**Thematic plan of seminars**
**in the discipline "Prosthetic Dentistry"**
**for students in the year of admission 2023**
**according to the educational program 31.05.03 Dentistry,**
**orientation (profile) Dentistry (specialty), full-time education**
**for the 2025-2026 academic year**

| № | Thematic blocks | Practical training in the framework of the thematic block[3] | Hours (academic)[4] |
|---|---|---|---|
| 5 semester | | | |
| **1.** | Organization of an orthopedic dentistry clinic. Familiarization with the work and equipment of the dental laboratory. Documentation of the orthopedic dentistry clinic. Medical history (outpatient card of a dental patient form 043.U) -its structure, filling rules, and value.[1]<br>Modern equipment and facilities. Sanitary and hygienic standards of the doctor's office and dental laboratory. Disinfection and sterilization systems in clinics and laboratories.[2] Part 1 | PT | 2 |
| | Organization of orthopedic dentistry clinics. Familiarization with the work and equipment of the dental laboratory. Documentation of the orthopedic dentistry clinic. Medical history (outpatient card of a dental patient form 043.U) -its structure, filling rules, and value.[1]<br>Safety practices in the clinic and laboratory. Medical registration and reporting documentation of an orthopedic dentist (forms # 37, # 39, # 43-U, order, informed consent).[2] Part 2 | PT | 2 |
| **2.** | Methods of examination of patients with defects of hard tissues of teeth and dentition rows in the clinic of orthopedic dentistry. Methods for determining the functional state of the dentoalveolar system (clinical, functional, laboratory and static).[1]<br>Features of examination of a patient with pathology of hard tissues of teeth in the clinic of orthopedic dentistry. Methods for determining the functional value of teeth (clinical and laboratory). Methods for determining chewing efficiency (static and functional). Static methods (Agapov, Oxman).[2] Part 1 | SM | 2 |
| | Methods of examination of patients with defects of hard tissues of teeth and dentition rows in the clinic of orthopedic dentistry. Methods for determining the functional state of the dentoalveolar system (clinical, functional, laboratory and static).[1]<br>Periodontogram of V. Y. Kurlyandsky (structure, filling, analysis). Functional (chewing tests - Gelman, Rubinov, gnathodynamometry) and graphic (mastication, electromyography, rheography, myotonometry) examination methods. The role of scientists in the development of treatment methods in orthopedic dentistry.[2] Part 2 | SM | 2 |

| | | | |
|---|---|---|---|
| **3.** | Articulation, occlusion and its types. Physiological types of bite. Biomechanics of the lower jaw. The concept of prosthetic sinlaysilization. Factors of sinlaysilization. Laws of Hanau-Bonneville articulation.[1]<br>Articulation, occlusion and its types. Physiological types of bite. Anatomical structure of the temporomandibular joint (TMJ).[2] Part 1 | SM | 2 |
| | Articulation, occlusion and its types. Physiological types of bite. Biomechanics of the lower jaw. The concept of prosthetic sinlaysilization. Factors of sinlaysilization. Laws of Hanau-Bonneville articulation.[1]<br>Biomechanics of the lower jaw. The concept of prosthetic sinlaysilization. Factors of sinlaysilization. Laws of Hanau-Bonneville articulation.[2] Part 2 | SM | 2 |
| **4.** | Devices that reproduce the movements of the lower jaw-occludators, articulators. How to work with them.[1]<br>Occluders. Appointment. How to work with them.[2] Part 1. | SM | 2 |
| | Devices that reproduce the movements of the lower jaw-occludators, articulators. How to work with them.[1]<br>Articulators. Appointment. Classification. How to work with them.[2] Part 2 | SM | 2 |
| **5.** | Method for determining the central occlusion and the central ratio of the jaws. Fixation of dentition rows in the central occlusion using occlusion registers and wax bases with occlusal rollers.[1]<br>Method for determining the central occlusion and the central ratio of the jaws. Classification of A. I. Betelman. Fixation of dentition rows in the central occlusion using silicone materials (occlusion recorders).[2] Part 1 | SM | 2 |
| | Method for determining the central occlusion and the central ratio of the jaws. Fixation of dentition rows in the central occlusion using occlusion recorders and wax bases with occlusal rollers.[1]<br>Fixation of dentition rows in the central occlusion using wax bases with occlusal rollers. Possible errors of the doctor at the stage of determining the central occlusion and the central ratio of the jaws.[2] Part 2 | SM | 2 |
| **6.** | Defects of dental crowns, classification. Types of dentures that restore the anatomical shape of teeth. Inlays, artificial crowns, pin-stump structures - their types, indications for use.[1]<br>Pathology of hard tissues of teeth (carious and non-carious origin). Classification. Etiology. Pathogenesis. Clinic.<br>Classification of cavities by Black, WHO. Index of occlusal tissue destruction surface of the tooth (IROPZ). Types of dentures that restore the anatomical shape of teeth.[2] Part 1 | SM | 2 |
| | Defects of dental crowns, classification. Types of dentures that restore the anatomical shape of teeth. Inlays, artificial crowns, pin-stump structures - their types, indications for use.[1]<br>Types of dentures that restore the anatomical shape of teeth. Indications for the use of inlays, artificial crowns, pin-stump structures. Their types.[2] Part 2 | SM | 2 |

| | | | |
|---|---|---|---|
| **7.** | Rules of preparation of hard tissues of teeth. Types and justification of the choice of abrasive tools. Methods of anesthesia during preparation.[1]<br>Preparation of hard tooth tissues. Tactics of working in "four hands". Types of preparation for crowns, control of the thickness of preparation of hard tissues of teeth. The sequence of stages of preparation of hard tooth tissues. Tools. Safety zones for individual teeth.[2] Part 1 | SM | 2 |
| | Rules of preparation of hard tissues of teeth. Types and justification of the choice of abrasive tools. Methods of anesthesia during preparation.[1]<br>The mechanism of pain and analgesia in the preparation of hard tooth tissues for artificial crowns. Analysis of the correctness of dental preparation on models..[2] Part 2 | SM | 2 |
| **8.** | Impressions. Kinds. Impression materials. Classification. Features. Indications for use. Methods ofobtaining anatomical impressions and criteria for evaluating their quality.[1]<br>Impressions. Types of prints. Features of obtaining anatomical and" refined " impressions. Impression spoons: characteristics, varieties.[2] Part 1 | SM | 2 |
| | Impressions. Kinds. Impression materials. Classification. Features. Indications for use. Methods ofobtaining anatomical impressions and criteria for evaluating their quality.[1]<br>Impression materials. Classification. Properties of impression materials. Indications for use.[2] Part 2 | SM | 2 |
| **9.** | Orthopedic treatment of dental hard tissue defects with inlays. Types of inlays. Forming cavities for inlays. Clinical and laboratory stages of making inlays: (inlay, onlay, overlay, pinlay). Materials and technologies. [1]<br>Methods of treating dental hard tissue pathology with inlays. Inlays types – "inlay","onlay", "overlay","pinlay". Design features of inlays depending on the IROPZ.[2] Part 1 | SM | 2 |
| | Orthopedic treatment of dental hard tissue defects with inlays. Types of inlays. Forming cavities for inlays. Clinical and laboratory stages of making inlays: (inlay, onlay, overlay, pinlay). Materials and technologies. [1]<br>Basic principles of forming cavities for inlays. Forming cavities for inlays. ("O", "OM", "OD", "MOD"). Creating a inlays retention zone. Parapulpar channels and pins. Theory of stress-strain state of tooth crown tissues.[2] Part 2 | SM | 2 |
| **10.** | Plastic and porcelain crowns. Features of dental preparation. Clinical and laboratory stages of manufacturing. Plastics and porcelain masses.[1]<br>Indications and contraindications for treatment with plastic and porcelain crowns. Plastics and dental porcelain: composition, properties. Principles and methods of preparing teeth with the formation of a ledge. Methods of making temporary crowns. Morphology of the gingival furrow (fold). Methods of gum retraction. Gingival canal protection edges when preparing teeth with a ledge.[2] Part 1 | SM | 2 |

| | | | |
|---|---|---|---|
| | Plastic and porcelain crowns. Features of dental preparation. Clinical and laboratory stages of manufacturing. Plastics and porcelain masses. [1]<br>Determining the color of artificial crowns. Storing and fixing plastic and porcelain crowns in the oral cavity. Possible mistakes of the doctor and technician at the stages of manufacturing plastic and porcelain crowns. Ways to eliminate them.[2] Part 2 | SM | 2 |
| **11.** | Solid cast metal crowns. Features of dental preparation.[1]<br>Indications for treatment with solid-cast crowns. Features of preparation of hard tissues of teeth for solid crowns. Dental safety zones.[2] Part 1 | SM | 2 |
| | Solid cast metal crowns. Features of dental preparation.[1]<br>Possible mistakes and complications of the doctor when preparing teeth for solid crowns. Ways to eliminate them.[2] Part 2 | SM | 2 |
| **12.** | Clinical and laboratory stages of manufacturing solid-cast crowns. Construction materials. Precision casting techniques for metal alloys. Basic and auxiliary materials. Equipment.[1]<br>Metal alloys for the manufacture of solid cast metal crowns. Stages of precision casting of metal alloys. [2] Part 2 | SM | 2 |
| | Clinical and laboratory stages of manufacturing solid-cast crowns. Construction materials. Precision casting techniques for metal alloys. Basic and auxiliary materials. Equipment.[1]<br>Clinical and laboratory stages of manufacturing solid-cast crowns. Possible errors and solutions. [2] Part 2 | SM | 2 |
| **13.** | Solid-cast metal crowns with facing (cermet, metal-plastic). Basic and auxiliary materials. Characteristics of porcelain masses, classification of dental ceramics. Features of dental preparation.[1]<br>Indications for treatment with solid-cast crowns with facing (cermet, metal-plastic). Features of preparation of hard tissues of teeth for solid crowns with lining with various materials. .[2] Part 1 | SM | 2 |
| | Solid cast metal crowns with facing (metal-ceramic, metal-plastic). Basic and auxiliary materials. Characteristics of porcelain masses. Features of dental preparation.[1]<br>Basic and auxiliary materials. Composition and properties of ceramic masses. Classification of dental ceramics. [2] Part 2 | SM | 2 |
| **14.** | Clinical and laboratory stages of manufacturing metal-ceramic and metal-plastic crowns. Possible errors of the doctor and technician at the stages of manufacturing solid-cast and solid-cast crowns with facing. Ways to eliminate them [1]<br>Clinicaland laboratory stages of manufacturing metal-ceramic crowns.<br>Clinical and laboratory stages of manufacturing metal-plastic crowns.[2] Part 1 | SM | 2 |
| | Clinical and laboratory stages of manufacturing metal-ceramic and metal-plastic crowns.. Possible errors of the doctor and technician at the stages of manufacturing solid-cast and solid-cast crowns with facing. Ways to eliminate them.[1] | SM | 2 |

| | | | |
|---|---|---|---|
| | Possible mistakes of the doctor and technician at the stages of manufacturing solid crowns.<br>Possible mistakes of the doctor and technician at the stages of manufacturing metal-plastic and metal-ceramic crowns.[2] Part 2 | | |
| **15.** | Methods of restoring defects in tooth crowns with pin structures. Indications for use. Clinical and laboratory stages of manufacturing pin structures (pin teeth, pin stump inserts, anchor pin inserts).[1]<br>Indications and contraindications for the use of pin-stump structures. Classification of pin-stump structures. Types of pin teeth, their structural features. Systematization of roots depending on the degree of destruction (according to F. N. Tsukanova). Requirements for the roots of teeth. Preparation of roots for the manufacture of a pin-stump structure.[2] Part 1 | SM | 2 |
| | Methods of restoring defects in tooth crowns with pin structures. Indications for use. Clinical and laboratory stages of manufacturing pin structures (pin teeth, pin stump inserts, anchor pin inserts).[1]<br>Methods of manufacturing pin-stump structures: (direct and indirect). Clinical and laboratory stages. Production of pin-stump structures in single-root and multi-root teeth with non-parallel channels: "inlays in inlays with pin", with "one-pin guide", standard intra-root pins with screw thread. Possible errors and complications at the stages of treatment with pin-stump structures.[2] Part 2 | SM | 2 |
| **16.** | Defects of dentition, their classification. Features of clinical examination of patients.[1]<br>Causes of dentition defects. Condition of the maxillary system with partial absence of teeth. Uncomplicated form. Theory of V. Y. Kurlyandsky. Etiology, clinic, and pathogenesis. Classification of dentition defects (Kennedy, Wild, Gavrilov).[2] Part 1 | SM | 2 |
| | Defects of dentition, their classification. Features of clinical examination of patients. [1]<br>Odontoparodontogram of V. Y. Kurlyandsky (analysis). Features of clinical examination of patients with dentition defects. Gnathodynamometry, EDI, measurement of tooth mobility with a two-parameter periodontalmeter, evaluation of the functional state of the periodontal teeth by comparing their mobility before and after the dosed load.[2] Part 2 | SM | 2 |
| **17.** | Orthopedic treatment of dentition defects with bridge-like prostheses.[1]<br>Types. structural elements. Justification of the choice of the bridge prosthesis design. The nature of the distribution of functional load on the supporting teeth.<br>Types of bridge prostheses: stamped-soldered, solid-cast, "Maryland" systems. Structural elements of bridge prostheses. Biological, clinical, and biomechanical justifications for orthopedic treatment with fixed bridges.[2] Part 1 | SM | 2 |
| | Orthopedic treatment of dentition defects with bridge-like prostheses.[1] | SM | 2 |

| | | | |
|---|---|---|---|
| | Features of preparation of supporting teeth for various types of bridge prostheses. Requirements for supporting teeth. Security zones. Errors and complications in dental preparation.[2] Part 2 | | |
| **18.** | Solid-cast, cermet and metal-plastic bridge prostheses. Bridge-like prostheses with one-sided support (cantilever).Clinicaland laboratory stages of manufacturing.[1] Indications and contraindications for the manufacture of solid-cast, cermet and metal-plastic bridge prostheses. The concept of parallelometry. Intra-and extra-oral parallelometers. Study of diagnostic models in aparallelometer: determination of-guiding supporting teeth, simulation of preparation on models. Basic principles of preparing teeth for solid-cast bridge prostheses without facing, with facing with ceramics, plastic, and compomers. Getting an updated impression. Methods. The main groupsof materials. Their characteristics [2] Part 1 | SM | 2 |
| | Solid cast, metal-ceramic and metal-plastic bridge prostheses. Bridge-like prostheses with one-sided support (cantilever). Clinical and laboratory stages of manufacturing.[1] Indications and contraindications for the use of bridge prostheses with one-sided support (cantilever) and composite bridge prostheses. Structural elements and materials for their manufacture. Clinical and laboratory stages of manufacturing solid-cast, metal-ceramic and metal-plastic bridge prostheses, bridge prostheses with one-sided support (cantilever). Criteria for evaluating the quality of a bridge prosthesis. Fixation in the oral cavity. Materials.[2] Part 2 | SM | 2 |
| | Total | | 72 |

**6 semester**

| № | Thematic blocks | Practical training in the framework of the thematic block | Hours (academic) |
|---|---|---|---|
| **1.** | Partial absence of teeth. Features of examination and laboratory methods of research of patients with partial absence of teeth during prosthetics with removable structures of prostheses. Justification of the diagnosis.[1] Partial absence of teeth, causes of development. Methods of examination of patients with partial absence of teeth.[2] Part 1 | SM | 2 |
| | Partial absence of teeth. Features of examination and laboratory methods of research of patients with partial absence of teeth during prosthetics with removable structures of prostheses. Justification of the diagnosis.[1] Clinical and functional methods of evaluation of prosthetic bed tissues. Justification of the diagnosis.[2] Part 2 | SM | 2 |
| | Partial absence of teeth. Features of examination and laboratory methods of research of patients with partial absence of teeth during prosthetics with removable structures of prostheses. Justification of the diagnosis.[1] The concept of "prosthetic field" and "prosthetic bed" Structure and properties of the oral mucosa, classification. Definition of the concepts of "transitional fold", "pliability", "mobility" of the | SM | 2 |

| | | | |
|---|---|---|---|
| | oral mucosa. Characteristics of the oral mucosa (Suppli, Lund). Pain sensitivity of the oral mucosa. Estesiometry, measurement of compliance of the prosthetic bed mucosa. [2] Part 3. | | |
| **2.** | Method for determining the central occlusion and the central ratio of the jaws in the partial absence of teeth.[1]<br>Definition of the concepts of "central occlusion", "central jaw ratio", "relative physiological rest" of the masticatory muscles and the position of the lower jaw.[2] Part 1 | SM | 2 |
| | Methodology for determining central occlusion and central ratio of the jaws in the partial absence of teeth.[1]<br>Determination of central occlusion or central ratio of the jaws in all groups of dentition defects according to A. I. Betelman.[2] Part 2 | SM | 2 |
| | Method for determining the central occlusion and the central ratio of the jaws in the partial absence of teeth.[1]<br>Errors and complications at the stage of determining the central occlusion and the central ratio of the jaws in the partial absence of teeth.[2] Part 3 | SM | 2 |
| **3.** | Removable plate prostheses. Indications for use. Structural elements. Methods of fixing removable plate prostheses. Clinical-and laboratory stages of manufacturing removable plate prostheses. [1]<br>Types of removable dentures used in the partial absence of teeth. Indications for use. Boundaries of the base of a lamellar prosthesis in the partial absence of teeth in the upper and lower jaws.[2] Part 1 | SM | 2 |
| | Removable plate prostheses. Indications for use. Structural elements. Methods of fixing removable plate prostheses. Clinical-and laboratory stages of manufacturing removable plate prostheses.[1]<br>Methods of fixing removable plate prostheses. Types of clamps and their components, purpose. Selection of the number, location and condition assessment of teeth for clamp fixation. Clamp line. Concepts: "point", "linear" and "planar" arrangement of clamps in the base of the prosthesis. Statics of removable plate prostheses depending on the number of clamps and their location in the prosthesis. Types of clamps. Components of a single-arm bent wire retaining clamp, their purpose. Definition of the concepts of fixation and stabilization of removable dentures. Methods of fixation and stabilization. [2] Part 2 | SM | 2 |
| | Removable plate prostheses. Indications for use. Structural elements. Methods of fixing removable plate prostheses. Clinical-and laboratory stages of manufacturing removable plate prostheses.[1]<br>Clinical and laboratory stages of manufacturing removable plate prostheses. Adaptation to removable dentures. Instructions to the patient about the rules of using removable plate prostheses. Correction of removable dentures. Complications that occur when using removable dentures.[2] Part 3 | SM | 2 |
| **4.** | Supported prostheses (bar, removable plate and removable bridge). Indications for use. Structural elements and their purpose. Fixing systems. Materials used in the manufacture of bar prostheses.[1] | PT | 2 |

| | | | |
|---|---|---|---|
| | Indications for treatment with bar ("supported") prostheses. Materials used in the manufacture of bar prostheses. Structural elements of the bar prosthesis, their purpose. Types of locking systems (clamp, lock, telescopic, beam). Indications, basic understandings. Indications for the manufacture of artificial crowns for clamp fixation.[2] Part 1 | | |
| | Supporting prostheses (bar, removable plate and removable bridges). Indications for use. Structural elements and their purpose. Fixing systems. Materials used in the manufacture of bar prostheses.[1]<br>Clamp. Components of the clamp. The concept of "support-retaining clamp". Biomechanics of the bar prosthesis. Operation of the "included" and "ended" saddles of the removable prosthesis.[2] Part 2 | PT | 2 |
| | Supporting prostheses (bar, removable plate and removable bridge). Indications for use. Structural elements and their purpose. Fixing systems. Materials used in the manufacture of bar prostheses.[1]<br>Characteristics of materials used in the manufacture of bar prostheses.[2] Part 3 | PT | 2 |
| **5.** | Parallelometry. Devices for parallelometry (parallelometers), their systematization, principles of operation. Methods of parallelometry.[1]<br>Parallelometers, their systematization, principles of operation. Definition of the concept of “prosthetic equator " ("line of sight”," boundary line”, "general equator line”," clinical equator " - synonyms). Options for the location of the line of sight by L. Blatterfein.[2] Part 1 | SM | 2 |
| | Parallelometry. Devices for parallelometry (parallelometers), their systematization, principles of operation. Methods of parallelometry.[1]<br>Methods of parallelometry. Stages of diagnostic measurement of the model. Tilt options for the model. Options for the location of the line of sight by L. Blatterfein.[2] Part 2 | SM | 2 |
| | Parallelometry. Devices for parallelometry (parallelometers), their systematization, principles of operation. Methods of parallelometry.[1] Determining the location of the retaining end of the clamp arm. Drawing a drawing of the frame of the bar prosthesis.[2] Part 2 | SM | 2 |
| **6.** | The sequence of clinical and laboratory stages of manufacturing soldered and solid-cast bar prostheses using the technology of investment casting. Technological processes at the stages of manufacturing bar prostheses (casting, soldering).[1]<br>Sequence of clinical and laboratory stages of manufacturing soldered bar prostheses. Soldering, equipment, materials, sequence of stages.[2] Part 1 | SM | 2 |
| | Sequence of clinical and laboratory stages of manufacturing soldered and solid-cast bar prostheses using the technology of investment casting. Technological processes at the stages of manufacturing bar prostheses (casting, soldering).[1]<br>A sequence of clinical and laboratory stages of manufacturing solid-cast bar prostheses using the technology of investment | SM | 2 |

| | | | |
|---|---|---|---|
| | casting. Casting, equipment, materials, sequence of stages.[2] Part 2 | | |
| | Sequence of clinical and laboratory stages of manufacturing soldered and solid-cast bar prostheses using the technology of investment casting. Technological processes at the stages of manufacturing bar prostheses (casting, soldering).[1]<br>Modeling of the base of the bar prosthesis, features of setting artificial teeth, replacing the wax base with a plastic one, applying the prosthesis. Recommendations to the patient on the rules of using bar prostheses. Patient adaptation to solid-cast bar prostheses.[2] Part 3 | SM | 2 |
| | Total | | 36 |

7 semester

| № | Thematic blocks | Practical training in the framework of the thematic block | Hours (academic) |
|---|---|---|---|
| **1.** | Increased tooth wear. Etiology. Pathogenesis. Classifications. Localized form of increased wear.[1]<br>Definition of "physiological" wear, its limits with age; and "pathological" wear ("delayed" and "increased"). Etiological factors. Pathogenesis. Structural and morphological changes in tooth and periodontal tissues. Classifications and general clinical manifestations of increased dental wear.[2] Part 1 | PT | 2 |
| | Increased tooth wear. Etiology. Pathogenesis.<br>Classifications. Localized form of increased wear.[1]<br>Clinical manifestations in various degrees of localized increased tooth wear. Complex methods of treatment of localized wear in the anterior and lateral parts (depending on the degree of wear). Varieties of orthopedic structures. Manufacturing technology of plastic dental diagnostic mouthguard.[2] Part 2 | PT | 2 |
| | Increased tooth wear. Etiology. Pathogenesis.<br>Classifications. Localized form of increased wear.[1]<br>Varieties of orthopedic structures. Manufacturing technology of plastic dental diagnostic mouthguard. Materials.[2] Part 3 | PT | 2 |
| **2.** | Increased wear of hard tooth tissues. Features of orthopedic treatment and features of complex rehabilitation of patients with generalized form with and without reduction in the height of the lower face. Preventive measures, medical examinations, and prognosis. ICD10- (K03. 0.).[1]<br>Clinical manifestations of generalized increased wear with a decrease in the height of the lower third of the face. The concept of myoarticular dysfunctional syndrome. Principles of complex treatment of generalized increased wear with a decrease in the height of the lower third of the face. Types of dentures.[2] Part 1 | PT | 2 |
| | Increased wear of hard tooth tissues. Features of orthopedic treatment and features of complex rehabilitation of patients with generalized form without reducing the height of the lower face. Preventive measures, medical examinations, and prognosis. ICD10 - (K03. 0).[1] | PT | 2 |

| | | | |
|---|---|---|---|
| | Clinical manifestations of generalized increased wear without reducing the height of the lower third of the face. The concept of "myostatic reflex according to Rubinov" and the physiological basis of its reconstruction. [2] Part 2 | | |
| | Increased wear of hard tooth tissues. Features of orthopedic treatment and features of complex rehabilitation of patients with generalized form without reducing the height of the lower face. Preventive measures, medical examinations, and prognosis. ICD10 - (K03. 0).[1]<br>Principles of complex treatment of generalized increased wear without reducing the height of the lower third of the face. Preventive measures, medical examinations, and prognosis.[2] Part 3 | PT | 2 |
| **3.** | Periodontal diseases. Examination of patients with periodontal diseases Methods of examination of periodontal tissues and their diagnostic significance. Traumatic periodontal overload. Complex therapy of periodontitis.[1]<br>Etiology and pathogenesis of periodontal diseases. Classification of periodontal diseases. The main symptoms of periodontitis. Determination of nosological forms of periodontal diseases-focal periodontitis and generalized periodontitis. Tasks of the orthopedic stage of complex treatment of periodontal diseases. Fundamentals of the choice of medical device designs.[2] Part 1. | SM | 2 |
| | Periodontal diseases. Examination of patients with periodontal diseases Methods of examination of periodontal tissues and their diagnostic significance. Traumatic periodontal overload. Complex therapy of periodontitis.[1]<br>X-ray methods of examination of periodontal diseases. Occlusography. Odontoparodontogram and its analysis. Gnathodynamometry. Periotestmetry, measuring devices. Getting impressions and studying diagnostic models in the articulator. Identification of supercontacts and comparison with occlusiogram data [2] Part 2. | SM | 2 |
| | Periodontal diseases. Examination of patients with periodontal diseases Methods of examination of periodontal tissues and their diagnostic significance. Traumatic periodontal overload. Complex therapy of periodontitis.[1]<br>The concept of traumatic occlusion and its types. The concept of functional overload of teeth. Selective grinding of teeth. Indications and methods of treatment. Classification of tires. Biomechanical basics of splinting. Requirements for tires. Comparative evaluation of removable and non-removable types of tires. Types зубных of dentition stabilization. Method of temporary splinting. Materials and methods of conducting research.[2] Part 3 | SM | 2 |
| **4.** | Focal and generalized periodontitis.. Etiology, pathogenesis, clinic. Orthopedic treatment of focal (localized) periodontitis. Orthopedic methods of treatment of generalized periodontitis.[1]<br>Etiology and pathogenesis of focal periodontitis. Clinic of focal (localized) periodontitis. Justification of the design of | SM | 2 |

| | | | |
|---|---|---|---|
| | splints or prostheses and their length on the basis of periodontal analysis data.[2] Part 1 | | |
| | Focal and generalized periodontitis.. Etiology, pathogenesis, clinic. Orthopedic treatment of focal (localized) periodontitis. Orthopedic methods of treatment of generalized periodontitis.[1]<br>Designs of splints and splinting prostheses: fixed, removable, combined. Conducting the clinical stage, depending on the design of the splint device or prosthesis. Orthopedic treatment of focal (localized) periodontitis [2] Part 2 | SM | 2 |
| | Focal and generalized periodontitis.. Etiology, pathogenesis, clinic. Orthopedic treatment of focal (localized) periodontitis. Orthopedic methods of treatment of generalized periodontitis.[1]<br>Orthopedic treatment of generalized periodontitis in intact patients dental rows. Orthopedic treatment of generalized periodontitis with partial absence of teeth. Types of medical devices. Clinical and laboratory stages of manufacturing splinting structures. Orthopedic treatment of patients with periodontal diseases with bar splinting prostheses with a fixation system on support-retaining clamps, telescopic, beam and lock fixation systems.[2] Part 3 | SM | 2 |
| **5.** | Features of clinical examination in the complete absence of teeth. Determination of morphological features of prosthetic bed tissues. Classifications. Biomechanics of the lower jaw. Patterns of articulation and occlusion of dentition (Bonneville's law of articulation, Hahnau).[1]<br>Characteristics of morphological features of the bone and facial skull, prosthetic bed tissues and TMJ in the complete absence of teeth. Determination of the degree of bone atrophy of the alveolar processes of the upper jaw and the alveolar part of the lower jaw (classification of Schroeder, Keller, V. Y. Kurlyandsky, A. I. Doynikov, I. M. Oxman). The structure of the mucous membrane and its features in various parts of the prosthetic bed. Classification of mucosal flexibility and mobility (Supple, Lund).[2] Part 1 | SM | 2 |
| | Features of clinical examination in the complete absence of teeth. Determination of morphological features of prosthetic bed tissues. Classifications. Biomechanics of the lower jaw. Patterns of articulation and occlusion of dentition (Bonneville's law of articulation, Hahnau).[1]<br>Biomechanics of the lower jaw. Mouth opening, Gizi chewing cycle. Movements of the lower jaw in vertical, sagittal and transversal directions. Patterns of articulation and occlusion of dentition. Articular and incisor sagittal angles; articular and incisor transversal angles. The Bonneville triangle. Balqueville corner. The concept of prosthetic stabilization. Factors of stabilization. The laws of articulation of Bonneville, Hanau. [2] Part 2 | SM | 2 |
| | Features of clinical examination in the complete absence of teeth. Determination of morphological features of prosthetic bed tissues. Classifications. Biomechanics of the lower jaw. | SM | 2 |

| | | | |
|---|---|---|---|
| | Patterns of articulation and occlusion of dentition (Bonneville's law of articulation, Hahnau).[1] Articulators, principles of designing medical devices. Device and types of articulators. Principles of designing dentures in the complete absence of teeth.[2] Part 3 | | |
| **6.** | Clinical and laboratory stages of manufacturing removable plate prostheses in the complete absence of teeth. Adaptation to prosthetics.[1] Methods of obtaining impressions from toothless jaws. Methods of manufacturing individual spoons for the upper and lower jaws (wax, plastic). Storing individual spoons. Gerbst functional tests for the upper and lower jaw. Functional impressions, the concept, and their classification.[2] Part 1 | SM | 2 |
| | Clinical and laboratory stages of manufacturing removable plate prostheses in the complete absence of teeth. Adaptation to prosthetics.[1] Determination of the central ratio of the jaws in the complete absence of teeth. Methods for determining the height of the lower part of the face. Anthropometric method for determining the central ratio of the jaws in the complete absence of teeth. Anatomical and physiological method for determining the central ratio of the jaws. Landmarks used in the design of artificial dentitions.[2] Part 2 | SM | 2 |
| | Clinical and laboratory stages of manufacturing removable plate prostheses in the complete absence of teeth. Adaptation to prosthetics.[1] Methods of setting artificial teeth. Setting teeth according to Gizi, Vasiliev, Gerber. Evaluation of the wax structure of prostheses in the occluder or articulator. Checking the wax structure of dentures in the oral cavity. Possible errors and solutions. Ways to replace a wax base with a plastic one. Technologies and materials. Application of a removable plate prosthesis with complete absence of teeth in the oral cavity. Recommendations. Correction of the prosthesis. Adaptation. The use of adhesive preparations that promote the fixation of prostheses. Part 3 | SM | 2 |
| | Total | | 36 |

**8 semester**

| № | Thematic blocks | Practical training in the framework of the thematic block | Hours (academic) |
|---|---|---|---|
| 1. | The concept of aesthetics in dentistry. The main aesthetic parameters. Facial composition; dental composition; stomato-facial composition. [1] Medical aesthetics, its structure. Research methods in medical aesthetics. Patterns in the structure of the body, face, and maxillary system of patients.[2] Part 1 | PT | 2 |
| | The concept of aesthetics in dentistry. The main aesthetic parameters. Facial composition; dental composition; stomato-facial composition.[1] The main aesthetic parameters. Analysis of | PT | 2 |

| | | | |
|---|---|---|---|
| | facial parameters in aesthetic dentistry. Aesthetic criteria of a smile.<br>The realization of aesthetic patterns in the design of dentures. Photocall and wax modeling.[2] Part 2 | | |
| | The concept of aesthetics in dentistry. The main aesthetic parameters. Facial composition; dental composition; stomato-facial composition.[1]<br>Aesthetic digital smile modeling and digital virtual planning (Digital Smile System, Planmeca Romexis Smile Design, etc.) Digital protocols for integrated planning of aesthetic dental treatment.2 Part 3. | PT | 2 |
| 2. | Modern methods of orthopedic treatment of patients with defects in hard dental tissues using ceramic veneers.1<br>Indications and contraindications for the manufacture of veneers. Principles of preparation of teeth for veneers.2 Part 1 | SM | 2 |
| | Modern methods of orthopedic treatment of patients with defects in hard dental tissues using ceramic veneers.1<br>The methods of manufacturing ceramic veneers are the method of layer-by-layer application, the method of casting or injection pressing. Materials. Characteristics of dental ceramics. Equipment..2 Part 2 | SM | 2 |
| | Modern methods of orthopedic treatment of patients with defects in hard dental tissues using ceramic veneers.1<br>Methods of manufacturing ceramic veneers (CAD/CAM milling method). Materials. equipment. Fixing ceramic veneers.2 Part 3. | SM | 2 |
| 3. | Methods of examination and determination of anatomical and topographic conditions for implantation. Indications and contraindications for dental implantation. Planning, features of orthopedic treatment based on intraosseous implants. Implantation materials 1.<br>The implant. Definition, design features of the main types of implants, requirements for structural materials.<br>The specifics of X-ray examinations and orthopantomogram readings. Features of examination of patients with partial and complete absence of teeth 2. Part 1. | SM | 2 |
| | Methods of examination and determination of anatomical and topographic conditions for implantation. Indications and contraindications for dental implantation. Planning, features of orthopedic treatment based on intraosseous implants. Implantation materials.1<br>Determination of the parameters of the volume of bone tissue of the toothless area of the jaws. Implantation under unfavorable anatomical and topographic conditions Equipment and tools. Methods of manufacturing a surgical template. 2 Part 2. | SM | 2 |
| | Methods of examination and determination of anatomical and topographic conditions for implantation. Indications and contraindications for dental implantation. Planning, features of orthopedic treatment based on intraosseous implants. Implantation materials.1<br>Implantation materials. Biotechnical standards for intraosseous dental implants (designs, dimensions, surface treatment, manufacturing methods, instrumentation). Morphology of | SM | 2 |

| | | | |
|---|---|---|---|
| | implant biocompatibility (mechanisms of osteogenesis during implantation). Biocompatibility of implants. Mechanisms of osteogenesis during implantation 2. Part 3. | | |
| 4. | Concepts: one-stage implantation; two-stage implantation. Criteria for assessing the condition of implants. The sequence of clinical and laboratory stages of orthopedic treatment with the support of implants 1.<br>The sequence of clinical and laboratory stages of orthopedic treatment of patients using single artificial crowns supported by implants. The technique of obtaining impressions with a closed spoon. Materials. Fixation: cement; screw. 2. Part 1. | SM | 2 |
| | Concepts: one-stage implantation; two-stage implantation. Criteria for assessing the condition of implants. The sequence of clinical and laboratory stages of orthopedic treatment with the support of implants 1.<br>The sequence of clinical and laboratory stages of orthopedic treatment using bridges supported by implants. The technique of obtaining impressions with an open tray with a tray. Materials 2. Part 2. | SM | 2 |
| | Concepts: one-stage implantation; two-stage implantation. Criteria for assessing the condition of implants. The sequence of clinical and laboratory stages of orthopedic treatment with the support of implants 1.<br>Removable dentures supported by two implants by means of a locking spherical push-button lock. The use of magnetic fixation of removable dentures. Beam fastening of prostheses. The use of endossal implants in maxillofacial orthopedics 2. Part 3 | SM | 2 |
| 5. | Errors and complications after dental prosthetics on implants. Hygienic measures necessary in the presence of orthopedic structures on dental implants in the oral cavity.1<br>Periimplantitis. Mucosities. Preventive measures 2. Part 1 | PT | 2 |
| | Errors and complications after dental prosthetics on implants. Hygienic measures necessary in the presence of orthopedic structures on dental implants in the oral cavity.1<br>Mechanical damage and fractures of components of implants and prostheses. Preventive measures 2. Part 2. | PT | 2 |
| | Errors and complications after dental prosthetics on implants. Hygienic measures necessary in the presence of orthopedic structures on dental implants in the oral cavity.1<br>Features of hygienic care of prosthetic structures based on dental intraosseous implants 2. Part 3. | PT | 2 |
| 6. | Diagnosis and prevention of complications in orthopedic treatment of various types of dentures and devices. Errors and complications at the stages of orthopedic treatment. Principles of deontology 1.<br>Medical errors at the stage of diagnosis and planning of orthopedic treatment of patients 2. Part 1 | PT | 2 |
| | Diagnosis and prevention of complications in orthopedic treatment of various types of dentures and devices. Errors and complications at the stages of orthopedic treatment. Principles of deontology 1. | PT | 2 |

| | | | |
|---|---|---|---|
| | Tactical, technical errors and complications in the orthopedic treatment of patients with fixed prosthesis structures. Ways to prevent and eliminate errors and complications in non-removable prosthetics2. Part 2 | | |
| | Diagnosis and prevention of complications in orthopedic treatment of various types of dentures and devices. Errors and complications at the stages of orthopedic treatment. Principles of deontology 1.<br>Tactical, technical errors and complications in the orthopedic treatment of patients with removable prosthesis structures. Ways to prevent and eliminate errors and complications in removable prosthetics 2. Part 3 | PT | 2 |
| | Total | | 36 |
| | **Total** | | **180** |

1 - topic
2 - essential content
3- PT - practical training, SM - simulation modules
4 - one thematic block includes several classes, the duration of one lesson is 45 minutes, with a break between classes of at least 5 minutes

Considered at the meeting of the Department for Prosthetic dentistry "17" May 2025, protocol No 11.

Head of the Department V.I.Shemonaev