

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: Preventív fogászat

Name of subject in English: Preventive Dentistry

Name of subject in German: Präventive Zahnheilkunde

Credit value of the course: 3

Semester: 5th semester

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

Weekly hours	Lecture	Practice	Seminar
0.0	0.0	0.0	0.0

Semester hours	Lecture	Practice	Seminar
56.0	28.0	18.0	10.0

Type of course:

obligatory

Academic year:

2026/27

Language of instruction (for optional and elective subjects):

Angol

Course code:

FOKOKFK429_1A

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

Course coordinator name: Dr. Molnár Eszter

Course coordinator location of work, telephone availability: Department of Restorative Dentistry and Endodontics, phone.: 06-1-459-1500/59385

Course coordinator position: senior lecturer

Course coordinator Date and number of habilitation: n.a.

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

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 the these is to introduce the students to clinical exercises, to learn about and practice the implementation of dental prevention.

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

The course is taught through lectures, seminars, and practical exercises.

Competencies acquired through completion of course:

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 the methods used in the diagnosis of caries and periodontal diseases, as well as the related prevention activities. Also they learn screening tests related to dental caries, periodontal diseases and oral cancer, as well as the recording of various indices and the relationship between oral health and other diseases.

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

FOKOKFK357_1A

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

Restorative Dentistry, Pre-clinical I., Odontotechnology and Prosthodontics Pre-clinical II.

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

The course is one semester long.

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

There is no limitation number of students required to start the course.

**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!)

Lectures:

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

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):

FOKOKFK357_1A, FOKOKFK355_1A, FOKOKFK357_2A, FOKOKFK357_3A, FOKOKFK357_4A, FOKOKFK357_5A

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

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. 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.

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)

Students must prepare in advance for the

practices according to the given topic. This is checked and evaluated by the practice leader.

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

None

Requirements for the successful completion of the course:

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.

Type of assessment:

terminal examination

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

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

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.

Students must prepare in advance for the

practices according to the given topic. This is checked and evaluated by the practice leader.

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)

Oral exam, the student will receive exam questions (one-one from A and B types) of the topics 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 unsatisfactory even if only the mark received for one topic is unsatisfactory.

No practical exam.

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.

There is no offered grade.

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 (ChatGPT) 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	Preventive dentistry Moodle site
Link	https://itc.semmelweis.hu/moodle/login/index.php
Other/Comment	Materials of exam are: materials on our homepage, in Moodle system, lectures and seminars

Printed resources:

Type	Recommended
Author	Norman O. Harris
Title	Primary Preventive Dentistry, 8th Edition
Publisher	Pearson Education Limited
Year of publication	2014
Other/Comment	ISBN 13: 978-1-292-05351-6

Type	Recommended
Author	Hardy Limeback
Title	Comprehensive Preventive Dentistry
Publisher	Wiley-Blackwell
Year of publication	2012
Other/Comment	ISBN 978-0-8138-2168-9

Type	Recommended
Author	Adrian Lussi
Title	Dental Erosion From Diagnosis to Therapy
Publisher	Karger
Year of publication	2006
Other/Comment	ISBN 978-3-318-01331-3

Type	Recommended
Author	Nyárasdy Ida és Bánóczy Jolán
Title	Preventív fogászat
Publisher	Medicina
Year of publication	2009
Other/Comment	978 963 226 233 8

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

Signature of the director of the host institution:

Date of submission: