

## **Phantom based Prosthodontics 1**

### **VI Semester**

- The Study area of Prosthodontics.
- A brief history of evolution, equipment used at dental clinic and dental laboratory, principles of prosthodontics activities.
- Components of the masticatory system and their functional interrelationship, Anatomy, and physiology of the teeth - jaws system;
- mastication and mimic muscles.
- Types of mandibular movements, Bennett movement; Bennett angle.
- Temporo-mandibular joint, concepts of basal, alveolar, dental curves;
- Factors ensuring tooth stability;
- Articulation and occlusion;
- Devices repeating mandibular motions, occlusion, occlusion types.
- The act of chewing and swallowing.: methods of determination of chewing effectiveness; chewing cycle, speech, swallowing.
- Angle classification of occlusion.
- Characteristics of normal occlusion.
- Dental materials;
- Classification of materials used in Prosthetic dentistry: basic and supplementary.
- Impression materials (alginate, silicone, polysulfide, polyether, thermoplastic. Dental waxes, gypsum products.).
- Impression taking technique.
- Model, techniques for its obtaining.
- Metal alloys used in Prosthetic dentistry;
- Abrasion masses, reinforcing bands.

## **Phantom based Prosthodontics 2**

### **VII Semester**

- Introduction to Dental porcelain-(ceramics),advantages and disadvantages .
- Introduction to fixed prosthodontics
- Treatment planning for tooth restoration: inlay,onlay,overlay.
- Full metal crown, metal-ceramic crown, crowns with cast posts and stumps.
- Etiology of caries or non-caries lesions of the tooth crown, pathogenesis, treatment methods;
- Classification of tooth caries lesions, inlay/onlay.
- Basic principles of preparation of tooth for inlay/onlay.
- Fabrication: direct, indirect, combined.
- Restoration of the damaged crowns with the artificial crowns.
- Indication for artificial crowns;

- Classification of the artificial crowns according to their fabrication ways; its structures; materials, purposes;
- The peculiarity of tooth preparation for different types of artificial crowns: metallic stamped, cast, plastic, ceramics; PEM;
- Clinical-laboratory stages of fabrication.
- Restoration of a totally damaged tooth with an artificial crown using the posts and stumps; demonstration of clinical-laboratory stages of production
- Replacement of missing teeth with fixed dentures; conventional and cantilever fixed partial dentures. Biomechanical considerations.
- Clinical and lab steps of fabrication.

## **Fundamentals of clinical prosthodontics**

### **VIII Semester**

- Treatment of defects in teeth arch with partially removable plates (non-physiological) and metal-based - arched (partially physiological) prostheses.
- Create them demonstrate the process of fabrication, parts of partially removable plates, anatomic retention;
- Fixation by clasps; clasps' types: by function, shape, production techniques;
- Clasps line.
- Artificial teeth.
- Clinical-laboratory stages of fabrication the removable partial dentures.
- Metal-based - arched prostheses, its components, create and demonstrate the process of fabrication.
- Clinical-laboratory stages of fabrication, planning of metal-based prostheses construction. Parallelometer, principles of its working. Try in and delivery of arch dentures.
- The full clinical picture of total secondary adentia;
- Elderly protrusion, resorption of alveolar bone, its classification, types of mucosa, its classification (Schreder, Keller, Kurliandski, Oxman, Supple).
- Methods of fixation (biomechanical, physical, biophysical);
- Patients research specifications.
- Special impression tray;
- Methods of its fabrication, adjustment of the special impression tray.
- Patterns of Herbst.
- Functional impression, the technique of its obtaining (mucostatic, mucodisplacive, differentiated).
- Clinical-laboratory stages of manufacturing removable plates.