REQUIREMENTS

Semmelweis University Faculty of Dentistry

Department of Paediatric Dentistry and Orthodontics

Name of the course: Orthodontics

Credit value: autumn semester: 5, spring semester: 5

Lessons (in hours): 142 lectures: 26 practicals: 116 seminars: -

Type of the course: compulsory obligatory elective elective

clinical faculty, theory and practice

Frequency of announcement (per semester or year): per semester

Academic year: 2025-2026

Subject code¹: FOKOGFK263 1A, FOKOGFK263 2A

Lecturer of the course: Prof. Dr. med habil Rózsa Noémi Katinka, MSc, PhD

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The goals of the course in point of view of the education:

Orthodontics is the acquirement of a sufficient theoretic and practical knowledge, fulfilling the requirements, set by the university and the government necessary to obtain a degree in dentistry. Students are expected to gain understanding through the attendance of practices; supervised practical sessions within small groups; the study of textbooks and further recommended literature. Practical work, the treatment of patients, can only be started once the supervisor has tested and is satisfied with the student's theoretical knowledge. Practical work consists of patient treatments. It is divided into two parts:

- 1. Joint work: students work alongside the supervisor.
- 2. Independent work: treatment is given by the students, under strict supervision.

The orthodontic training provides students with a broad knowledge, specifically concentrating on the following fields: 1. Aetiology 2. Prevention 3. Orthodontic diagnostics 4. Treatment planning 5. Early treatment 6. Most frequently used orthodontic appliances and treatment methods

7. The relation of orthodontics with other fields of dentistry. 8. Orthodontics in adulthood.8. Surgical-orthodontics 9. Aligner therapy 10. Trainers

Location of the course (address of lecture hall, seminar room etc.):

Dental Training Centre: SE FOK Oktatási Centrum, 1088, Bp., Szentkirályi St. 47.:

- Lectures in the Árkövy Lecture Hall or other seminar and lecture facilities of the dental training centre.
- Clinical practices will take place in the practical training facilities (Ith. floor) and in the dental offices (Vth. floor) of the Department for Pedodontics and Orthodontics.

Competences acquired by completion of the course:

Practical skills, orthodontic diagnostics, treatment planning, completition of orthodontic treatments

Pre-study requirements and prerequisites of course registration and completion:

Orthodontics Pre-clinical, Conservative Dentistry and Endodontics III., Prosthodontics III.; Spring semester: Orthodontics I.

Number of students required for announcement of course (min., max.):

Compulsory for all Vth year students, Clinical practices in small groups of five-six students.

Method of course registration: Neptun system

Detailed course/lecture description²:

Fall semester:

- 1. The subject, significance of orthodontics, its relation to caries and periodontal diseases
- 2. Historical survey of orthodontics. Classification and terminology of malocclusion
- 3. Diagnosis of malocclusions I.
- 4. Diagnosis of malocclusions II. X-ray diagnosis
- 5. Aetiology; hereditary and acquired anomalies. Functional anomalies.
- 6. The timing of the orthodontic treatment
- 7. Biomechanical principles of orthodontics. Possibilities of tooth movement.
- 8. Removable appliances I. Simple orthodontic appliances.
- 9. Removable appliances II. Functional appliances
- 10. Space gaining in orthodontics. Arch expansion and molar distalization
- 11. Elements of multiband/multibond appliances. Multibond technics I.
- 12. Multibond techniques II. Orthodontic wires and the phases of orthodontic treatment
- 13. Modern techniques in orthodontics: splint appliances
- 14. Aesthetics in orthodontics

Spring semester:

- 1. Possibilities of orthodontic prevention. Early treatment in orthodontics.
- 2. Normooclusion. Local and general anomalies.
- 3. Treatment of distoocclusion.
- 4. Treatment of mesioocclusion
- 5. Extraction in orthodontics.
- 6. Complex treatment of orthodontic anomalies combined with missing teeth
- 7. Surgical-orthodontic treatments
- 8. Complex therapy of cleft lip and palate
- 9. Retention and relapse.
- 10. Side effects and complications of orthodontic treatment.
- 11. Adult orthodontic treatment.
- 12.. Interdisciplinary aspects of orthodontic treatment.
- 13. Digital techniques and workflow in orthodontics
- 14. Consultation

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

Pedodontics I. and II., Orthodontic propedeutics, Orthodontic diagnostics I. and II., Preventive dentistry I. and II., Digital orthodontics.

Special academic work required for completion of the course³:

Orthodontic diagnostics, orthodontic treatment planning, completitons of orthodontic treatments

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

Students are required to attend practice sessions and midterm tests. The practical course of one semester cannot be recognised if a student is absent for more than 25% (more than 3 occasions) of the practice sessions. The missed practices can be retaken twice per semester.

Consequences of absence from sessions and exams:

Every student has to sign his/her own practical attendance sheet which is certified by the supervisor's signature. Presence is required at a level of 75%. No more than three absences are permitted. Medical certificates are accepted, but the practical courses have to be retaken. Replacement of the missed practices is possible.

Method of checking acquired knowledge during the study period⁴:

The midterm tests have to be completed once every semester. The test-paper is validated with a score over 50%. There are two possibilities to retake an unsuccessful test.

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

- 1. Interest and participation shown during the practical courses (maximum 3 absences).
- 2. Students should attain a sufficient theoretical and practical knowledge fulfilling the requirements of the department.

Type of the exam:

Fall semester: practical grade

Spring semester: practical grade, final oral exam

Requirements of the exam⁵:

Upon the completion of the 10th semester, students receive a grade based on their practical work and must sit a final verbal examination in which they are tested on two topics chosen randomly. The list of examination topics is available at the beginning of the 10th semester on the website of the Department.

Grading of courses⁶:

The judgement of the practical presence and performance determine the final score of the semester.

Exam registration: in the Neptun system

Rules of repeating exams: new registration in the Neptun system

List of textbooks, lecture notes and recommended textbooks:

Required textbook:

- 1. Proffit, WR, Fields, DW, Larson, B, Sarver, DM.: Contemporary Orthodontics 6th ed., Mosby, 2018.
- 2. Mitchell, L.: An introduction to orthodontics, Oxford Publishing, 2011.

Recommended Textbook:

1. Graber LW, Vanarsdall RL, Vig KWL, Huang GJ.: Orthodontics, Current Principles and Technics, 6^{th} ed., Elsevier, 2016.

Signature of course lecturer:

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Signature of head of department:

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Date of submission: 05th of May 2025.

Opinion of OKB:

Notes from the Dean's Office:

Signature of Dean:

¹ Filled out by the Dean's Office following approval

² Detailed and numbered for each week of theoretical and practical lessons one by one, indicating the names of lecturers and instructors

³ Eg. field practice, medical chart analysis, survey conducting, etc.

⁴ Eg. homework, report, midterm exam etc. Topics, dates, method of retake and replacement.

⁵ List of topics in case of theoretical exam, thematic and method in case of practical exam.

⁶ Method of inclusion of theoretical and practical exams. Method of inclusion of midterm assessments.