarding the reliability of the information obtained.

List of coursebooks, textbooks, study aids and literature facilitating the acquisition of knowledge to complete the course and included in the assessment, precisely indicating which requirement each item is related to (e.g., topic by topic) as well as a list of important technical and other applicable study aids; possibility of individual or group student consultation, if available:

Online resources:

Type	Mandatory
Title	Moodle site of the subject
Link	https://itc.semmelweis.hu/moodle/course/view.php?id

Printed resources:

Type	Recommended
Author	Ritter AV, Boushell LW, Walter R
Title	Sturdevant's Art and Science of Operative Dentistry 7th ed. or higher
Publisher	Mosby
Year of publication	2018

Signature of habilitated instructor (course coordinator) announcing the course:

Signature of the director of the host institution:

Date of submission:
