

COURSE SYLLABUS

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| <p style="text-align: center;">Semmelweis University, Faculty of Dentistry, Doctor of Medicine in Dentistry Program</p> |
| <p>Name of the course in Hungarian: Parodontológia IV In English¹: Periodontology IV In German¹: Parodontologie IV Credits: 3 (1L 2P)</p> <p>Number of hours: 36, of which lectures: 12 , practicals: 24, seminars: 0 Course type: compulsory Semester in which the course is offered, according to the curriculum: 10. semester Frequency of announcement: yearly The educational research unit teaching the course: Department of Periodontology</p> |
| <p>Academic year: 2025/2026 spring semester</p> |
| <p>Neptun code of the course: FOKOPDK387_4A</p> |
| <p>Course coordinator: Dr. Balint Molnar Position: Associate Professor Workplace, contact: H-1088 Szentkirályi street 47. 4. floor, + 36 1 318 5222</p> |
| <p>Course objectives and role within the Dental Curriculum: Periodontology is a basic, conceptual subject in the undergraduate curriculum of dental students, with a definite aim to teach modern, evidence based methods of periodontal diagnostics and treatments. Providing students with up-to-date knowledge of periodontics and related implant dentistry. During clinical practices students should carry out complex treatment on a few patients on a weekly basis under supervision. Students will be able to understand the anatomy and pathology of periodontal tissues, modern methods of diagnostics and the current protocol of treatment by non-surgical as well as surgical way, through two semesters of clinical practice. The acquired core knowledge will be essential for dentists in general dental setting</p> |
| <p>Location of instruction (lecture hall, seminar room, etc.): Arkövy Auditorium, practical Sugar Laszlo room</p> |
| <p>Competencies acquired upon successful completion of the course: Students will be able to diagnose the diseases of the gum and the attachment apparatus, diagnose the clinical manifestations of systemic diseases, provide oral prophylaxis, non-surgical periodontal pocket therapy and basic pocket surgery. Should be familiar with mucogingival and regenerative techniques and also perio-implantology and perio-prosthodontics.</p> |
| <p>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: Periodontology III.</p> |
| <p>Enrollment requirements: minimum and maximum number of students, and selection criteria: The total number of registered students for the given semester</p> |
| <p>How to apply for the course: NEPTUN</p> |

Detailed course/lecture description: (to facilitate credit recognition in other institutions)

1 hour/ week

Is periodontitis a risk factor in implant dentistry? HA
Biology of periodontal and periimplant tissues WP
Periodontal aspects of implantology, augmentations I. WP
Periodontal aspects of implantology, augmentations II. WP
Periimplantitis. Background and management MB
Comprehensive case presentations I. (perio-prot direct/indirect, surg) GI
Comprehensive case presentations II. (perio/plastic surg - impl)MB
Comprehensive case presentations III. (perio-non-surg/surg - impl) HA
Supportive therapy in periodontology and implant dentistry HA
Eastern Monday -
Periodontal diagnostics - consultation 30

Written test WP/GI

Clinical session pensum

Diagnosis - (new patient examination) (3) Complex treatment planning – determination of perio-(implant)-prosthetic prognosis (1) Non surgical therapy. Supra and subgingival scaling. Root planning (local anaesthesia) (3) Assisting in surgery (2)

Related courses covering overlapping or interdisciplinary topics (including both compulsory and elective courses) with possible overlapping areas of the course curriculum: none

The application of artificial intelligence in teaching of the course: The use of artificial intelligence is not permitted during mid-term examinations, written examinations and oral examinations. The use of electronic devices that can access artificial intelligence is not permitted during examinations.

Lecturers may use artificial intelligence in editing lectures and compiling test questions, while students are also permitted to use artificial intelligence during the academic period in order to master the course material. However, the use of artificial intelligence is prohibited in any type of examination. Violation of the provisions is considered illegal behavior, plagiarism, and in order to investigate it, responsibility for plagiarism during the existence of the student relationship must be investigated in student disciplinary proceedings.

Specific academic requirements for successful course completion³: none

Attendance requirements and make-up policy: Completing the administration work for closing the previous semester and obtaining the pre-requisites Proper uniform matching the rules with a nameplate. Learning and understanding both the course description (requirements and rules of the subject) presented by the instructor of a given group and certified by each student's signature. Absence in accordance with the Study and Examination Policy of Semmelweis University Faculty of Dentistry with no possibility to substitute lectures.. Participation on lectures is certified by QR codes -. Absences are in accordance with The Study and Examination Policy of Semmelweis University Faculty of Dentistry. The maximum allowed absences on the practices is 1 out of four sessions. This is the principal requirement for the acceptance of the semester and the signature in addition to fulfill at least 70% of the given practical pensum . In case of total practical incompetence, or the practical output on the practices does not reach at least 70% of the required practical pensum or other behavioral problems the signature can be denied 1 (failed) after having been consulted with the department chairman. The maximum allowed absences on the practices are 1. This is the

principal requirement for the acceptance of the semester and the signature . The failed written semifinal exam can be retaken as an oral exam during the examination period.

Methods of assessment during the study period⁴ : midterm test on the lectures and short essay on the practices

Requirements for semester completion and signature: participation in lectures with absences in accordance with The Study and Examination Policy of Semmelweis University Faculty of Dentistry. 'Satisfied' grade in the midterm test and midterm oral exam at the practice. Fulfilling the at least 70% of the given practical pensum . The maximum allowed absences is 1 day, but that should be retaken during the semester. This is the principal requirement of the acceptance of the semester and the signature. In case of total practical incompetence, if the practical output during the practices does not reach at least 70% of the required practical pensum or other behavioral problems the signature can be denied after having been consulted with the department chairman

Type of examination: final exam written and oral

Examination requirements⁵: All curricular matter of the lectures and practices of Periodontology I-IV. Is questioned during the written and oral exam.

Written final test- slide diagnostics : 30 clinical slides (slide diagnoses in essay).

Qualifications for the slide diagnostics: The passing grade is above 60% (17 slides)

Oral exams: students first must answer one-or two off hand questions on trivial and necessary knowledge on periodontal diseases. After answering those successfully, two topics are chosen (randomly) from the 60 questions listed below .

Periodontology final exam topics

1. Macroscopic and microscopic anatomy of the gingiva
2. Macroscopic-, microscopic anatomy and function of the attachment apparatus
3. Normal macroscopic-, microscopic anatomy and function of the gingival sulcus
4. Development of periodontal tissues and biology of the alveolar bone
5. Normal defensive functions of periodontal tissues
6. The mechanism of plaque and calculus accumulation
7. Light-, and electron microscopic structure of the dental plaque
8. Microbiology of supragingival dental plaque
9. Microbiology of subgingival dental plaque, periopathogen microorganisms
10. The experimental gingivitis model – Histology and immunology of initial gingivitis
11. Histology and immunology of onset and developed gingivitis
12. Histology and immunology of initial periodontitis
13. The role of PMN leukocytes, monocytes and systemic factors in the patomechanism of periodontitis
14. The role of local factors in the patomechanism of periodontitis; elimination of local plaque retentive factors
15. Procession of the untreated periodontal disease
16. Classification of periodontal diseases
17. Clinical and subjective symptoms of plaque-induced gingivitis
18. Gingivitis with systemic background and paired with deficiency diseases
19. Connection of periodontitis and smoking
20. The periodontal pocket as a focal infection (systemic connections of periodontitis)
21. Non plaque-induced gingival diseases
22. The role of attached gingiva in the mechanical defense of the periodontium

23. Causes and consequences of gingival recession, tooth neck hypersensitivity
 24. Drug-induced gingival hyperplasty, pregnancy-associated gingivitis
 25. Chronic, adult periodontitis
 26. Microbiology, genetic and immune background of aggressive periodontitis
 27. Treatment of aggressive periodontitis
 28. Oral hygiene indexes
 29. Diagnosis of gingivitis, gingival indexes
 30. Periodontal indexes. Significance of CPITN/PSR/BPE index systems
 31. Periodontal clinical diagnostic parameters, radiology, furcation lesions
 32. Epidemiology of periodontal diseases
 33. Prevention of periodontal diseases
 34. Treatment of acute periodontal conditions
 35. Main phases of complex periodontal therapy
 36. Acquiring effective individual oral hygiene
 37. Professional oral hygiene, tools
 38. Chemical plaque-control and systemic antibiotic treatment
 39. Reevaluation after the professional oral hygiene phase
 40. Fundamentals of periodontal surgery, indications and contraindications
 41. The role of gingivectomy in contemporary periodontal surgery
 42. Apically repositioned flap surgical techniques and the treatment of severe horizontal bone loss
 43. The modified Widman flap
 44. Treatment options for vertical bone defects
 45. Healing and regenerative potential of different periodontal tissues
 46. Fundamentals and history of Guided Tissue Regeneration
 47. Classification of periodontal flaps, incisions and suture techniques in periodontal surgery
 48. Resorbable, and non-resorbable barrier membranes
 49. Biological and biochemical tissue regeneration (morphogenic proteins, enamel matrix derivate)
 50. Bone replacement grafts and autogenous bone in periodontal regeneration
 51. Mucogingival surgery, correction of recessions, the Miller classification
 52. Periodontal considerations in prosthodontics, correction of secondary occlusal trauma, grinding, and prosthetic rehabilitation
 53. Indications and technical possibilities of creating temporary and semipermanent splints
 54. Borders of endodonty and periodontology
 55. Periodontal maintenance and recall. Determinants of recall intervals. Criteria for successful periodontal treatment
 56. Connection between periodontology and orthodontics. Guidelines for orthodontic treatment of periodontally affected patients
 57. Alveolar ridge preservation
 58. The biological width around teeth and implants
 59. Aspects of implant placement in periodontally affected patients
- The definition of periimplant mucositis and periimplantitis. Treatment options

Grading method and type⁶, the option for grade offer and its conditions:

Grading of courses¹: Grade based on the result of the diagnosis of 30 clinical slides. Oral exams: students first must answer one-or-two off hand questions on trivial and necessary knowledge on periodontal diseases. After answering those successfully, two topics are chosen (randomly) from the 60 questions listed below. Each part of the exam is scored separately and the final grade is given by the sum and average of the scores. If student is not able to give correct answer to the off hand questions will not be eligible to continue the oral exam.

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| The whole oral exam should be retaken. |
| Examination registration procedure: NEPTUN |
| Rules for examination retake: The failed final exam should be retaken as an oral exam during the examination period. Slide diagnosis will be part of the oral exam. |
| Recommended printed, electronic, and online study materials, textbooks, and references (include URLs for online materials): Lindhe J. (et al) (ed): Clinical Periodontology and Implant Dentistry 6th ed (Blackwell 2016) http://semmelweis.hu/parodontologia/en/ |
| Signature of course lecturer (course coordinator): |
| Signature of the head of coordinating department: |
| Date of submission: |

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| Opinion of the Committee on Education and Credit Transfer: |
| Notes from the Dean's Office: |
| Signature of Dean: |

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

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

³ E.g., fieldwork, case report analysis, conducting a survey, etc.

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

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

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

ⁱ Method of inclusion of theoretical and practical exams. Method of inclusion of midterm assessments.