

## COURSE SYLLABUS

<b>Semmelweis University Faculty of Dentistry, Department of Preclinical Dentistry</b>
<b>Name of the course: General Dental Preclinical Practice</b> <b>Credit value: 4 (L1P3; English: semester 3)</b> <b>Lessons (in hours in the whole semester): 56; from this lectures: 14; practicals: 42; seminars: 0</b> <b>Type of the course: <u>compulsory</u> obligatory elective elective</b> <b>Semester in which it is announced according to the curriculum: 3 semester</b> <b>Frequency of announcement (per semester or year): annually</b> <b>The responsible educational and research organizational unit for teaching the subject: Department of General Dental Preclinical Practice</b>
<b>Academic Year: 2024/2025. 1st semester</b>
<b>Subject (Neptun) code: FOKOPRT231_1A</b>
<b>Lecturer of the course: Prof. Dr. Márton Krisztina</b> <b>Academic position: Head of the department</b> <b>Contact: Department of Preclinical Dentistry, fprop@dent.semmelweis-univ.hu</b>
<b>The goals and place of the course in regards to the education of dental students:</b>  Principal aim of this special education is to provide the students with a professional preclinical theoretical and manual exercise, used in the clinical treatment procedures. It consists of the simulation of the clinical stages on phantom heads, but furthermore students also have the opportunity to study the basics of minimal- and micro invasive dentistry and the most important rules of infection control, as well as the epidemiological data and examinations in the dental research.
<b>Location of the course (address of lecture hall, seminar room etc.):</b> Lecture: 45 minutes/ week (1 lesson) according to the timetable Practice: 2 hours 15 minutes (3 lessons) in the Földvári Practice Hall (Budapest, Szentkirályi utca 47. 1088. 2-nd floor)
<b>Competences acquired by completion of the course:</b>  Student might acquire the basic knowledge and manual skills which are necessary to start the successful clinical practical training. He or she will be aware of the establishment of the dental clinic, the basics of the operative techniques in the dental healthcare, the rules of the infection control procedures.
<b>Pre-study requirements and prerequisites of course registration and completion, in case of a multi-semester subject, the standpoint of the educational-research unit on the concurrent subject registration and on the requirements of permission thereof :</b>  <b>Macroscopic anatomy and embryology I.</b> <b>Physical Foundations of Dental Materials Science</b>
<b>Number of students required for announcement of course (min., max.), method of selection:</b>

**No minimum, maximum is 50 students,  
Selection is ruled by the timetable of the student 's study group  
Application for the course is carried out in the Neptun system**

**Method of course registration: Neptun system**

**Detailed course/lecture description<sup>1</sup>:** *(to facilitate credit recognition in other institutions)*

**Topics of the lectures:**

**Az előadók változhatnak.**

**Lectures:**

- |   |                      |
|---|----------------------|
| 1. Dental Public Health Of Hungary At The First Decade Of The 21-St Century                       | Dr. Krisztina Márton |
| 2. Oral Diseases  | Dr. Krisztina Márton |
| 3. Preparation Techniques In Dentistry: Conservative Dentistry And Endodontics                    | Dr. Dávid Jelencsics |
| 4. Morphology Of The Teeth. Guide-Planes And Cephalometric Landmarks                              | Dr. Krisztina Márton |
| 5. Role Of Dentistry In The Health Sciences. The Dental Team. Environmental aspects in dentistry. | Dr. Tamás Demeter    |
| 6. Minimally Invasive And Micro-Invasive Dentistry. Digital Dentistry.                            | Dr. Tamás Demeter    |
| 7. Establishment And Instrumentation Of The Dental Clinic   | Dr. Anna Dézsi       |
| 8. Consequences of Loss of Teeth. Types of Prosthetic Appliances                                  | Dr. Krisztina Márton |
| 9. Preparation Techniques In Dentistry: Prosthodontics  | Dr. Anna Dézsi       |
| 10. Contamination And Infection Control In Dentistry.   | Dr. Krisztina Márton |
| 11. Disinfection And Sterilization Methods In Dentistry   | Dr. Krisztina Márton |
| 12. Operative Techniques In Dentistry: Periodontology   | Dr. Pál Nagy         |
| 13. Operative Techniques In Dentistry: Oral And Maxillofacial Surgery                             | Dr. Dorottya Kiss    |
| 14. Operative Techniques In Dentistry: Paedodontics And Orthodontics                              | Dr. Miklós Kaán      |

**Instructors:**

**Prof. Dr. Krisztina Márton, Dr. Anna Júlia Dézsi, Dr. Csilla Erdei, Dr. Tamás Demeter, Dr. Dávid Jelencsics, Dr. Fanni Andrea Vass, Dr. Zsófia Éva Vincze, Dr. Heizer Ágnes**

**Az oktatók változhatnak.**

**Practice:**

1. Pick-Up Of The Instruments. Instrumentation Of The Dental Clinic
2. Preparation Techniques In Dentistry. Practicing Cavity Preparation On Training-Plates
3. Preparation Techniques In Dentistry. Practicing Cavity Preparation On Training-Plates. MIDTERM.
4. Preparation Techniques In Dentistry. Practicing Cavity Preparation On Training-Plates
5. Preparation Techniques In Dentistry. Practicing Cavity Preparation On Training-Plates
6. Minimally Invasive And Micro-Invasive Dentistry techniques.
7. Class 1 Cavity Preparation on the Artificial 36 Tooth
8. Preparation of Artificial 46 Tooth for a Full Crown 1
9. Preparation of Artificial 46 Tooth for a Full Crown 2, Digital impression taking with intraoral scanner.
10. Establishment And Instrumentation Of The Dental Clinic. Clinical Practical Introduction, Fluid Control, Four-Handed Dentistry In Practice. Contamination And Infection Control In The Dental Practice. Disinfection And Sterilization In Dentistry. Central Sterilization Unit Of The Teaching Centre. MIDTERM.
11. Wax-modellation of the 46 tooth. RETAKE

12. Periodontology Practice. Role Of Oral Hygiene In The Health Of The Oral Cavity. Oral Hygiene Techniques. RETAKE

13. Oral Surgery Practice. The Oral Surgery Operation Unit. Basics Of The Dental Anaesthesia

14. Paedodontics And Orthodontics. Introduction Into The Orofacial Anomalies In Children.

**Courses (*compulsory and obligatory elective*) which in part or entirely overlap the topics of above course:**

There is no overlap

**Special academic work required for completion of the course<sup>2</sup>:**

Visiting and acquiring of the establishment of the dental clinic

Visiting and learning the special protocol of the central sterilization unit of the teaching center

**Attendance on practices and lectures, replacement in case of missed sessions:**

Attendance is **compulsory** at the practical sessions, but not compulsory on the lecture. In relation to the subject, the allowed number of absences is 25% from the practical sessions. Practical sessions might be replaced according to written individual requests of the student, depending on the capacity of the department and the staff.

Absences from the practical sessions are ought not to be verified. In case of no show at the exam session is judged according to the recommendations of the Educational and Examinational Rules of the Semmelweis University

**Method of checking acquired knowledge during the study period<sup>3</sup>:**

Students' academic performance is assessed on a five-point scale.

Written midterm exam is carried out at the 3rd and at the 10th week of the semester. Retake of the midterm is possible on the 11<sup>th</sup> and 12<sup>th</sup> educational week.

The unsatisfactory mark of the midterm must be replaced, and its mark is counted together with the unsatisfactory mark. Mark 2 to 4 might also be replaced, the new mark will be counted.

Judgement of the accomplishment:

**0%-49% - unsatisfactory (1)**

**50%-63% - satisfactory(2)**

**64%-76% - medium(3)**

**77%-89% - good (4)**

**90%-100% excellent (5)**

Mid-semester progress is monitored by means of a practical performance evaluation, with the practical work carried out being assessed on a five-point scale by the trainer.

**Requirements of an accepted semester (*signature of the lecturer*):**

Practical work is ranked at the end of the given working phase.

The final mark (practical mark) is graded according to the average of the practical and theoretical skills of the student. Grade of below **2.00** means an unsatisfactory result. In this case the semester is cancelled, and must be repeated. Attendance, in **at least 75%** of the practical sessions, - is also requirement for the recognition of the semester. Precondition for the semifinal exam is: the recognition of the semester and at least satisfactory practical mark in the electronic index of the student (Neptun).

**Grading:**

**0-1.99 - unsatisfactory (1)**

**2-2.69- satisfactory(2)**

2.70- 3.69 - medium(3)  
3.70—4.49 - good (4)  
4.50 – 5.00 excellent (5)

**Type of the exam: Priority semifinal exam (1 semester) oral**

**Requirements of the exam<sup>3</sup>:**

**Priority semifinal exam (1 semester):**

Student chooses 2 topics and can be prepared for 15 minutes, then explains the knowledge about it, might be asked by the examiner, and is valued accordingly. Requirement is the whole practical and theoretical material of the semester.

**Topics:**

1. Classification of caries, clinical form, location, morphology and progression.
2. Characteristics of caries incipiens, treatment possibilities.
3. Characterization of dentin caries.
4. Periodontal diseases: form, pathology and diagnostics.
5. History of dental public health in Europe and Hungary.
6. Examination of oral health, dental and periodontal indexes.
7. Instrumentation of the dental chair and the dental clinic.
8. Grouping and characterization of hand instruments and engine driven instruments.
9. Requirements of the establishment and instrumentation of the dental clinic.
10. Definition of contamination and cross infection. Most common microorganisms causing diseases in the health care environment.
11. Hygiene zones in the dental office.
12. Definition of disinfection, disinfection methods in dentistry
13. Definition of sterilisation, sterilisation methods in dentistry
14. Signing of teeth, morphology of the teeth. Guide planes and cephalometric landmarks.
15. Morphology of the front teeth.
16. Morphology of the premolar teeth.
17. Morphology of the molar teeth.
18. Minimally invasive techniques in the preparation of cavities.
19. Application of the caries-infiltration technique, as a microinvasive method.
20. Principles of cavity preparation according to Black. Nomenclature of cavity, surfaces, walls, angles, edges.
21. Importance and possibilities of the dental plaque control.
22. The basic principles and tools of the mechanical plaque control.
23. Importance of the interdental cleaning, techniques and aids.
24. Cleaning of the gingival sulcus.
25. Types of fixed prosthetic appliances.
26. Principles of tooth preparations.
27. Types of removable prosthetic appliances.
28. Consequences of the loss of teeth, the effects of edentulousness.
29. Fields of dentoalveolar- and maxillofacial surgery. Definition of impacted and retained teeth. Most common interventions in dentoalveolar surgery.
30. Most frequent interventions in maxillofacial surgery. Steps of surgical hand wash.
31. Parts and parameters of the syringe and the needle, used in dentistry.
32. General rules of dental anesthesia.
33. Comparison of the establishment and instrumentation of the dental clinic and the oral surgery operating room.
34. Hand hygiene rules in the dental office.
35. Classification of cavities. Principles of cavity preparation by Black.
36. Definition and localisation of caries predilection spots.

37. General rules of cavity preparation.
38. Primary phases of cavity preparation, definition of each phases.
39. Secondary phases of cavity preparation, definition of each phases.
40. Definition of the dentally originated cysts. Dental implants.
41. Cavity preparation by Black versus minimally and micro invasive techniques.
42. Micro invasive techniques in caries prevention and therapy.
43. Diagnosis of caries in pits and fissures, in smooth surfaces and in root surfaces. Assessment tools.
44. Eruption of primary and secondary teeth.
45. Aplasia, impacted, retentive teeth, persistant primary teeth.
46. Classification of removable orthodontic appliances.
47. Elements of fix orthodontic appliances, multiband system.
48. Angle diagnostic system.
49. Waste management in the dental office. Environmental protection aspects.
50. Needle prick accidents and prevention against needle prick accidents.
51. Tooth preparation forms and different kinds of finish lines.
52. Requirements of tooth preparation.

**Grading of courses<sup>4</sup>. The possibility and requirements of an offered grade:**

mark: 1-5 grading considering the student's accomplishment on the oral exam, and the practical mark

**Exam registration:** in Neptun-system, limited by the given number and the given dates

**Rules of repeating exams:**

According to the actual In case of no show is judged the according to the the rules and guidelines of the Educational and Examinational Rules of the Semmelweis University university and faculty rules.

**List of textbooks, lecture notes and recommended textbooks, online material:**

all the materials are uploaded onto the homepage of Deaprtment

<http://semmelweis-egyetem.hu/propedeutika/english/>

**Signature of course lecturer:** Prof. Dr. Krisztina Márton



**Signature of head of department:**

**Date of submission:** 21st February 2024

**Opinion of OKB:**

**Notes from the Dean's Office:**

**Signature of Dean:**

<sup>1</sup> Detailed and numbered for each week of theoretical and practical lessons one by one. In an annex, cannot be attached appendix!

<sup>2</sup> Eg. homework, report, midterm exam etc. Topics, dates, method of retake and replacement

<sup>3</sup> List of topics in case of theoretical exam, thematic and method in case of practical exam

<sup>4</sup> Method of inclusion of theoretical and practical exams. Method of inclusion of midterm assessments.

