FACULTY OF DENTAL MEDICINE – SOFIA

DEPARTMENT OF ORTHODONTICS

L E C T U R E P R O G R A M

4th year, 7th winter semester

1. The scope of orthodontics. Interdisciplinary relations. Orthodontic terms. Classification of the malocclusions. Angle's classification.
2. Study cast analysis. Orthodontic diagnosis. Single arch analysis: tooth position evaluation, tooth size discrepancies. Sectional analysis, arch length discrepancies, maxillofacial discrepancies.
3. Study cast analysis. Evaluating the occlusion in primary, mixed and permanent dentition.
4. Maturational changes in dental arches and occlusion. Prediction of the development of the dental arches and the occlusion in primary, mixed and permanent dentition.
5. Maxillofacial development. (Facial growth.)
6. Orthodontic diagnosis and photographic analysis. Radiological examination – methods. CBCT.
7. Cephalometric radiographs – types. Lateral projection cephalometry.
8. Orthodontic diagnosis – clinical diagnostic procedures.
9. Orthodontic materials.
10. Classification and principles of action of the orthodontic appliances. Basic elements of the lingual plate.
11. Fixed appliances: edgewise and straight wire appliance. Stages of edgewise appliance orthodontic treatment.
12. Functional appliances and modifications with active elements – monobloc, activator, twin block.
13. Functional orthodontic appliances, correcting the activity of intrinsic and extrinsic oral muscles – Fränkel's function regulator, Klammt's elastic open activator and Balters' bionator.
14. Etiology of the malocclusions. Heredity, prenatal effect of environmental factors. Endocrine disorders and avitaminoses.
15. Etiology of the malocclusions. Oral habits. Dental caries, premature loss of teeth. Fractures and trauma of the teeth and jaws in children.

P R A C T I C A L E X E R C I S E S P R O G R A M

4th year, 7th winter semester

1. Lower jaw impressions. Making study casts and trimming.
2. Upper jaw impressions. Making study casts and trimming.
3. Orthodontic cast analysis in permanent dentition. Discrepancies in tooth number, tooth size and in tooth position. Diastemas and tremas.
4. Discrepancies in tooth position. Case analysis on photographs.
5. Single arch analysis in permanent dentition. Transverse, sagittal and vertical discrepancies. Indexes for tooth size-jaw size discrepancies.
6. Single arch analysis in permanent dentition. Tooth size discrepancies indexes according to Tonn and Bolton. Arch segment analysis according to Gerlach.
7. Analysis of the occlusion in permanent dentition. Angle's classification.
8. Analysis of the occlusion in permanent dentition. Checkup and discussion. Cast analysis on photographs.
9. Written seminar. Single arch analysis and examination of the occlusion.
10. Single arch analysis and examination of the occlusion in mixed dentition. Chateau's index. Moyers prediction method. Differences in the measuring units.
Single arch analysis and examination of the occlusion in deciduous dentition.
11. Prognostic methods in mixed dentition. Importance of the terminal plane of primary second molars. Types of primary dentition according to Vladislavov.
12. Colloquium – Biometric methods of evaluation.
13. Tooth size discrepancies according to Tonn and Bolton. Case studies and bonding or stripping planning.
14. Bite registration. Final cast trimming. Intraoral scanning and virtual models (short movies).
15. Signature.