

Medical University of Plovdiv- Faculty of Dental Medicine

Orthodontics Syllabus

**Semester exam in orthodontics 5th course
2019/2020**

1. Prenatal development from orthodontic point of view.
2. Craniofacial growth and development.
3. Primary dentition. Formation, time of eruption, characteristics and development.
4. Mixed and permanent dentition. Formation, time of eruption, characteristics and development.
5. Heredity and main etiological factors of dentofacial deformities during prenatal development.
6. Birth and nutrition as etiological factors.
7. Anodontia. Hypodontia and hyperdontia- factors for malocclusions.
8. Hormonal disorders and vitamin deficiencies- factors for malocclusions.
9. Bad habits as etiological factors for dentofacial deformities.
10. Carious damage and premature loss of primary and permanent teeth- factors for malocclusions.
11. Impaired nasal breathing and mouth breathing- factors for malocclusions.
12. Clinical methods of examination in orthodontics.
13. Biometric methods of examination in orthodontics
14. Facial photo analysis- lateral and front view.
15. Radiographic methods of examination in orthodontics. Intraoral periapical radiography, orthopantomography, X –ray of wrist and hand.
16. Radiographic methods of examination in orthodontics – Lateral and Frontal telerecortography.
17. Functional methods of examination in orthodontics.
18. Terminology and the norm concept in orthodontics.
19. Classification of malocclusions. Angle classification. Simons and Kantorovich classifications.

20. Primary prevention of orthodontic malocclusions during pregnancy and first year of baby's development.
21. Primary and secondary prevention of orthodontic malocclusions in nursery – age children and preschoolers (3-6- year old children).
22. Primary and secondary prevention of orthodontic malocclusions of (school aged children) (6-12 years).
23. Myofunctional therapy in orthodontics.
24. Interceptive orthodontic appliances- types, classification and application.
25. Biomechanics in orthodontics. Force sources. Characteristics of the orthodontic forces.
26. Main principles of action of the functional and mechanical appliances.
27. Angle's appliances. Contemporary modifications.
28. General characteristics of Edgewise technique.
29. Main characteristics of the extraoral orthodontic appliances.
30. Monoblock and Häupl-Anderson activator and its modern modifications.
31. Fränkel functional appliances.
32. Klammt elastic open activator.
33. Balters appliances.
34. Retainers.
35. Deviations in the number, size, shape and structure of teeth.
36. Deviations in tooth positions.
37. Impacted teeth and persistent deciduous teeth. Clinical manifestation and diagnosis. Prevention and treatment.
38. Diastema. Clinical manifestation and diagnosis. Prevention and treatment.
39. Compression (endognathia). Clinical manifestation and diagnosis. Prevention and treatment.
40. Expansion (exognathia). Clinical manifestation and diagnosis. Prevention and treatment.
41. Protrusion. Clinical manifestation and diagnosis. Prevention and treatment.
42. Retrusion. Clinical manifestation and diagnosis. Prevention and treatment.
43. Prognathia. Clinical manifestation and diagnosis. Prevention and treatment.

44. Deckbiss. Clinical manifestation and diagnosis. Prevention and treatment.
45. Progenia. Clinical manifestation and diagnosis. Prevention and treatment.
46. Cross bite in anterior and posterior segment. Clinical manifestation and diagnosis.
Prevention and treatment
47. Laterognathia. Clinical manifestation and diagnosis. Prevention and treatment.
48. Open bite. Clinical manifestation and diagnosis. Prevention and treatment.
49. Deep bite. Clinical manifestation and diagnosis. Prevention and treatment.
50. Combined orthodontic-prosthetic treatment.
51. Combined orthodontic periodontal treatment
52. Combined orthodontic-surgical treatment of severe malocclusions, clefts and syndroms.
53. Tissue changes under the effect of orthodontic forces.
54. Extraction of teeth during orthodontic treatment – indications. Hotz serial extraction
55. Retention period and relapse after orthodontic treatment.

Head of Orthodontic Department:
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