

## COURSE SYLLABUS

<b>Semmelweis University, Faculty of Dentistry, Doctor of Medicine in Dentistry Program</b>
<p><b>Name of the course in Hungarian:</b> Preventív fogászat</p> <p><b>In English<sup>1</sup>:</b> Preventive dentistry</p> <p><b>In German<sup>1</sup>:</b> Präventive Zahnheilkunde</p> <p><b>Credits:</b> 3</p> <p><b>Number of hours:</b> 56, of which lectures: 28, practicals: 18, seminars: 10</p> <p><b>Course type:</b> <u>compulsory</u>      compulsory elective      elective</p> <p><b>Semester in which the course is offered, according to the curriculum:</b> 5th</p> <p><b>Frequency of announcement:</b> per Year</p> <p><b>The educational research unit teaching the course:</b> Department of Restorative Dentistry and Endodontics</p>
<p><b>Academic year:</b> 2025/2026</p>
<p><b>Neptun code of the course:</b> FOKOKFK246_1A</p>
<p><b>Course coordinator:</b> Dr. Eszter Molnár</p> <p><b>Position:</b> senior lecturer</p> <p><b>Workplace, contact:</b> Department of Restorative Dentistry and Endodontics, phone number: 06-1-459-1500/59385</p>
<p><b>Course objectives and role within the Dental Curriculum:</b> The objective of teaching the subject is that the students' work should be permeated by a preventive approach. Introducing the importance and possibilities of primary, secondary and tertiary prevention in all areas of dentistry. The purpose of these is to introduce the students to clinical exercises, to learn about and practice the implementation of dental prevention.</p>
<p><b>Location of instruction (lecture hall, seminar room, etc.):</b> FOK OC, Budapest, Szentkirályi u. 47. Lectures: Árkövy hall (ground floor), practicals: 111, 113, 114 rooms, according to the current timetable (1st floor).</p>
<p><b>Competencies acquired upon successful completion of the course:</b> After successfully completing the course, students will understand what constitutes a healthy mouth and be able to recognize conditions that deviate from this. They learn and practice the methods used in the diagnosis of caries and periodontal diseases, as well as the related prevention activities. Also they learn and practice screening tests related to dental caries, periodontal diseases and oral cavity cancer, as well as the recording of various indices. Understanding the relationship between oral health and other diseases.</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 propaedeutics I., Odontotechnology and Prosthodontics propaedeutics II. The course is one semester long.</p>
<p><b>Enrollment requirements: minimum and maximum number of students, and selection criteria:</b> There is no limitation number of students required to start the course.</p>
<p><b>How to apply for the course:</b> Neptun System</p>
<p><b>Detailed course content<sup>2</sup>:</b> Preventive Dentistry is educated as a separate, compulsory, independent course at the Department of Restorative Dentistry and Endodontics. In the 5.</p>

semester there are two hours lecture/week and two hours practices or seminars pro week.

Lectures:

1.	Preventive dentistry- introduction
	Dental caries, Etiology of caries. Dental plaque
2.	Caries Epidemiology. Caries indices. Risk factors
	Caries incipient and remineralisation
3.	The Role of diet in the caries prevention
	Cervical sensitivity, dentinal hypersensitivity and erosion
4.	Fluorides in the cariesprevention
	Toxicology of fluorides
5.	Oral hygiene - Toothpaste
	Oral hygiene - Toothbrush
6.	Prevention in pregnancy and from the intrauterine life to the age of three
	Dental treatment and prevention in case of elderly patients
7.	Gingivitis and periodontal disease. Epidemiological characteristics. Pathogenesis and diagnosis
	Strategy for prevention of periodontal diseases
8.	Integrated preventive dentistry – Prosthodontics
	Integrated preventive dentistry – Gnathology
9.	Integrated preventive dentistry – Conservative dentistry
	Possibilities in prevention of orthodontic anomalies
10.	Oral cancer
11.	Environmental and iatrogenic damaging factors in dentistry
	Infection control
12.	Fissure-sealing
	The role of dental hygienists in the dental practice
13.	Environmental protection
14.	Group-prophylaxis, Design, Organisation
	Profilaxis in the school

Practices/Seminars:

1.	Clinical workplace, infection control (seminar)
2.	Clinical workplace, levels of disease prevention (primary, secondary, tertiary prevention) (practice, test)
3.	Dental/medical history, status, stomato-oncological screening, caries diagnosis (seminar)
4.	General medical history, stomato-oncological screening (practice, test)
5.	Dental status, Caries diagnostics (practice, test)
6.	Determination of DMF number/index, caries diagnostic tools (practice)
7.	Oral hygiene (seminar)
8.	Oral hygiene indices, plaque staining, periodontal indices (seminar)

	9.	Oral hygiene indices (practice, test)
	10.	Plaque staining (practice, test)
	11.	Periodontal index, presentation of depuration (practice, test)
	12.	Fissure sealing on artificial teeth, non-invasive caries treatment (practice)
	13.	Caries risk assessment, caries risk tests (practice)
	14.	Consultation (seminar)
<b>Related courses covering overlapping or interdisciplinary topics (including both compulsory and elective courses) with possible overlapping areas of the course curriculum:</b> The subject discusses dental prevention, so there is a possible overlap with all dental subjects.		
<b>The application of artificial intelligence in teaching of the course:</b> 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.		
<b>Specific academic requirements for successful course completion<sup>3</sup>: --</b>		
<b>Attendance requirements and make-up policy:</b> Participation in practices is compulsory. More than 25% absences are not allowed from practices/seminars, verifying the absence is unnecessary. We cannot ensure possibility of making up the absence. Being more than 10 minutes late for exercises/seminars counts as an absence. Also three late arrivals (late less than 10 minutes) count as one absence.  Students must be prepared for the exercises - in terms of their material. To check this, a five-question test must be completed (on a mobile phone) at the beginning of the practices. The topics of each test can be found in the practical topics, and they can prepare from the material of the corresponding seminar. Those who receive an insufficient grade on the tests (could give at most one correct answer in each test) will receive an additional question on the colloquium. The average of the tests must be totalled at the end of the semester. Those who write all six tests in the practices with an average of 4.8 can return one of the topics (A or B question) received in the exam. Attendance at practical classes is conditional on taking the current test. In case of absence from practice, it is not necessary to make up the test.		
<b>Methods of assessment during the study period<sup>4</sup>:</b> Students must prepare in advance for the practices according to the given topic. This is checked and evaluated by the practice leader.		
<b>Requirements for semester completion and signature:</b> Adequate preparation and activity in the exercises, proper management of the "Performance sheet" and submission to the instructor at the end of the semester, and no more than 25% absence from the practices/seminars. If the student is unprepared or does not show adequate activity during the practices, the instructor may refuse to sign.		
<b>Type of examination:</b> Semifinal, oral exam.  During the exam, students are prohibited from using any form of artificial intelligence.		
<b>Examination requirements<sup>5</sup>:</b> Materials of exam are: materials on our homepage, in Moodle system, lectures and seminars and recommended books.  During the exam, students are prohibited from using any form of artificial intelligence.  Topic list A: 1. The concept of preventive dentistry, its place in dentistry. The different levels of prevention 2. Cariesdiagnostics 3. Caries incipient and the methods of remineralisation 4. Dental plaque - biofilm		

5. Caries risk assessment, caries risk patients
6. Dentin hypersensitivity and its treatment
7. Dental erosion
8. Infection control – general aspects
9. Infection control in dentistry
10. Risk groups - risk patients
11. Epidemiology and aetiology of oral cancer and its primary prevention
12. Pillars of the caries prevention. Possibilities of immunization in caries prevention
13. History of fluoride prevention, mechanism of action of fluorides
14. Collective/individual fluoride prophylaxis
15. The modern fluoride prevention
16. Toxicology of Fluoride
17. Clinical examination of dental plaque and its staining
18. Oral hygiene indices
19. Diet and caries. Cariogenicity and acidogenicity of foods
20. Sugar substitutes and sweetening agents
21. Fissure sealant (aim and materials)
22. Fissure sealants: the use
23. Pathomechanism and diagnosis of periodontal diseases
24. Professional oral hygiene (its role and implementation)
25. Toothpastes

Topic list B:

1. Health education, health preservation
2. Health education programs
3. Dental care in pregnancy
4. Health education programs in early childhood (0-3 years)
5. Health education programs in kindergartens
6. Health education programs at school
7. Health education programs in adulthood
8. Dental prevention of elderly patients, and specialities of the dental treatment of patient with systemic disease
9. Dental caries, caries indices, rank of caries susceptibility
10. Types of epidemiological studies. Epidemiology of the dental caries
11. Possibilities of prevention in conservative dentistry. Finishing and polishing of fillings
12. Environmental aspects in dentistry
13. Possibilities of prevention in orthodontics
14. Secondary and tertiary prevention of oral cancer
15. Fluoridation in Hungary and all over the world
16. Periodontal status and general health
17. Indexes in periodontology
18. Strategy of prevention of periodontal diseases
19. Individual oral hygiene. Toothbrushes, electric toothbrushes, supplementary devices, dental floss
20. Tooth cleaning techniques tooth brushing methods and their frequency
21. Chemical plaque control

22. Scaling 23. Consequences of tooth loss 24. Preventive aspects of Prosthetic dentistry 25. Iatrogenic damages in dentistry
<b>Grading method and type<sup>6</sup>, the option for grade offer and its conditions:</b> Oral exam, the student will receive exam questions (one-one from A and B types) of the topics and practical questions which are on the website (the number of the topic is determined using a random number generator). The number of exam topics varies as described above, depending on the aggregated results of the tests written in the practices. After the preparation time, the students explain the items and answer the questions. The exam is graded on a five-point scale (1-5). The exam mark is insufficient even if only the mark received for one topic is insufficient. There is no offered grade.
<b>Examination registration procedure:</b> In the Neptun-system. It is not possible to increase the number of given exam spots.
<b>Rules for examination retake:</b> According to the Study and Examination Regulations.
<b>Recommended printed, electronic, and online study materials, textbooks, and references (include URLs for online materials):</b> Materials of exam are: materials on our homepage, in Moodle system, lectures and seminars <b>Recommended textbooks:</b> <ul style="list-style-type: none"> <li>• Primary Preventive Dentistry. Edited by Norman O. Harris, 8th Edition, Pearson Education Limited 2014, ISBN 13: 978-1-292-05351-6 (english)</li> <li>• Comprehensive Preventive Dentistry. Edited by Hardy Limeback, Wiley-Blackwell 2012, ISBN 978-0-8138-2168-9 (english)</li> <li>• Dental Erosion From Diagnosis to Therapy, Edited by Adrian Lussi, Karger 2006, ISBN 978-3-318-01331-3 (english)</li> <li>• Preventív fogászat. Szerkesztette: Nyárasdy Ida és Bánóczy Jolán  Második, átdolgozott és bővített kiadás. Medicina, Budapest, 2009. (magyar)</li> </ul>
<b>Signature of course lecturer (course coordinator):</b>
<b>Signature of the head of coordinating department:</b>
<b>Date of submission:</b>

<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.