

**MINISTRY OF HEALTH
OF THE REPUBLIC OF AZERBAIJAN
AZERBAIJAN MEDICAL UNIVERSITY**

"APPROVED"

Head of the Innovation Department
and ensuring the quality of education
of Azerbaijan Medical University

prof. A.I.Gurbanov

" ____ " _____ 2017

Protocol № _____

"APPROVED"

Chairman of the Central
Methodological Commission
of Azerbaijan Medical University

prof. S.D.Aliyev

**STUDY PROGRAM
FOR PROSTHODONTICS**

BAKU – 2017

Azerbaijan Medical University
The curriculum of the Department of Prosthodontics

The subject of Prosthodontics

The subject of prosthodontics. Goals and mission. Sections of prosthodontics: propaedeutics of prosthodontics, treatment of defects of teeth with fixed prostheses, treatment of partial toothless with fixed prostheses, treatment of full toothless with removable prostheses, implant supported prostheses, prosthetic treatment of Temporomandibular joint diseases, prosthetic treatment of periodontal diseases, maxillofacial prosthodontics.

Interrelation of prosthodontics with boundary sciences, including with profile and non-profile disciplines of medicine.

The basic designs made in the clinic of prosthodontics. The history of prosthodontics. Development of prosthodontics in Azerbaijan.

Prosthodontics dental offices and dental laboratories. The principle of operation of the prosthodontics dental clinic and its departments: clinic, laboratory, registry, accounting, archive, etc. Equipments. Accounting and reporting documentation.

Disinfection and sterilization of the prosthodontics dental office.

Functional anatomy of the maxillofacial region

Functional anatomy of the maxillofacial region. Embryonic and postembryonic development of jaws. The structure of the upper and lower jaw. Features of the structure of compact and spongy layers of the upper and lower jaw. Buttresses. Age changes in the jaw bone. A hard and soft palate.

Soft tissues of the oral cavity. Structure of the oral mucosa. Types of oral mucosa. Movable and attached mucosa. The notion of a transitional fold. Line "A". Topography of the folds of the mucosa.

Muscles of the maxillofacial region. Muscles that move the lower jaw: lowering, lifting, shifting to the side, pushing the lower jaw of the muscle. Mimic muscles. Muscles of the tongue and soft palate, their role in the act of speech formation, swallowing and breathing.

Temporomandibular joint. Structure. Movement of the Temporomandibular joint. Changes in the joint by aging. The formation of the Temporomandibular joint under the influence of the type of occlusion and functional features.

Morphology of the tooth. Hard and soft tissues. Eruption and maturation of teeth. Timing of eruption of deciduous and permanent teeth. Different groups of teeth and their anatomical and functional features. Anatomical structure of upper and lower central incisors, canines, first and second premolars, first, second and third molars.

The structure of dentition, developmental stages and age features. Forms of dental arches of the upper and lower jaw. Factors that ensure the stability of teeth in the hole: interdental contacts, circular ligament, the location of the roots. Sagittal and transversal occlusal curves, line of occlusion. The concept of dental, alveolar and basal arches.

Structure and function of periodontal disease. Trophic, barrier, plastic, depreciation functions, the function of periodontal reflex endurance to masticatory pressure. Reserve periodontal forces.

Articulation and occlusion. Types of occlusion: central, lateral, anterior, distal. Bite. Types of bite: physiological and pathological. Varieties of physiological bite: orthognathic, straight, physiological bipognathism, physiological opistognathic. Varieties of pathological bite: distal, mesial, deep, open, cross. Signs of central occlusion with orthognathic occlusion: indications of closure of molars, signs of closure of frontal teeth, signs of closure of dentition.

The structure of the face and its anthropometric features. Height of the lower third of the face. The state of relative physiological dormancy. The height of the bite.

Biomechanics of the lower jaw. Sagittal movements of the lower jaw, the position of the joints in these movements. Sagittal articular and incisal dentures. Angle of sagittal joint and incisors. Ratio of dentition in the extension of the lower jaw. Transversal movements of the lower jaw, the position of the joints in these movements. Transversal articular and incisal dentures. Angle of transversal articular and incisal tract.

Absolute strength of the chewing muscles, endurance of periodontal tissues, chewing efficiency. The act of chewing. The phases of the chewing movements of the lower jaw when nibbling and chewing food.

The examination of a patient in the clinic of prosthodontics

Examination of the patient in the clinic of prosthodontics. Subjective examination. Anamnesis. Anamnesis of the disease, anamnesis of life, advanced and comorbidities diseases.

Deontology in the clinic of prosthodontics.

External examination of the face: skin and mucous membrane. Palpation of the Temporomandibular joints, submandibular, parotid salivary glands. Examination of the oral mucosa: examination, palpation, determination of the degree of compliance, temperature, tactile and taste sensitivity.

Examination of teeth, dentition and periodontium. Visual examination, probing, percussion, palpation, determination of the degree of mobility of teeth, determination of the degree of atrophy of periodontal disease.

Determination of the type of occlusion, analysis of diagnostic models, determination of occlusion height.

X-ray diagnostics methods: contact radiography, X-ray imaging, teleradiography, two-dimensional tomography, three-dimensional computed tomography.

Special examination methods: electrodontometry, galvanometry, thermodiagnosics. Determination of endurance the periodontal tissues to the load, gnathodynamometry.

Determination of the functional state of the blood supply of the mucous membrane of the cavity: capillarography, reoparodontography, determination of buffer zones.

Static and functional methods for determining chewing efficiency. The study of the function of the chewing muscles. Graphic methods for determining chewing efficiency. Myotonometry, electromyography, electromyomascicography.

Examination of the Temporomandibular joint: palpation, auscultation, radiography, tomography, electromyarthography, phonography.

General clinical methods of research. Allergological methods of research. Biochemical analysis of saliva and blood.

Establishment of nosological form of the disease. Establishing diagnosis.

The medical history, as a medical, statistical and legal document.

Psychological preparation of a patient for prosthetics. Preparation of the oral cavity for prosthetics.

Materials used in prosthodontics

Basic and auxiliary materials used in prosthodontics. Classification, biomedical requirements for materials. General characteristics of materials: mechanical, physical, chemical, technological properties.

Alloys of metals. Solders. Plastics. Porcelain weights. Sital. Modeling materials. Cements. Covering materials. Abrasive materials. Types of gypsum, the scope of application in the laboratory of prosthodontics.

Impressions used in prosthodontics. Types, purposes. Impression trays. Impression materials, medical and biological requirements for them. Crystallizing, thermoplastic, alginate, polymerizing impression materials. Models. Types, purposes.

Treatment of defects in tooth crowns with fixed prostheses

Defects of tooth crowns. Etiology, forms. Types of prosthetic structures in the treatment of defects in the crowns of teeth, indications for their use.

Anesthesia used in the preparation of teeth. Types, techniques.

Basic principles of tooth preparation. Used tools. Preservation of hard tissues of teeth. The reaction of tooth pulp and the periodontal tissues to preparation. Providing fixation and stabilization of immovable prosthesis. Retraction of the gingiva. Retraction threads and solutions. Types of shoulders in the cervical part of the teeth, methods of their formation.

Impressions and impression materials used for defects in dentition. Getting the impression from the upper and lower jaw. Manufacturing of models. Articulators. Fixing of models in articulators.

Aesthetic and prosthetic predictions in the treatment of defects in the frontal teeth.

Prosthetic fillings, their types. The basic principles of the preparation of the cavity of the teeth. Making inlays for different groups of teeth. Making onlays for different groups of teeth. Making overlays for different groups of teeth.

Veneers. Wax-up. Mock-up. Making veneers for different teeth.

One-piece ceramic crowns. Indications for use. Preparation of teeth under an integral ceramic crown.

Metal ceramic crowns. Indications for use. Preparation of teeth under a metal ceramic crowns.

Temporary crowns. Methods of production, rules of fixation.

Restoration of completely destroyed teeth. Post core. Types. Indications for use. Evaluation the condition of the root canals with complete destruction of the tooth crowns. Preparation of root canals. Methods of making pins. Getting the impression. Rules for fixing the pin structures.

Cementation of non-removable structures in the treatment of tooth defects. Using a rubberdam for isolation.

Removal of non-removable prostheses from the oral cavity.

Laboratory stages of manufacturing non-removable structures in the treatment of defects in the crowns of teeth.

Pathological abrasion of the teeth. Types, clinical features. Reduction in the height of occlusion with pathological abrasion of the teeth. Prosthetic treatment for pathological abrasion of teeth.

Treatment of partial toothless with fixed prostheses

Partial toothless. Classification. Etiology and clinic of partial toothless, morphological, functional, aesthetic, phonetic and psychological factors. Violation of morphofunctional integrity in the dentoalveolar system in the partial defects: the presence of teeth participating and not participating in the functioning. The negative influence of partial toothless to the body.

Clinical and radiographic studies of a patient with partial toothless. Evaluation of supporting teeth.

Planning prosthetic treatment for partial toothless. Prosthetic structures used in the treatment of partial toothless. Types, indications for use. Constructive elements of bridges.

Basic principles of tooth preparation with partial toothless. Creation of parallelism of supporting teeth. Formation of various types of shoulders. Preparation of supporting teeth of bridges for metal ceramics. Preparation of supporting teeth of bridges for full ceramic crowns. Making prosthetic fillings as

support elements in the preparation of bridges. Preparation of three or more supporting teeth in the preparation of bridges.

Temporary bridges. Methods of production, rules of fixation.

Impressions, impression materials and impression trays used in the treatment of partial toothless. Getting of impressions from the upper and lower jaw with partial toothless, making models. Determination of the central relationship of jaws with partial toothless. Manufacturing of bases with occlusal ridges. Articulators. Fixation of models in articulators. Filling and cementing of non-removable structures made in the treatment of partial toothless.

Laboratory stages of manufacturing non-removable structures used for partial toothless.

Secondary deformations of dentition. Types of deformations. Features of prosthetic treatment with secondary deformations of dentition. Principles of preparation of supporting teeth in the preparation of bridges in patients with secondary deformation of dentition.

Adhesive bridges. Indications for use. Methods of production, rules of fixation.

Basic principles of tooth preparation with weakened periodontium.

Treatment of partial toothless with removable prostheses

Indications of the removable prostheses with partial toothless. Comparative evaluation of the restoration of partial defects of dental rows from a functional, aesthetic, phonetic, hygienic psychological and preventive point of view.

The main components of partially removable prostheses. The basis of the prosthesis, its borders. Parts of the metal frame, large and small connecting links, their borders. Occlusive overlays. Clammers, their types. Design features of different clasps. Clam line. Clamping system. Counter-tipping elements – Kipmayders.

Clinical and radiological studies of patients with partial toothless, the analysis of diagnostic models. Materials and tools used in the preparation of partial removable prostheses. Parallelometry, methods of conducting.

Impressions and impression materials used in the preparation of partial removable prostheses. Getting the impression from the upper and lower jaw. Manufacturing of gypsum models.

Determination of the central relationship of jaws with partial toothless. Manufacturing of bases with occlusal ridges. Fixation of jaws in a state of central relationship. Use of the face arch.

Articulators used in the preparation of partial plate prostheses, plugging models into an occludator. Artificial teeth. Methods of setting artificial teeth in the preparation of partial plate prostheses. Checking the wax structure of the prosthesis in the oral cavity. Clinical evaluation of the location of artificial teeth, arches, clasps, the form of the prosthesis in place of contacts with natural teeth.

Delivery of partial removable plate and clasp prostheses. The imposition of partial prostheses on the prosthetic bed, the clinical evaluation of the finished prosthesis. Advice to patients.

Adaptation to partial removable dentures. Repair of the bases of prostheses, addition of clasps, artificial teeth.

Laboratory stages of manufacturing of partial removable prostheses, technological processes, used materials.

Partial removable dentures made with the use of standard attachments. Telescopic prostheses that do not have a hyoid arc on the lower jaw and do not have a palatine plate on the upper jaw. Clinical and laboratory stages. Convenience for patients and the role of these prostheses in the prevention of periodontal disease.

Treatment of complete toothless with removable prostheses

Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Changes in toothless jaws by aging. Design features of complete removable plate prostheses. Borders of the prosthesis.

Fixation and stabilization of prostheses on toothless jaws.

Clinical and X-ray methods for examining patients with toothless jaws. Planning prosthetic treatment of patients in the preparation of complete removable prostheses. Preparation for prosthetic treatment.

Selection of impression material and tray. Removal of an anatomical impression from the upper and lower jaws and making models. Individual trays, manufacturing methods. Filling of an individual tray by carrying out functional tests of Gerbst. Removal of functional impression from the upper and lower jaws, making models.

The state of relative physiological dormancy. Methods of determination. The central relationship of the jaws. Methods of determination and fixation. Articulators used in the preparation of complete removable prostheses. Fixation of models in articulators. Artificial teeth. Methods of setting.

Checking the wax structure of complete removable plate prostheses in the oral cavity. Identification of errors and methods for their elimination.

Delivery of complete removable plate prostheses. Imposition of the prosthesis on the prosthetic bed. Recommendations for patients who first use complete removable dentures. Nutrition of patients with complete removable plate prostheses.

Adaptation of patients to complete removable plate prosthesis. Correction of complete removable plate prostheses. Regulation of occlusion. Changes in the prosthetic bed when wearing complete removable plate prostheses.

Features of making a complete removable plate prosthesis for a single jaw. Complete removable lamellar implant prostheses. Features of prosthetics in geriatric period. Overdenture prosthesis.

Laboratory stages of manufacturing complete removable plate prostheses. Repair of complete removable plate prostheses. Relocation. Substitution of the basis. Soft lining materials.

Implant supported prostheses

Implant supported prostheses. Planning dental implantation in accordance with the prosthetic design. Indication for the dental implants. Methods of prosthetics for dental implantation. Biomechanics of the dental implantation. Regulation of the occlusion in implant supported prostheses. Methods of diagnostic imaging. Diagnostic models and surgical patterns.

Abutments, their types and features. The choice of abutments, suitable for the design of the prosthesis. Nuances that require special attention when connecting the implant with the abutment. Implant supported prostheses with cement and screw retention.

Implant supported prostheses in partial toothless. Restoration of single tooth by dental implant. Features of prosthetic treatment with the implant supported prostheses with a number of natural teeth. Removing the impression using open and closed tray techniques. Used impression materials. Collapsible and individual trays used in the open tray method. Monophase and double-layer impression materials.

Implant supported prostheses in full toothless. The choice of abutments for implant supported prostheses. Locator abutment, ball abutment, bar system. Immediate loading after dental implantation. Care for dental implants. Importance of hygienic measures in the prevention of peri-implantitis.

**Prosthetic treatment of pathological abrasion,
Temporomandibular joint diseases
and periodontal diseases**

Pathological abrasion of the teeth. Etiology. Types, clinical features. The type of bite and its role in the formation of vertical, horizontal and mixed forms of pathological abrasion. Reduction of the lower third of the face and the height of the occlusion with pathological abrasion. Prosthodontics treatment of pathological abrasion.

Anatomico-physiological features of the Temporomandibular joint. Arthritis, arthrosis, habitual dislocation, semi-invisible. Etiology, clinic, diagnostics, differential diagnostics. Influence of diseases of the dentoalveolar system on the Temporomandibular joint. The use of prosthetic devices in the complex treatment of Temporomandibular joint diseases. Correction of occlusion. Interocclusal splints.

Traumatic occlusion associated with periodontal diseases. Basic principles of prosthetic treatment of periodontal diseases. Biomechanical bases of medical influence provided by prosthetic devices. Method of selective mellowing. Temporary and fixed splints. Modern removable and non-removable splints.

Maxillofacial prosthodontics

Defects of maxillofacial region. Classification. Prosthetic approaches used for maxillofacial defects. Their classification.

First medical aid for jaw fractures. Fractures of the upper jaw. Etiology, classification, clinic, displacement of broken fragments. Prosthetic treatment. Fractures of the lower jaw. Etiology, classification, clinic, displacement of broken fragments. Prosthetic treatment.

Obturator. Prosthetic treatment for resection of the upper and lower jaw.
The preparation of epithezes in the treatment of extraoral face defects.

EXPLANATORY SHEET

Teaching of the subject "Prosthodontics" is conducted on 4 courses, 7 semesters.

II year

IV semester - Propaedeutics of prosthodontics

90 hours - 3 credits

Lectures - 10 hours

Practical training - 35 hours

Independent work - 45 hours

III year

V semester - Treatment of defects in tooth crowns with fixed prostheses

90 hours - 3 credits

Lectures - 14 hours

Practical training - 31 hours

Independent work - 45 hours

VI semester - Treatment of partial toothless with fixed prostheses

120 hours - 4 credits

Lectures - 14 hours

Practical training - 46 hours

Independent work - 60 hours

IV year

VII semester - Treatment of partial toothless with removable prostheses

90 hours - 3 credits

Lectures - 10 hours

Practical training - 35 hours

Independent work - 45 hours

VIII semester - Treatment of complete toothless with removable prostheses

90 hours - 3 credits
Lectures - 10 hours
Practical training - 50 hours
Independent work - 30 hours
Production practice - 3 credits

V course

IX semester - Optional section:

1. Fixed prostheses
2. Removable dentures
3. Implant supported prostheses

120 hours - 4 credits
Lectures - 16 hours
Practical training - 59 hours
Independent work - 45 hours

X semester - Clinical prosthodontics

180 hours - 6 credits
Lectures - 20 hours
Practical training - 115 hours
Independent work - 45 hours
State examination - 3 credits

THEMATIC PLANS OF LECTURES

Prosthodontics – 1

PROPAEDEUTICS OF PROSTHODONTICS

Thematic plan of lectures

II year IV semester

1. The subject of prosthodontics. The basic designs made in the clinic of prosthodontics. The history of prosthodontics. Prosthodontics, as a discipline in Azerbaijan. Prosthodontics offices and dental laboratories. Disinfection and sterilization in the office of prosthodontics.
2. Functional anatomy of the maxillofacial region. Upper and lower jaw. Mucous membrane of the oral cavity. Temporomandibular joint. Muscles of the maxillofacial region. Periodontal diseases. Teeth. Teeth rows. Articulation and occlusion. Bite, physiological and pathological types of occlusion. Biomechanics of the lower jaw. The act of chewing.
3. Patient examination in the clinic of prosthodontics. Basics of deontology. Clinical examination. Special examination methods. X-ray examination. Chewing efficiency and methods of its determination. General clinical examination. Preparation of the patient for prosthetics.
4. Basic and auxiliary materials used in prosthodontics. Requirements for materials: medical-biological, mechanical, physical, chemical, technological. Alloys of metals, solders, plastics, sital, porcelain. Modeling, covering, abrasive materials, cements. Gypsum, its varieties, areas of application in prosthodontics.

5. Impressions used in prosthodontics. Types, classification. Impression trays. Impression materials, medical and biological requirements, presented to them. Crystallizing, alginate, thermoplastic, polymerizing impression materials. Models. Types, purposes.

Prosthodontics – 2

TREATMENT OF DEFECTS IN TOOTH CROWNS WITH FIXED PROSTHESES

Thematic plan of lectures

III year V semester

1. Functional anatomy of the maxillofacial region. Teeth. Periodontal disease. The concept of biological width. Teeth rows. Occlusion. Bite. Determination of the central relationship of jaws in the treatment of defects in the crown part of the teeth. The use of the face-bow. Articulators.
2. Defects in the crowns of teeth. The influence of caries and non-carious diseases on hard tissues of teeth. Prosthetic structures, preparation in the treatment of defects in the crowns of teeth. Types, indications for use.
3. Basic principles of tooth preparation. Preservation of hard tissues of teeth. Reaction of pulp and periodontal to preparation. Providing fixation and stabilization of permanent prostheses on the teeth. Retraction of the gingiva. Creation of shoulders in the cervical part of the teeth.
4. Restoration of defects in the crowns of teeth by Prosthodontic restorations. The principles of manufacturing onlay, inlay, overlay structures.
5. Veneers. The principles of manufacturing wax-up and mock-up. Aesthetic and prosthodontic expectations in the planning of treatment of defects in the frontal teeth.

6. The rationale for the treatment of artificial crowns defects crowns of teeth. One-piece ceramic crowns. Metal ceramic crowns. Preparation of teeth for whole ceramic and metal ceramic crowns.

7. Temporary crowns. Methods of their preparation. Laboratory stages of manufacturing non-removable structures in the treatment of defects in the crowns of teeth.

Prosthodontics – 3

TREATMENT OF PARTIAL TOOTHLESS WITH FIXED PROSTHESES

Thematic plan of lectures

III year VI semester

1. Pathological abrasion of the teeth. Types, clinical features. Reduction of the height of occlusion with pathological abrasion of the teeth. Prosthodontic treatment of pathological abrasion of teeth.
2. Restoration of teeth with complete destruction of the crown part. Evaluation of the condition of the root canals with complete destruction of the crown part of the teeth. Post core, manufacturing methods, making impression, rules for fixing the structure.
3. Partial toothless. Etiology, clinic, diagnostics, classification. Changes in the maxillofacial system with partial toothless. Patient examination. Evaluation of supporting teeth. Planning of prosthetic treatment with partial toothless. Biological and clinical justification for treatment with bridge prostheses. Design features of bridges.
4. Basic principles of tooth preparation with partial toothless. Impressions used to treat partial toothless. Determination of the central relationship of jaws with partial toothless. Articulators. Clinical and laboratory stages of manufacturing bridges with different support elements. Temporary bridges.

5. Secondary deformation of dentition. Their types, clinical features. Features of prosthodontic treatment. Basic principles of tooth preparation with secondary deformations of dentition.
6. Adhesive bridges. Design features, manufacturing methods. Planning of prosthetic treatment of teeth with weakened periodontium with deformations of dentition. Basic principles of tooth preparation with weakened periodontium.
7. Errors in the treatment of defects in the crowns of teeth and dentition with non-removable structures. Methods of their prevention. Complications when using non-removable structures. Methods for their elimination.

Prosthodontics – 4

TREATMENT OF PARTIAL TOOTHLESS WITH REMOVABLE PROSTHESES

Thematic plan of lectures

IV course VII semester

1. Partial toothless. Etiology, classification. Functional overload of teeth. Indications for removable prostheses. Types of partial removable prostheses. Principles of sharing of masticatory load. Biomechanics of partial removable prostheses. Stabilization and fixation in the oral cavity of partial removable lamellar and clasp prostheses. Complications arising from the use of partial removable prostheses.
2. Features of basic and auxiliary materials used in the preparation of partial removable prostheses. The main structural elements of partial removable prostheses. The basis of the prosthesis, its boundaries. Parts of the metal frame, large and small connecting elements, their boundaries. Occlusive overlays. Clammers, their varieties. Features of the structure of various clasps. Clammer line. Clammer system. Counter-tipping elements – Kipmayders. Parallelometry, methods of conducting.
3. Clinical and radiological examination of patients with partial toothless, analysis of diagnostic models. Principles of preparation of impression from jaws with partial toothless. Determination and fixation of the central relationship of jaws in partial toothless. Use of the facial arch.

4. Articulators. Artificial teeth. Methods of setting artificial teeth in the preparation of partial removable plate prostheses. Checking the wax structure of the prosthesis in the oral cavity.
5. Delivery of partial removable lamellar and clasp prosthesis to the patient. Clinical evaluation of the finished prosthesis. Adaptation to partial removable prosthesis. Advice to patients.

Prosthodontics – 5

TREATMENT OF COMPLETE TOOTHLESS WITH REMOVABLE PROSTHESES

Thematic plan of lectures

IV course VIII semester

1. Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Changes in toothless jaws by aging. Biomechanics of toothless jaws. Methods of fixation and stabilization of complete removable prostheses on toothless jaws. Design features of complete removable dentures. Clinical radiology examination of patients with complete toothless. Planning prosthodontic treatment in patients. Preparation for prosthodontic treatment.
2. Preparation of anatomical, functional and differentiated impression of toothless jaws. Justification of the choice of impression material. Functional tests of Gerbst. The state of relative physiological rest of the lower jaw. Methods for determining it. The central relationship of the jaws. Methods of its determination and fixation.
3. Articulators used in the preparation of complete removable plate prostheses. Plugging models into the articulator. Artificial teeth. Methods of their formulation. Checking in the oral cavity of the wax structure of a complete removable plate prosthesis. Methods for identifying and eliminating errors.
4. The delivery of a complete removable plate prosthesis. Imposition of the prosthesis on the prosthetic bed. Recommendations for patients who first use complete removable plate prostheses. Nutrition of patients using complete removable plate prostheses. Correction of prostheses. Regulation of occlusion.

Changes in the prosthetic bed when wearing complete removable plate prostheses.

5. Features of manufacturing a complete removable plate prosthesis on one jaw. Immediate complete removable plate prosthesis. Features of prosthetics of patients in old age. Prostheses on the preserved root of the teeth (overdenture).

Prosthodontics – 6

Optional section

FIXED PROSTHESES

Thematic plan of lectures

V course IX semester

1. Defects of tooth crowns. Etiology, forms. Prosthetic structures used in the treatment of defects in tooth crowns, their types and indications for use. Basic principles of tooth preparation. Preservation of hard tissues of teeth. Reaction of pulp and periodontal to preparation. Providing fixation and stabilization of permanent prostheses on the teeth. Retraction of the gingiva. Shoulders created in the cervical part of the teeth.
2. Restoration of defects in the crowns of teeth by Prosthodontic restorations. Onlay, inlay, overlay design. Veneers. The principles of manufacturing wax-up and mock-up mock-up. Aesthetic and prosthodontic expectations in the planning of treatment of defects in the frontal teeth.
3. The rationale for the treatment of artificial crowns defects crowns of teeth. One-piece ceramic crowns. Metal ceramic crowns. Preparation of teeth for whole ceramic and metal ceramic crowns. Temporary crowns. Laboratory stages of manufacturing non-removable structures in the treatment of defects in the crowns of teeth.
4. Restoration of teeth with complete destruction of the crown part. Evaluation of the condition of the root canals with complete destruction of the crown part of

the teeth. Post core, manufacturing methods, making impression, ways of fixing the structure.

5. Pathological abrasion of the teeth. Types, clinical features. Reduction of the height of occlusion with pathological abrasion of the teeth. Prosthodontic treatment of pathological abrasion of teeth.
6. Partial toothless. Etiology, clinic, diagnosis, classification, changes in the maxillofacial region with partial toothless. Evaluation of supporting teeth, planning of prosthodontic treatment. Biological and clinical justification for the treatment with bridges, constructive features of bridges. Basic principles of tooth preparation with partial toothless, Impressions used in the treatment of partial toothless, determination of the central relationship of jaws. Articulators.
7. Clinical and laboratory stages of manufacturing bridges with different support elements. Secondary deformation of dentition. Their types, clinical features. Features of prosthodontic treatment. Basic principles of tooth preparation with secondary deformations of dentition.
8. Temporary bridges. Adhesive bridges. Design features, manufacturing methods. Planning of prosthodontic treatment of teeth with weakened periodontium. Basic principles of tooth preparation with weakened periodontium.

Prosthodontics – 6

Optional section

REMOVABLE PROSTHESES

Thematic plan of lectures

V course IX semester

1. Partial toothless. Etiology, classification. Types of partial removable prostheses, indications for use, their biomechanics. Principles of sharing of masticatory load. Fixation and stabilization in the oral cavity of partial removable lamellar and clasp prostheses. The main structural elements of partial removable prostheses, the rationale for their use, the main and auxiliary materials used in their preparation. The basis of the prosthesis, parts of the metal frame, large and small connecting elements, occlusal lining, kipmayder. Clammers. Parallelometry, methods of conducting.
2. Clinical and radiological examination of patients with partial toothless, analysis of diagnostic models. Principles of preparation cast of jaws with partial toothless. Determination and fixation of the central relationship of jaws in partial toothless. Face-bow. Articulators. Artificial teeth. Methods of setting artificial teeth on the plate prostheses.
3. Checking the wax structure of the prosthesis in the oral cavity. Delivery of a partial removable plate and clasp prosthesis to the patient. Clinical evaluation of the ready prosthesis. Adaptation to partial removable prosthesis. Advice to patients. Complications arising from the use of partial removable prostheses.

4. Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Changes in toothless jaws by aging. Biomechanics of toothless jaws. Methods of fixation and stabilization of complete removable prostheses on toothless jaws. Design features of complete removable dentures.
5. Clinical radiology examination of patients with complete toothless. Planning prosthodontic treatment in patients. Preparation for prosthodontic treatment. Preparation of anatomical, functional and differentiated impression of toothless jaws. Justification of the choice of impression material. Functional tests of Gerbst.
6. The state of relative physiological rest of the lower jaw. Methods for determining it. The central ratio of the jaws. Methods of its determination and fixation. Articulators used in the preparation of complete removable plate prostheses. Fixing models into the articulator. Artificial teeth. Methods of their placement.
7. Checking in the oral cavity of the wax structure of a complete removable plate prosthesis. Methods for identifying errors and their elimination. Delivery of a complete removable plate prosthesis. Imposition of the prosthesis on the prosthetic bed. Recommendations for patients who first use complete removable plate prostheses. Adaptation to the prosthesis. Nutrition of patients using complete removable plate prostheses.
8. Correction of prostheses. Regulation of occlusion. Changes in the prosthetic bed when wearing complete removable plate prostheses. Features of making a complete removable plate prosthesis on one jaw. Immediate complete removable plate prosthesis. Features of prosthetics of patients in geriatric period. Prostheses on the preserved root of the teeth (overdenture).

Prosthodontics – 6

Optional section

IMPLANT SUPPORTED PROSTHESES

Thematic plan of lectures

V course IX semester

1. Partial toothless. Etiology, clinic, diagnostics, classification. Changes in the maxillofacial system with partial toothless. Patient examination. Evaluation of supporting teeth. Functional overload of teeth.
2. Planning of treatment with partial toothless. Indications for the preparation of permanent prostheses with defects in the dentition. Biological and clinical justification for treatment with bridge prostheses. Design features of bridges. Possible complications when using non-removable prostheses in partial toothless.
3. Indications for the preparation of removable dentures with partial defects in the dentition. Types and design features of partial removable dentures. Biomechanics of partial removable dentures. Principles of sharing of masticatory load. Possible complications when using partial removable dentures.
4. Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Changes in toothless jaws by aging. Biomechanics of toothless jaws. Design features of complete removable plate prostheses. Principles of sharing of masticatory load. Possible complications when using complete removable dentures.

5. Justification for the use of dental implants. Methods of prosthetics for dental implantation. Biomechanics for dental implantation. Regulation of occlusion in implant supported prostheses.
6. Methods of diagnostic imaging. Diagnostic models and surgical patterns. Planning dental implantation in accordance with the prosthetic design. Abutments, their types and features. Implant supported prostheses with cement and screw retention.
7. Implant supported prostheses in partial toothless. Restoration of single tooth by dental implant. Features of prosthetic treatment with the support of implants with a number of natural teeth. Implant supported prostheses in full toothless. Selection of abutments for implant supported prostheses.
8. Immediate loading after dental implantation. Care for dental implants. Importance of hygienic measures in the prevention of peri-implantitis. Possible complications of implant supported prostheses.

Prosthodontics – 7

CLINICAL PROSTHODONTICS

Thematic plan of lectures

V course X semester

1. Prosthetic appliances, produced in the treatment of defects in the crowns of a part of the teeth. Basic principles of tooth preparation. Onlay, inlay, overlay. Veneers. One-piece ceramic, metal-ceramic crowns. Temporary crowns. Restoration of teeth with complete destruction of the crown part. Post core.
2. Non-removable prosthetic appliances, prepared in the treatment of partial toothless. Constructive elements of bridges. Basic principles of tooth preparation with partial toothless. Secondary deformations of dentition. Features of prosthodontic treatment. Adhesive bridges.
3. Removable prosthetic appliances, produced in the treatment of partial toothless. Types and basic constructive elements of partial removable prostheses. Clinical and laboratory stages of manufacturing partial removable plate and clasp prostheses.
4. Removable prosthetic appliances, produced in the treatment of complete toothless. Design features of complete removable plate prostheses. Clinical and laboratory stages of manufacturing complete removable plate prostheses.
5. Partially removable dentures with standard locks. Telescopic prostheses that do not have a hyoid arc on the lower jaw and do not have a palatine plate on the upper jaw. Features of making a complete removable plate prosthesis on one jaw. Immediate complete removable plate prosthesis. Features of prosthetics of

patients in geriatric period. Protheses on the preserved root of the teeth (overdenture).

6. Justification for dental implantation. Methods of prosthetics for dental implantation. Biomechanics for dental implantation. Regulation of occlusion in implant supported protheses. Methods of diagnostic imaging. Planning dental implantation in accordance with the prosthetic design. Abutments, types, features. Implant supported protheses with cement and screw retention.
7. Implant supported protheses in partial toothless. Restoration of single tooth by dental implant. Features of prosthodontic treatment with the support of implants with a number of natural teeth. Prosthodontic part of treatment after implantation of jaws with full toothless. The choice of abutment in the preparation of removable implant supported structures. Immediate loading after dental implantation. Importance of hygiene measures in the prevention of peri-implantitis.
8. Pathological abrasion of the teeth. Types, clinical features. Prosthetic treatment of pathological abrasion of teeth. Temporomandibular joint. Anatomico-physiological features. Prosthodontic treatment for diseases of the Temporomandibular joint. Interocclusal splints.
9. Traumatic occlusion, which occurs during periodontal diseases. Basic principles of prosthodontic treatment for periodontal diseases. Biomechanical substantiation of the therapeutic effect of prosthodontic devices. Method of selective sanding. Constant and temporary splints. Modern removable and non-removable splints.
10. Defects of the maxillofacial region. Classification. Prosthodontic appliances used for defects in the maxillofacial area. Their classification. First medical aid

for jaw fractures. Obturators. Prosthetic treatment for resection of the upper and lower jaw. Preparation of epitheses with extra oral defects of the face.

THEMATIC PLANS OF PRACTICAL LESSONS

Prosthodontics – 1

PROPAEDEUTICS OF PROSTHODONTICS

Thematic plan of practical exercises

II year IV semester

1. The subject of Prosthodontics. Organization and equipment of an prosthodontic office.
2. Dental laboratory. The main production rooms, organization, equipment.
3. Demonstration of the basic designs made in the clinic of prosthodontics.
4. Modeling the anatomical shape of the 11th and 21th teeth
5. Modeling the anatomical shape of the 12th and 22nd teeth
6. Modeling the anatomical shape of the 13th and 23rd teeth
7. Modeling the anatomical shape of the 33rd and 43rd tooth
8. Modeling the anatomical shape of the 31st, 41st, 32nd and 42nd teeth
9. Modeling the anatomical shape of the 14th, 24th, 15th and 25th teeth
10. Modeling the anatomical shape of the 34th, 44th, 35th and 45th teeth
11. Modeling the anatomical shape of the 16th and 26th teeth
12. Modeling the anatomical shape of the 36th and 46th teeth
13. Modeling the anatomical shape of the 17th, 27th, 37th and 47th teeth
14. Alginate impression materials. Selection of an impression tray. Rules for the taking of impression from the upper and lower jaw.
15. Crystallizing impression materials. Selection of an impression tray. Rules for the taking of impression from the upper and lower jaw.
16. Thermoplastic impression materials. Selection of an impression tray. Rules for the taking of impression from the upper and lower jaw.
17. Polymerizing impression materials. Selection of an impression tray. Rules for the taking of impression from the upper and lower jaw.
18. Models, their types. Methods of preparation.

Prosthodontics – 2

TREATMENT OF DEFECTS IN TOOTH CROWNS WITH FIXED PROSTHESES

Thematic plan of practical exercises

III year V semester

1. Teeth. Teeth rows. Periodontal diseases. Biological width. Occlusion. Bite. Determination of the central relationship of jaws in defects of tooth crowns. The use of the face-bow.
2. Prosthetic appliances made for defects in the crowns of teeth. Their types and indications for use. Anesthesia performed during tooth preparation. Their types and techniques of conducting.
3. Impression techniques and materials used for defects in the crowns of teeth. Taking impression from the upper and lower jaws, making models. Articulators. Fixing models into the articulator.
4. Basic principles of tooth preparation. Used tools. Retraction of the gingiva. Retraction threads and liquids.
5. Basic principles of tooth preparation. Creation of ledges in the cervical part of the teeth.
6. Prosthodontic restorations, their types. Preparation inlays for different groups of teeth.
7. Preparation onlay for different groups of teeth.
8. Preparation overlays for different groups of teeth.
9. Veneers. Wax-up. Mock-up. Preparation veneers for the teeth of the upper jaw.
10. Preparation of veneers for teeth of the lower jaw.
11. One-piece ceramic crowns. Indications for use. Preparation of frontal teeth for a full ceramic crown.
12. Preparation of chewing teeth for a full ceramic crown.

13. Metal ceramic crowns. Indications for use. Preparation of various teeth for a metal ceramic crown.
14. Laboratory stages of fabrication non-removable structures in the case of defects in the crowns of teeth.
15. Temporary crowns. Methods of production, rules of fixation.
16. Cementation of non-removable structures on teeth.

Prosthodontics – 3

TREATMENT OF PARTIAL TOOTHLESS WITH FIXED PROSTHESES

Thematic plan of practical exercises

III year VI semester

1. Pathological abrasion of the teeth. Types, clinical features. Reduction of the height of occlusion with pathological abrasion.
2. Prosthodontic treatment of pathological abrasion.
3. Restoration of teeth with complete destruction of the crown part. Post core. Types. Indications for use.
4. Evaluation of root canals with complete destruction of the crown part of the tooth. Preparation of root canals.
5. Methods of manufacturing cult designs. Receipt of impressions. Rules for fixing cult designs.
6. Partial toothless. Classification. Clinical radiology examination of patients with partial toothless. Evaluation of supporting teeth.
7. Planning of prosthodontic treatment with partial toothless. Prosthetic structures made with partial toothless. Their types, indications for use. Constructive elements of bridges.
8. Basic principles of tooth preparation with partial toothless. Creation of parallelism of supporting teeth. Formation of various types of ledges.
9. Preparation of supporting teeth for metal ceramic crowns in the preparation of bridges.
10. Preparation of supporting teeth for whole ceramic crowns in the preparation of bridges.
11. Manufacturing of bridges with supporting elements in the form of Prosthodontic restorations.

12. Preparation of supporting teeth in the preparation of bridges, with the number of supporting teeth three or more.
13. Temporary bridges. Methods of production, rules of fixation.
14. Impressions used in the treatment of partial toothless. Impression materials. Impression trays.
15. Taking the impression from the upper and lower jaw with partial toothless, making models.
16. Determination of the central relationship of jaws in partial toothless. Manufacturing of bases with occlusal ridges.
17. Articulators. Fixation of models in articulators.
18. Laboratory stages of manufacturing non-removable structures with partial toothless.
19. Cementing of non-removable structures with partial toothless. Using a rubberdam for insulation. Removal of non-removable prostheses from the oral cavity.
20. Secondary deformations of dentition. Their types. Features of prosthodontic treatment of secondary deformities of dentition.
21. Principles of preparation of supporting teeth in the preparation of bridges in patients with secondary deformation of dentition.
22. Adhesive bridges. Methods of production, rules of fixation.
23. Basic principles of tooth preparation with weakened periodontium.

Prosthodontics – 4

TREATMENT OF PARTIAL TOOTHLESS WITH REMOVABLE PROSTHESIS

Thematic plan of practical exercises

IV course VII semester

1. Partial toothless. Etiology, classification. Indications for the use of removable prostheses with defects in the dentition. Types of partial removable prostheses, basic structural elements. Clinical and radiological examination of patients with partial toothless, analysis of diagnostic models. Materials and tools used in the preparation of partial removable prostheses. Parallelometry, methods of conducting.
2. Impressions and impression materials used in the preparation of partial removable prostheses. Taking impression from the upper and lower dentition. Manufacturing of gypsum models.
3. Determination of the central relationship of jaws in partial toothless. Manufacturing of bases with occlusal ridges. Fixation of jaws in the position of central occlusion. Use of the facial arch. Articulators, fixation models into articulators.
4. Artificial teeth. Methods of setting artificial teeth in the preparation of partial removable prostheses. Checking the wax structure of the prosthesis in the oral cavity. Clinical evaluation of the location of artificial teeth, arches and clasps and the shape of the prosthesis, taking into account contact with natural teeth.
5. Laboratory stages of manufacturing partial removable prostheses, technological processes, applied materials.
6. Delivery of a partial removable plate and clasp prosthesis to the patient. Imposition of partial removable prosthesis on the prosthetic bed, clinical evaluation of the finished prosthesis. Advice to patients. Adaptation to partial

removable prosthesis. Work on renewal in the basis of the prosthesis, the addition of clasps and artificial teeth.

7. Partial removable prosthesis with standard attachment. Telescopic prostheses that do not have a hyoid arc on the lower jaw and do not have a palatine plate on the upper jaw. Clinical and laboratory stages. Convenience for the patient and role in the prevention of periodontal diseases.

**TREATMENT OF COMPLETE TOOTHLESS
WITH REMOVABLE PROSTHESES**

Thematic plan of practical exercises

IV course VIII semester

1. Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Age changes in toothless jaws. Design features of complete removable dentures. Clinical and X-ray methods for examining patients with toothless jaws. Planning prosthetic treatment of patients in the preparation of complete removable prostheses. Preparation for prosthetic treatment.
2. Choosing a tray and impression material. Removal of anatomical impression from the upper and lower jaws, making models. Individual trays, methods of their preparation. Conducting functional tests of Gerbst by means of an individual tray. Removal of functional impression from the upper and lower jaws and making models.
3. The state of relative physiological rest of the lower jaw. Methods for determining it. The central relationship of the jaws. Methods of its determination and fixation.
4. Articulators used in the preparation of complete removable plate prostheses. Fixation models into the articulator. Artificial teeth. Methods of their formulation.
5. Check in the oral cavity of the wax structure of a complete removable plate prosthesis. Methods for identifying errors and their elimination.
6. Delivery of a complete removable plate prosthesis. Imposition of the prosthesis on the prosthetic bed. Recommendations for patients who first use complete removable plate prostheses. Adaptation to the prosthesis. Nutrition of patients using complete removable plate prostheses.

7. Correction of prostheses. Regulation of occlusion. Changes in the prosthetic bed when wearing complete removable plate prostheses.
8. Features of making a complete removable plate prosthesis on one jaw. Immediate complete removable plate prosthesis. Features of prosthetics of patients in old age. Prostheses on the preserved root of the teeth (overdenture).
9. Laboratory stages of manufacturing complete removable plate prostheses.
10. Fixing complete removable plate prostheses. Relocation. Substitution of the basis. Soft primer materials.

Prosthetic stomatology – 6

Optional section

FIXED PROSTHESES

Thematic plan of practical exercises

V course IX semester

1. Prosthodontic structures used in the treatment of defects in tooth crowns. Their types, indications for use. Anesthesia used in the preparation of teeth. Their types, technique of carrying out. Impressions and impression materials used for defects in dentition. Taking the impression from the upper and lower jaw. Manufacturing of casts. Articulators. Fixation of models in articulators.
2. Basic principles of tooth preparation. Used tools. Retraction of the gingiva. Retraction threads and liquids. Types of shoulders created in the cervical part of the teeth. Prosthodontic restorations, their types. Making onlay, inlay, overlay for various teeth. Veneers. Wax-up. Mock-up. Preparation of veneers for the upper and lower jaw.
3. All ceramic crowns. Indications for use. Preparation of various teeth for all ceramic crowns. Metal ceramic crowns. Indications for use. Preparation of various teeth for metal ceramic crowns. Temporary crowns. Methods of production, rules of fixation. Cementation of non-removable structures for defects of the crown part of the teeth.
4. Restoration of teeth with complete destruction of the crown part. Cult constructions (post core). Types. Indications for use. Evaluation of root canals with complete destruction of the crown part of the tooth. Preparation of root canals. Methods of preparation cult designs. Taking of impressions. Rules for fixing cult designs.

5. Pathological abrasion of the teeth. Types, clinical features. Reduction of the height of occlusion with pathological abrasion of the teeth. Prosthodontic treatment for pathological abrasion of the teeth.
6. Partial toothless. Classification. Clinic-radiological examination of patients with partial toothless. Evaluation of supporting teeth. Planning of prosthetic treatment with partial toothless. Prosthetic structures made with partial toothless. Elements of bridges. Basic principles of tooth preparation with partial toothless. Preparation of supporting teeth for metal ceramic and integral ceramic crowns in the preparation of bridges.
7. Manufacturing of bridges with supporting elements in the form of inlays. Preparation of supporting teeth in the preparation of bridges, with the number of supporting teeth three or more. Preparation of wax-up and mock-up for defects in the dentition. Temporary bridges. Methods of preparation, rules of fixation.
8. Impressions used for partial toothless. Impression materials. Impressions trays. Individual trays. Methods of their preparation. Determination of the central relationship of jaws with partial toothless. Articulators. Plugging models into the articulator. Cementing of non-removable structures with partial toothless. Application of the cofferdam for insulation.
9. Secondary deformations of dentition. Their types. Features of prosthetic treatment with secondary deformations of dentition. Principles of preparation of supporting teeth in the preparation of bridges in patients with secondary deformities of dentition.
10. Adhesive bridges. Methods of their preparation, rules of fixation. Fundamental principles of tooth preparation with weakened periodontium.

Prosthodontics – 6

Optional section

REMOVABLE PROSTHESES

Thematic plan of practical exercises

V course IX semester

1. Partial toothless. Etiology, classification. Indications for the use of partial removable prostheses for defects in the dentition. Types of partial removable prostheses, the main components. The basis of the prosthesis, parts of the metal frame, large and small connecting elements, occlusal lining, kipmayder. Clammers. Materials and tools used in the preparation of partial removable prostheses.
2. Clinical and radiological examination of patients with partial toothless, analysis of diagnostic models. Parallelometry, methods of conducting it. Impressions and impression materials used in the preparation of partial removable prostheses. Taking impressions from the upper and lower dentitions. Determination and fixation of the central relationship of jaws in partial toothless. Use of the facial arch. Articulators. Fixation of models in articulators. Artificial teeth. Methods of setting artificial teeth in the preparation of partial removable prostheses.
3. Checking the wax structure of the partial removable prosthesis in the oral cavity. Clinical evaluation of the location of artificial teeth, arches and clasps and the shape of the prosthesis, consideration contact with natural teeth. Delivery of a partial removable plate and clasp prosthesis to the patient. Imposition of partial removable prosthesis on the prosthetic bed, clinical evaluation of the finished prosthesis. Advice to patients. Adaptation to partial removable prosthesis.

4. Partially removable dentures with standard locks (attachment). Telescopic prostheses that do not have a hyoid arc on the lower jaw and do not have a palatine plate on the upper jaw. Clinical and laboratory stages. Ease of use and role in the prevention of periodontal disease.
5. Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Age changes in toothless jaws. Design features of complete removable plate prostheses. Clinical and X-ray methods for examining patients with toothless jaws. Planning treatment of patients in the preparation of complete removable prostheses. Preparation for treatment.
6. Selection of impression material and tray. Taking of anatomical impression from the upper and lower jaws, making models. Individual trays, methods of their preparation. Conducting functional tests of Gerbst by means of an individual tray. Removal of functional impression from the upper and lower jaws and making models.
7. Condition of relative physiological rest of the lower jaw. Methods for determining it. Making an occlusal roller with a wax base. The central relationship of the jaws. Methods of its determination and fixation. Articulators used in the preparation of complete removable plate prostheses. Fixation models into the articulator. Artificial teeth. Setting artificial teeth in the preparation of complete removable plate prostheses.
8. Check in the oral cavity of the wax structure of a complete removable plate prosthesis. Methods for identifying errors and their elimination. Delivery of a complete removable plate prosthesis. Imposition of the prosthesis on the prosthetic bed. Adaptation to the prosthesis. Recommendations for patients who first use complete removable plate prostheses. Correction of complete removable prostheses. Regulation of occlusion. Changes in the prosthetic bed when wearing complete removable plate prostheses Complications arising from the use of removable prostheses.
9. Features of making a complete removable plate prosthesis on one jaw. Immediate complete removable plate prosthesis. Features of prosthetics of

patients in geriatric period. Protheses on the preserved root of the teeth (overdenture).

10. Fixing complete removable plate protheses. Work on renewal in the basis of the prothesis, the addition of clasps and artificial teeth. Substitution of the basis. Soft primer materials.

Prosthodontics – 6

Optional section

IMPLANT SUPPORTED PROSTHESES

Thematic plan of practical exercises

V course IX semester

1. Partial toothless. Etiology, clinic, diagnostics, classification. Changes in the maxillofacial system with partial toothless. Patient examination. Evaluation of supporting teeth. Functional overload of teeth.
2. Planning of treatment with partial toothless. Indications for the preparation of fixed prostheses with defects in the dentition. Design features of bridges. Clinical and laboratory stages of manufacturing bridges. Possible complications when using non-removable prostheses with partial toothless.
3. Indications for the preparation of removable dentures with partial defects in the dentition. Design features of partial removable dentures. Clinical and laboratory stages of manufacturing partial removable prostheses. Possible complications when using partial removable dentures.
4. Complete toothless. Anatomical and physiological features of toothless jaws. Classification. Changes in toothless jaws by age. Design features of complete removable plate prostheses. Clinical and laboratory stages of manufacturing complete removable prostheses. Possible complications when using complete removable dentures.
5. Implant supported prostheses. Justification for the use of dental implants. Methods of prosthetics for dental implantation. Biomechanics for dental implantation. Regulation of occlusion in implant supported prostheses.
6. Methods of diagnostic imaging. Diagnostic models and surgical patterns. Planning dental implantation in accordance with the prosthetic design.

Abutments, their types and features. The choice of abutments, suitable for the design of the prosthesis. Nuances that require special attention when connecting the implant with the abutment. Implant supported prostheses with cement and screw retention.

7. Removing the impression using open and closed tray techniques. Used impression materials. Collapsible and individual trays used in the open tray method. Monophase and double-layer impression masses.
8. Implant supported prostheses in partial toothless. Restoration of single tooth by dental implant. Features of prosthetic treatment with the support of implants with a number of natural teeth.
9. Implant supported prostheses in complete toothless. Selection of abutments for implant supported prostheses. Locator abutment, bar abutment, bar system.
10. Immediate loading after dental implantation. Care for dental implants. Importance of hygienic measures in the prevention of peri-implantitis. Possible complications in the use of prostheses with the support of implants.

CLINICAL PROSTHODONTICS

Thematic plan of practical exercises

V course X semester

1. Prosthetic structures, produced in the treatment of defects in the crowns of teeth. Fundamental principles of tooth preparation. Retraction of the gingiva. Types of shoulders created in the cervical part of the teeth. Prosthodontic restorations. Preparation of various teeth under onlay, inlay, overlay and veneer. Impressions and impression materials used in the treatment of defects in the crown part of the teeth.
2. One-piece ceramic crowns. Metal ceramic crowns. Preparation of different groups of teeth for whole ceramic and metal ceramic crowns. Temporary crowns. Restoration of teeth with complete destruction of the crown part. Evaluation of root canals with complete destruction of the crown part of the teeth and their preparation. Post core, methods of their preparation, taking impression, rules of fixation.
3. Partial toothless. Planning of prosthetic treatment. Non-removable prosthetic structures, prepared in the treatment of partial toothless. Constructive elements of bridges. Basic principles of tooth preparation in partial toothless. Preparation of supporting teeth for all ceramic and metal ceramic crowns in the preparation of bridges. Temporary bridges.
4. Secondary deformations of dentition. Features of prosthetic treatment. Principles of preparation of supporting teeth in the preparation of bridges with secondary deformations of dentition. Adhesive bridges. Basic principles of tooth preparation with weakened periodontium.
5. Partial toothless. Manufacturing of partial removable prostheses with secondary deformation of dentition. Types of partial removable prostheses, the

- main components. Impressions and impression materials used in the preparation of partial removable prostheses. Determination of the central ratio of jaws with partial toothless. Setting artificial teeth.
6. Checking the wax structure of the prosthesis in the oral cavity. Delivery to the patient of partial removable lamellar and clasp prosthesis. Adaptation to partial removable prosthesis. Partial removable dentures with standard locks. Telescopic prostheses that do not have a hyoid arc on the lower jaw and do not have a palatine plate on the upper jaw.
 7. Complete toothless. Design features of complete removable dentures. Preparation for treatment. Anatomical and functional impressions. The state of relative physiological rest of the lower jaw. The central ratio of the jaws. Artificial teeth. Methods of their formulation. Check in the oral cavity of the wax structure of a complete removable plate prosthesis.
 8. Delivery of a complete removable plate prosthesis. Correction of prostheses. Changes in the prosthetic bed when wearing complete removable plate prostheses. Features of making a complete removable plate prosthesis on one jaw. Immediate complete removable plate prosthesis. Features of prosthetics of patients in geriatric period. Prostheses on the preserved root of the teeth (overdenture).
 9. Implant supported prostheses. Planning dental implantation in accordance with the prosthetic design. Justification for the use of dental implants. Methods of prosthetics for dental implantation. Biomechanics for dental implantation. Regulation of occlusion in implant supported prostheses. Methods of diagnostic imaging. Diagnostic models and surgical patterns.
 10. Abutments, their types and features. The choice of abutments, suitable for the design of the prosthesis. Nuances that require special attention when connecting the implant with the abutment. Implant supported prostheses with cement and screw retention.
 11. Prosthesis of jaws with support on implants with partial toothless. Prosthetics for implantation of one tooth. Features of treatment with the support of

- implants with a number of natural teeth. Taking the impression using open and closed tray techniques. Impression materials. Collapsible and individual trays used in the open tray method. Monophase and double-layer impression masses.
12. Implant supported prostheses at full toothless. The choice of abutments for implant supported prostheses. Locator abutment, ball abutment, bar system. Immediate loading after dental implantation. Care for dental implants. Importance of hygienic measures in the prevention of peri-implantitis.
 13. Pathological abrasion of the teeth. Types, clinical features. Reduction of the height of occlusion with pathological abrasion. Prosthetic treatment of pathological abrasion.
 14. Temporomandibular joint. Anatomical-physiological features. Prosthodontic treatment of Temporomandibular joint diseases. Interocclusal splints.
 15. Prosthodontic treatment of periodontal diseases. Method of selective melloning. Constant and temporary splints. Modern splints.
 16. Defects of the maxillofacial region. Classification. Prosthetic structures used for maxillofacial defects. Their classification. First medical aid for jaw fractures. Obturators. Prosthodontic treatment for resection of the upper and lower jaw. The preparation of epithezes in the treatment of extraoral face defects.

PRACTICAL SKILLS ON THE PROGRAM OF PROSTHODONTICS

1. The basis of general examination in the clinic of prosthodontics
2. The basis of a special examination in the clinic of prosthodontics
3. The basis of X-ray examination in the clinic of prosthodontics
4. Determine the chewing efficiency
5. Sculpting the anatomical shape of the upper incisors
6. Sculpting the anatomical shape of the upper canines
7. Sculpting the anatomical shape of the upper premolars
8. Sculpting the anatomical shape of the upper molars
9. Sculpting the anatomical shape of the lower incisors
10. Sculpting the anatomical shape of the lower canines
11. Sculpting the anatomical shape of the lower premolars
12. Sculpting the anatomical shape of the lower molars
13. Taking impression from the upper and lower jaw with alginate impression materials
14. Taking impression from the upper and lower jaws with crystallized impression materials
15. Taking impression from the upper and lower jaws with thermoplastic impression materials
16. Taking impression from the upper and lower jaw with polymerizing impression materials
17. Taking casts
18. Carry out measurements on diagnostic casts
19. Conducting parallelometry
20. Fixation models into the articulator
21. Carry out biological separation
22. Performing a gingiva retraction
23. Creating different types of shoulders in the cervical part of the teeth
24. Making prosthodontic restorations for different teeth

25. Making inlays for different teeth
26. Making prosthodontic restorations overlay for different teeth
27. Making wax-up and mock-up
28. Making veneers for different teeth
29. Preparation different teeth under an integral ceramic crown
30. Preparation different teeth under a metal ceramic crown
31. Preparation the root canal for pins
32. Taking impression for pins
33. Making temporary crowns
34. Cementing non-removable structures for defects of the crown part of the teeth
35. Removing non-removable structures from the oral cavity
36. Making adhesive bridges
37. Creating parallelism of the supporting teeth during their preparation with partial toothless
38. Preparation supporting teeth with secondary deformations of supporting teeth
39. Making bases with occlusal ridges
40. Determining the central relationship of the jaws for defects in the dentition
41. Apply the face-bow
42. Making setting of artificial teeth on removable prostheses
43. Checking the wax structure of the partial removable prosthesis in the oral cavity
44. Delivery of partial removable prosthesis to the patient
45. Making partial removable dentures with standard locks
46. Preparation of telescopic prostheses
47. Making an individual tray
48. Fitting an individual tray when carrying out functional tests
49. Determine the position of relative physiological dormancy
50. Determine the central position of the jaws in full toothless
51. Holding the jaws in the central position at full toothless

52. Checking the wax construction of a complete removable prosthesis in the oral cavity
53. Delivery of a complete removable prosthesis to the patient
54. Correction of removable prostheses
55. Fixing removable dentures
56. To produce surgical templates for implant supported prostheses
57. Taking the impression with an open tray in implant supported prostheses
58. Taking the impression with a closed tray in implant supported prostheses
59. Prostheses with a single tooth implantation
60. Prosthetic supported by implants for partial toothless
61. Prosthetic with implants for complete toothless
62. Produce prosthetic appliances for pathological abrasion
63. Produce prosthetic appliances for diseases of the Temporomandibular joint
64. Carry out selective melloving for periodontal disease
65. Produce removable splints for prosthetic treatment of periodontal diseases
66. Produce non-removable splints for prosthetic treatment of periodontal diseases
67. Provide first medical assistance for jaw fractures
68. Produce prosthetic structures for fractures of the upper and lower jaw
69. Produce prosthetic structures for resection of the upper and lower jaw
70. Produce epithezes in the treatment of extraoral face defects

**PROGRAM OF PRODUCTION PRACTICES ON PROSTHODONTICS
FOR STUDENTS OF IV COURSE**

1. The diagnosis at the examination in the clinic of prosthodontics
2. Taking impression from the upper and lower jaw with alginate impression materials and casting models
3. Taking impression from the upper and lower jaw with crystallizing impression materials and casting models
4. Taking impressions from the upper and lower jaw with thermoplastic impression materials and casting models
5. Taking impressions from the upper and lower jaw with polymerizing impression materials and casting models
6. Retraction of the gingiva and the creation of various types of ledges in the cervical part of the teeth
7. Preparation of inlays, inlays, overlays and veneers for various teeth
8. Preparation of various teeth under a single ceramic and metal ceramic crown
9. Preparation of root canals for pivot structures and impression making
10. Preparation of temporary crowns
11. Cementation of non-removable structures with defects of the crown part of the teeth
12. Removal of non-removable prostheses from the oral cavity
13. Creation of parallelism of supporting teeth with partial toothless
14. Production of adhesive bridges
15. Conducting functional tests with an individual tray and taking samples
16. Definitions of the relative physiological rest position and the central ratio of the jaws
17. Checking the wax structure of a partial removable prosthesis in the oral cavity
18. Delivery of a partial removable prosthesis to the patient
19. Checking the wax structure of a complete removable prosthesis in the oral cavity

20. Delivery of a complete removable prosthesis to the patient and correction of prostheses.