

Orthodontics

MIDTERM EXAM

Venue: The university department or clinic designated by the Head of the University Examination Board, with physical attendance required.

Examiners: One examiner from the professional examiners' register and one tutor from the tutors' register, both designated by the Head of the University Examination Board.

Prerequisites:

- Training agreement concluded with the University
- Approved training plan
- Completion of 20 months of the basic training program and fulfillment of the requirements set out in points 2.2.1.1 – 2.2.1.5 of Decree No. 22/2012 (IX.14.) of the Ministry of Human Resources (EMMI), confirmed by the University
- Completion of the intervention list in full, verified by the tutors
- Tutor evaluation(s)

List of clinical procedures:

	Competency Title	Performed Procedure / Activity (Name and Number)
1.	Patient examination and written assessment of clinical and functional examination results	100
2.	Taking and analyzing photographs – assessment of asymmetries with written report	100
3.	Plaster or digital model analysis: occlusal diagnosis, space assessment and prognosis, Bolton analysis, index evaluation, and written report	50
4.	Evaluation of lateral cephalometric X-rays – cephalometric analyses following Ricketts and Hasund	50
5.	Assessment and written report of postero-anterior cephalometric X-rays	5
6.	Written evaluation of orthopantomograms	50
7.	CBCT analysis with written evaluation	5
8.	Planning and initiation of interceptive orthodontic treatments	10

Competencies assessed in the partial exam:

- Patient examination and written assessment of clinical and functional findings

- Photography and photo analysis – asymmetry assessment with written evaluation
- Plaster or digital model analysis – occlusal diagnosis, space prognosis, Bolton analysis, indices, and written evaluation
- Lateral cephalometric radiograph evaluation – cephalometric analyses according to Ricketts and Hasund
- Written evaluation of postero-anterior cephalometric radiographs
- Written evaluation of orthopantomograms
- CBCT analysis and written evaluation
- Planning and initiation of interceptive orthodontic treatments

Tasks of the midterm exam:

- Evaluation of theoretical and practical knowledge using the oral exam question set and submitted case presentations

Practical task:

- Presentation of 3 full-mouth rehabilitations of patients treated by the candidate
- Presentation of three fully documented and diagnosed clinical cases from the specialty, prepared by the candidate, along with one case previously documented and treated by the candidate's tutor (with full initial, intermediate, and final documentation), where the candidate demonstrates and explains the treatment-induced changes between the initial and final stages (via PowerPoint, Prezi, Keynote, etc.).
- At least 5 competencies from the above-mentioned list must be assessed in connection with the practical task.

Oral task: Assessment of theoretical knowledge based on at least 10 questions from topics agreed and published by the committees of the four universities.

Weighting of exam tasks: 100% (oral 20%, practical 80%)

Time allocated: 60 minutes

Oral exam topics:

1. Advantages and limitations of Angle's diagnostic system
2. Possibilities for prevention of caries and periodontal changes during fixed orthodontic appliance treatment
3. Methods for maintaining oral hygiene with different orthodontic appliances; ensuring proper oral hygiene during orthodontic treatments
4. Decay in primary dentition, therapeutic options, and the importance of conservative treatment for permanent dentition development
5. Correlations between orthodontic anomalies, orthodontic treatments, and dental caries
6. Management of incipient carious lesions during and after fixed orthodontic appliance treatment
7. Aesthetics in orthodontics
8. Functional examinations, photo analysis, soft tissue analysis
9. Model analysis at different ages
10. Indications, contraindications, and implementation of partial orthodontic treatment in the anterior region
11. Indications and diagnostic roles of different types of radiographs in orthodontics
12. Evaluation of cephalometric radiographs using different methods
13. Development and comparison of cephalometric radiographic techniques
14. Management of dentoalveolar anomalies in late mixed and permanent dentition

15. Prevalence, localization, and treatment options for impacted and retained teeth
16. Diagnosis and etiology of skeletal vertical anomalies
17. Treatment options for transverse anomalies at different ages
18. Management and retention of deep bites
19. Management and retention of open bites
20. Comparison of treatment and retention of Angle Class II/1 and II/2 malocclusions
21. Possible causes and management of Angle Class II/1 malocclusions
22. Appliances for treating sagittal skeletal anomalies and their mechanisms of action
23. Diagnosis of sagittal skeletal anomalies and timing of treatment initiation
24. Treatment options for Angle Class II/2 malocclusions
25. Orthodontic management of Angle Class III malocclusions
26. Concept of pseudoprognathia and treatment possibilities
27. Role of distal plane in permanent molar occlusion development; sequence of tooth eruption and conditions for normal progression; definition and etiology of incongruence
28. Steps in creating an orthodontic treatment plan
29. Early primary tooth extraction: definition, consequences for permanent dentition, therapeutic options; space maintainers: types and indications
30. Timing of orthodontic treatments; optimal start, treatment duration, and frequency of patient visits
31. Age-related characteristics in orthodontics (differences between adult and pediatric orthodontics)
32. Biological foundations of orthodontic treatment
33. Effects of orthodontic forces on sutures and the temporomandibular joint
34. Biomechanical considerations in appliance design
35. Role of friction, frictionless systems, and sliding mechanics
36. Importance and possibilities of anchorage in orthodontics
37. Side effects of applying orthodontic forces
38. Cellular, tissue, and periodontal changes due to prolonged force
39. Development of the dentition and craniofacial complex
40. Importance of preserving the posterior support zone in primary and early mixed dentition; definition and significance of "leeway space"
41. Historical overview of orthodontic appliances and factors influencing their development
42. Types, components, mechanisms, indications, and activation of removable appliances
43. Types, indications, fabrication, and activation of Frankel appliances
44. Structure, classification, and indications of activator-type appliances
45. Intermaxillary appliances
46. Indications, types, and structure of anchorage devices used with fixed appliances
47. Lingual technique
48. Development of multibond techniques (from standard edgewise to straight-wire)
49. Non-multibond fixed appliances and their mechanisms of action
50. Types, properties, and applications of archwires in orthodontics
51. Use of elastic elements in orthodontics
52. Direct and indirect bonding techniques
53. Classification of multibond appliances by material; types, structure, and properties of brackets

54. Mechanism of action and applications of multibond techniques (including Alexander technique)
55. Aesthetic considerations in appliance selection and use; patient compliance and its effect on treatment outcomes
56. Mechanism and applications of multibond techniques (comparison of Andrews and MBT techniques)
57. Mechanism and applications of multibond techniques (comparison of Roth and Damon techniques)
58. Mechanism and applications of multibond techniques (including Bergen technique)
59. Types, mechanisms, and indications of extraoral anchorage appliances
60. Numerical tooth anomalies: complex interdisciplinary treatment options for hypodontia
61. Role of orthodontic treatment in managing missing teeth; factors influencing treatment planning
62. Types and implementation of pre-prosthetic orthodontic treatments
63. Etiology of dental anomalies
64. Classification of cleft lip, jaw, and palate and associated functional disturbances
65. Appliances used in the treatment of cleft lip, jaw, and palate patients
66. Role and responsibilities of the orthodontist within the cleft care team
67. Planning of orthognathic surgeries; goals and implementation of pre- and post-surgical orthodontic treatments
68. Outpatient surgical procedures supporting orthodontic treatments
69. Distractors
70. Indications and types of orthognathic surgeries
71. Anesthesia options in pediatric dentistry; dental surgical procedures; frenulectomy/frenulotomy: indications and techniques
72. Physiological and pathological effects of orthodontic treatments on the periodontium
73. Common errors during orthodontic treatments and their consequences
74. Retention tasks following orthodontic treatments
75. Possible causes of relapse
76. Early treatment options for dentoalveolar anomalies
77. Orthodontic prevention: definition, classification; general preventive activities, internal and external influencing factors, importance of posterior support zone
78. Early orthodontic treatment; interceptive orthodontics and simple appliances; myotherapy
79. Preorthodontic myofunctional trainers: description, applications, indications, contraindications
80. Splint therapy
81. Planning, indications, and contraindications for TADs (temporary anchorage devices)
82. Types of implants in orthodontics and their applications
83. Documentation; key aspects and importance of patient information and consent
84. Orthodontic documentation and its significance
85. Pain during orthodontic treatments; identification and relief; differential diagnostic considerations
86. Injuries caused by orthodontic appliances
87. First aid in the dental office (medications and techniques used)
88. Tooth extraction and compensatory extractions in orthodontics
89. Role of third molars in orthodontic treatment planning; arguments for and against extraction; timing and method considerations
90. Numerical tooth anomalies: hyperdontia and complex interdisciplinary treatment possibilities
91. First permanent molar extraction: indications, contraindications, and consequences for malocclusion development
92. Tooth extraction in orthodontics: when, why, and which teeth to remove

93. Indications, contraindications, and implementation of partial orthodontic treatment in premolar and molar regions
94. Classification of injuries to permanent teeth; complex interdisciplinary treatment options for dental trauma
95. Trauma to teeth and primary dentition: classification and therapy; consequences for permanent dentition; orthodontic treatment possibilities after trauma
96. Infection control; hygiene requirements in the orthodontic clinic; proper disinfection and storage of instruments and materials
97. Psychological aspects of orthodontic treatments; realistic and unrealistic patient expectations

Criteria for tutor evaluation: see tutor evaluation form

Tutor name:

Specialist dentist candidate name:

Reporting period:

Evaluation criteria regarding the candidate's activities:

- Practical knowledge level
- Theoretical knowledge level
- Problem-solving ability
- Up-to-date knowledge of domestic and international literature

A TUTOR ÉRTÉKELŐLAPJA A JELŐLTRŐL

Tutor neve:

Jelölt neve:

Beszámoló időszaka:

A gyakorlat helyszíne:

Milyennek értékeli az eltöltött gyakorlatot? (1 - kiváló, 2 - megfelelő, 3 – nem megfelelő. A jelölt klinikai tevékenysége alapján:

1. Jelölt hozzáállása, morálja megfelelő a szakma ismeretek elsajátításához	1	2	3
2. A képzési elem során az adott időszakban szükséges elméleti és gyakorlati ismereteket elsajátította	1	2	3
3. A képzési elem elsajátítása során végzett munkájának szakmai minősége	1	2	3
4. A képzés jelenlegi szakaszában az elvárható szakmai ismeretekkel rendelkezik	1	2	3

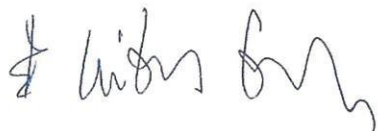
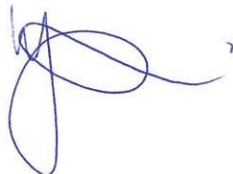
Fejlesztendő készségek vagy ismeretek (szöveges) megjelölése:

Szabadon megfogalmazott értékelő szöveg:

Milyen problémák adódtak a gyakorlat során? Ezek megoldására mit javasol?

NYILATKOZAT

A Fogszabályozás szakirányhoz tartozó részvizsga kidolgozott tematikájával, tételsorával és a tutori értékelőlap tartalmaival egyetértünk.

 Dr. Vitályos Géza Fogszabályozás Grémium Elnök Debreceni Egyetem	 Dr. Gurdán Zsuzsa Fogszabályozás Grémium Elnök Pécsi Tudományegyetem
 Prof. Dr. Rózsa Noémi Katinka Fogszabályozás Grémium Elnök Semmelweis Egyetem	 Dr. Kárpáti Krisztina Fogszabályozás Grémium Elnök Szegedi Tudományegyetem