

**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 1st year 1st semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Introduction to the specialty**

1. Introduction to the specialty (the purpose and objectives of dentistry, dental schools, the main stages of the development of dentistry). Dentistry as a single branch of general medicine, its connection with other sciences (physics, mathematics, chemistry, metallurgy, materials science, etc.). The place of propaedeutics in the system of dental education.

2. Organization of the work of the orthopedic department, orthopedic dentist.Dental laboratory. Material and technical equipment of the orthopedic department – modern types of dental installations; operation of turbine tips, micromotors, a mixer gun, a saliva pump, a dust collector, etc. mechanisms; chairs (their designs, rules of operation and care). Dental furniture.

3. Tools of the orthopedic office for the preparation of teeth: carborundum, diamond, bores made of hard-alloy metals; diamond discs, turbine diamond heads. Varieties. Indications for use. Requirements for the cutting tool. Means of isolation from saliva.

4. A set of tools for the initial examination of the patient and at subsequent stages of treatment. Special tools, devices and devices of the dental laboratory. Ergonomic basics of working in "four hands".

5. Safety precautions in the clinic and in the laboratory (delivery of the technical minimum with registration in a special journal). Sanitary and hygienic standards for orthopedic offices and dental laboratories: disinfection, sterilization, protective equipment for medical personnel and patients.. Treatment of the dentist's hands.

6. Asepsis, definition, types of sterilization with solutions of chemicals. Antiseptics, definition of types. Antiseptic drugs. The main classes of antiseptics and disinfectants. Samples to check the quality of disinfection of the used tools.

7. Rules for processing tools, impressions and dentures. Prevention of cross-infection.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 1st year 2nd semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Dental materials science**

1-2. Classification of dental materials by purpose and chemical nature. Properties of dental materials and their influence on the choice of material to restore the lost function of the dentofacial system. The concepts of load and deformation associated with the choice of material during restoration of the dentofacial system. The main types of loading and deformations under load during the functioning of structures in the oral cavity. Methods for determining the strength of materials. The influence of the chemical nature of materials on their behavior under loading. The concept of dimensional accuracy when choosing an impression material. Indicators that determine the dimensional accuracy of impression materials. Surface properties of dental materials. Hardness and methods for its determination. The concepts of roughness, abrasiveness, surface wear.

3-4. Quality criteria of dental materials. Biological evaluation of dental materials, efficacy and safety. The procedure for testing and registration of dental materials. Systems of international and national standards.

5. Classification and General characteristics of basic (structural) restorative materials for prosthetic dentistry.

6-9. Polymeric materials as the main (basic) structural materials for prosthetic dentistry. Main concepts of polymers and polymerization processes. Polymeric materials for manufacturing bases of removable dentures. Methods of estimation of technological and manipulative properties of acrylic polymeric materials for manufacturing bases of removable dentures. Comparison of the properties of acrylic materials for the manufacture of prosthetic bases of different curing methods. Manufacturing technology. The concepts of porosity, residual monomer, water absorption. Artificial teeth. Materials used for the manufacture of artificial teeth. Basic requirements for artificial teeth.

10-11. Modeling materials, investment materials, abrasive materials, classification, composition, properties, dimensional changes during hardening. Welding, soldering. Wax in dentistry, properties, types, structure.

12-13. Classification and general characteristics of impression materials. Gypsum (plaster) in dentistry. Thermoplastic compounds. Elastomeric impression materials. General information about the composition and properties. Hydrocolloid impression materials. Alginate impression materials. Composition and purpose of inorganic cements. Basic properties and norms of the standard. Technological and manipulative properties of dental cements. Classification according to the composition and appointment. Comparison of properties of inorganic and polymeric cements. The mechanism of hardening of cements. Cements dual-curing mechanism.

14-15. Adhesion and adhesion systems, purpose, composition, properties. Materials and methods of creating compounds with dental tissues. Mechanisms and conditions of formation of adhesive compounds. Methods for determining the adhesive strength. Features of adhesive connection with enamel and dentin of the tooth.

16. The concept of temporary material. Difference between temporary material and permanent structural material. Requirements for temporary materials. Temporary materials in prosthetic dentistry for the manufacture of temporary crowns and bridges. Temporary materials in therapeutic dentistry. Zinc sulfate cement, dentin paste, temporary light curing material, composition, properties, application.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 2nd year 3rd semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Propaedeutics of dentistry**

1. Introduction to the dentistry (the purpose and objectives of dentistry, dental schools, the main stages of development of dentistry). Dentistry as a single branch of General medicine. The connection dentistry with other sciences (physics, mathematics, chemistry, metallurgy, materials science, etc.). The place of propaedeutics in the system of dental education.

2. The main parts of the masticatory-facial area. Organ, the dental system, oral cavity. Dental system as a single anatomical and functional complex. The function of the masticatory system: mastication, swallowing, sound production, speech, breathing.

3. Definition of the concepts "chewing force", "chewing pressure", "chewing efficiency". Physiological basis of movements of the mandible. Temporomandibular joint: topographical relations of elements of the joints. Age-related features of joint formation under the influence of function and type of bite.

4. Anatomical and functional structure of temporary, permanent teeth: signs of teeth. Anatomical and functional structure of dentition: dentition, their shape on the upper and lower jaws. Factors that ensure the stability of the teeth (occlusal contacts, circular and interdental ligaments, the slope of the teeth, the location of the roots). Dental, alveolar and basal arches. Anatomical and functional structure of the periodontium: determination; periodontal endurance to chewing pressure in normal and pathological conditions; reserve forces of the periodontium. Physiological and pathological mobility of teeth.

5-6. Biomechanics of the chewing apparatus: phases of chewing movements of the lower jaw (mandible) when biting and chewing food. Sagittal movements of the lower jaw. The nature of condyle movement of the mandible. Angle of the sagittal articular and incisal guidance. The ratio of dentition in the protrusion (extension) of the lower jaw. Lateral movements of the lower jaw. The nature of the movement of the heads of the lower jaw. The definition of "working" and "balancing" the sides. Angle of the transversal articular and incisional pathways. Definition of concepts – "height of the lower part of the face in the Central occlusion", "height of the lower part of the face in the position of the lower jaw in relative physiological rest of the masticatory muscles". The apparatus, reproducing the movements of the lower jaw. Occlusion, types of occlusion. Borderline (transitional) types of bite. Abnormal types of bite.

7. Safety in the clinic and in the dental laboratory. Sanitary and hygienic standards for prosthetic offices and dental laboratories: disinfection, sterilization, means of protection of medical personnel and patients. Rules of processing of tools, impressions and dentures. Cleaning of the hands of a dentist. Asepsis, definition, types of sterilization by solutions of chemical substances. Antiseptics, definition of species. Antiseptic preparation. The main classes of antiseptics and disinfectants. Samples to check the quality of disinfection of used tools. Prevention of cross-infection.

8-9. Material and technical equipment of prosthetic department – modern types of dental installations; work of turbine handpieces, micromotors, the gun-mixer, the saliva ejector, etc. mechanisms; chairs (their designs, rules of operation and leaving). Dental furniture. The equipment for preparation of teeth: burs, discs, heads. Varieties. Indications for use. Cutting tool requirements. Means of isolation from saliva. Basic principles of preparation. Biological aspect. A set of equipment for the initial examination of the patient and stages of treatment. Special tools and devices of dental laboratory. Ergonomic basics of four-handed operation.

10. Additional methods of examination of the patient. Paraclinic methods of examination. Instrumental (an electromyography, electroodontodiagnosis, chewing samples and other methods). Types of radiological examination methods. Laboratory methods of examination. Complete blood count. Histological examination. Biopsy. Saliva studies, etc.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 2nd year 4th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Propaedeutics of dentistry**

1-2. Methodology. Definition of the "symptom", "syndrome", "pathological condition", "disease", "nosological form". Tasks of prosthetic treatment. Stages of the diagnostic process. Preliminary and final diagnosis. Nosological form. Classification of ICD-10.

3-4. Treatment plan, stages. Surgical and therapeutic preparation of the oral cavity for prosthetics. Classification of dentition defects. Removable and non-removable prosthetics: types, classifications, indications and contraindications. The main structural elements.

**Module 2nd – Deontology, etics, law, menegment.**

5. Ethical aspects of the professional activities of the dentist. Ethics in dentistry. Ethics in dentistry. Ethical and moral aspects of the relationship between the dentist and colleagues, the patient and his relatives. Formation and application of ethical norms and rules in professional activities. Corporate ethics. Ethical and legal compromises in dental practice. Dentist as a subject of law and a citizen. Control and self-control of the professional competence of the dentist from an ethical perspective. Ethics and morality as part of a paid dental service.

6. International collaboration in dentistry. Legal issues in the professional activities of the dentist. Common law in dentistry. Common law in dentistry: obligations and contracts. Fulfillment of obligations and contracts and liability for their violation. Legal regulation of internal labor regulations, disciplinary and material liability. Harmful working conditions in dentistry.

7-8. Medical law in dentistry. Categories and types of crimes in dental practice, personal and group responsibility. Information in dentistry: forms, legal aspects, organizational and legal methods of protection and protection. Responsibility associated with medical records. Responsibility for the disclosure of secrets. Confidentiality of personal and official data. The legislation of the Russian Federation in the field of healthcare. Normative legal acts and their application in dentistry. Legal awareness and legal culture of a dentist. Legal relations and offenses. Labor law in dentistry: competence and education. The rights of patients and their violations. Mechanisms for resolving legal conflicts. Types of legal liability in dentistry. Legal qualification of medical errors. The concept of harm to health and life caused by improper provision of medical care, the responsibility for causing it. Information security, data privacy. The principle of voluntary informed consent in dentistry. Responsibility for harm to health due to improper performance by a doctor of professional duties.

9-10. Licensing in dentistry. Compliance with sanitary and epidemiological and technological requirements. Medical technology in dental practice. Quality management in dentistry. The concept of expertise in dentistry, its types, order of appointment and production. Rights and obligations, responsibility of the expert. The challenge of the expert. Examination of the quality of dental care. Causal relationship as a tool during the examination. Departmental and non-departmental expertise in dentistry.

11-12. Management and management issues in dentistry. The organizational structure of the dental clinic (department). The organizational structure of the dental clinic, process automation, document management, economic security. Dental service. The concept of dental services, its types and components. Features of the formation of the dental services market in the Russian Federation.

Dental clinic marketing. Marketing system of the dental organization: external and internal marketing, information system. Levels of marketing services in a dental organization: administrative, medical. Methods of promoting dental services, performance evaluation. Legal aspects of marketing. Commercial responsibility of the staff of the dental organization.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 3rd year 5th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Prosthetic treatment of dentition.**

1 Diseases of hard tissues of teeth. Etiology and pathogenesis. Classification. Methods of examination in the clinic of prosthetic dentistry (static and functional). Methods of prosthetic treatment of patients with dental hard tissue defects. Choice of treatment method, prognosis of its effectiveness. Prosthetic treatment of dental hard tissue defects with inlay, onlay, overlay, pinlay.

2. Prosthetic treatment of dental hard tissue defects with artificial crowns. Types of crowns. Types of preparation for crowns, control of the thickness of preparation of hard tissues of teeth. Indications and contraindications.

3. Clinical and laboratory stages of manufacturing fixed prosthesis structures for defects in hard dental tissues: inlay, onlay, overlay, pinlay, veneers; pin structures; artificial crowns.

4-5. Methods of examination, diagnosis, and prevention of patients with dental defects for the manufacture of fixed structures of prostheses. Classification of dental defects (Kennedy and etc.). Partial absence of teeth, causes of development. Gnathodinamometry, measurement of tooth mobility with a two-parameter periodontometer, assessment of the functional state of the periodontal teeth by comparing their mobility before and after a dosed load. Biological, clinical and biomechanical substantiations of orthopedic treatment with fixed bridges. Choice of treatment method, prognosis of its effectiveness.

6-7. Methods of prosthetic treatment of patients with defects of dentition with fixed constructions. Features of preparation of supporting teeth. Types of bridges: stamped-soldered, solid-cast, "Maryland" systems. Possible complications and errors in the treatment of bridges. Clinical and laboratory stages of manufacturing fixed structures of prostheses for defects in dentition. Clinical and laboratory stages of manufacturing: soldered bridge prostheses; cast all-metal bridge prostheses; cast bridge prostheses with facing (metal-ceramic, metal-plastic); adhesive bridges



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 3rd year 6th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Clinical Anatomy and Radiology in Dentistry.**

1. Technical features of modern specialized X-ray equipment designed for different types of radiography, layer-by-layer and contrast studies of the dentoalveolar system and other parts of the facial skull. Radiation loads and ensuring the safety of studies. Methods of intra- and extraoral radiography, indications for use.
2. Methodological methods and basics of standardization of the X-ray diagnostic process in diseases of the maxillofacial region.
3. Age and functional variants of the structure of teeth and jaws.
4. Radiosemiotics of dental and periodontal disease. Radiosemiotics of periodontal disease.
5. Radiological manifestations of fractures ­of the mandible, middle and upper areas of the facial skull. Radiological examination in inflammatory ­changes and radionecrosis of jaw ­bones.
6. Radiosemiotics of benign and malignant tumors, cysts, systemic and tumor-like lesions ­of jaw bones of different genesis. Radiological examination of odontogenic and non-dontogenic diseases of the maxillary sinuses.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 3rd year 6th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Prosthetic treatment of dentition.**

1. Methods of examination, diagnosis, prevention of patients with defects in the dentition for the manufacture of removable structures of prostheses. Classification of dentition defects. Partial absence of teeth, causes of development. The structure and properties of the mucous membrane of the mouth, classification. The concepts of "prosthetic field" and "prosthetic bed", TMJ. Stationery, measurement of compliance of the mucous membrane of the prosthetic bed. The choice of the treatment method, the prognosis of its effectiveness.
2. Methods of orthopedic treatment of patients with dental row defects with removable denture structures. Classification of removable dentures. Indications for the use of various types of removable dentures. Types of fixation of plate and clasp prostheses: single-shoulder bent clasps, support-holding clasps, telescopic fastening system, lock connections (attachments, magnets). Overlapping dentures.
3. Clinical and laboratory stages of manufacturing removable structures of dentures with defects in the dentition. Clinical and laboratory stages of manufacturing removable dentures with different bases: plastic, metal, metallized, double-layer. Systems of fixation of removable dentures of plate, clasp, removable bridge-shaped: clamp, beam, lock, magnetic retention.

**Module 2nd – Сomplete absence of teeth.**

1. Methods of examination of patients with complete absence of teeth. Reconstruction of the organs of the maxillofacial region due to the complete loss of teeth. Features of clinical examination in the complete absence of teeth. Determination of the morphological features of the tissues of the prosthetic bed; 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. Yu.Kurlandsky, A. I. Doynikov). Choosing a treatment method, predicting the results. Classification flexibility and mobility of the mucosa (Supply), pain sensitivity of the mucous membrane.
2. Methods of fixing and stabilizing removable dentures in the complete absence of teeth. Methods of making individual spoons for the upper and lower jaws (wax, plastic). Methods of storing individual spoons made of plastic. Functional tests according to Gerbst et al. The boundaries of the bases of prostheses in the complete absence of teeth. Obtaining functional impressions, their classification. Impression materials.
3. Determination of the central ratio of the jaws in the absence of teeth. Methods for determining the height of the lower part of the face. Clinical and anthropometric guidelines for the selection and placement of teeth.
4. Biomechanics of the lower jaw. Regularities of articulation and occlusion of dentition in physiological types of occlusion. Bonneville's Law of articulation, Hanau. Articulators, principles of design of medicinal products. Recording the movements of the lower jaw and transferring the data to individual articulators.
5. Features of the design of prostheses with the orthognathic ratio of dentition in the occludator and articulator, on the glass. Setting according to individual occlusal curves. Artificial teeth. The "spherical" theory of articulation and its implementation in the practical restoration of dentition in the complete absence of teeth.
6. Features of the construction of dentition in prostheses with a progenic and prognatic ratio of the jaws.
7. Checking the design of prostheses in the absence of teeth. Possible errors in determining and fixing the central ratio of the jaws, the causes and methods of their elimination. Analysis of medical errors in determining the central ratio of the jaws-causes, consequences, methods of elimination
8. Storing and applying removable dentures in the absence of teeth. Adaptation to the dentures. Rules for the use of removable dentures.
9. Features of orthopedic treatment of patients with complete absence of teeth during repeated prosthetics, reducing the height of the lower part of the face. Correction of prostheses. Complications with the use of plate prostheses. Methods of prevention and elimination.
10. Clinical and laboratory stages of manufacturing complete removable dentures with various designs of bases (plastic, metal, metallized, double-layer) in the complete absence of teeth.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 4th year 7th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Prosthetics of dentition (complex prosthetics).**

1. Orthopedic treatment with clasp prostheses in the partial absence of teeth. Clinical indications for treatment with clasp prostheses. Orthopedic treatment with clasp prostheses with a fixation system using support-retaining clasps. Influence on the choice of the clamp design, the location on the occlusal surface of the lining and shoulders, the defect class - with a "distal" restriction and a natural tooth "without a distal" restriction. The "operation" of the clamp and the "artificial saddle" when applying a chewing load.

2-3. Methods of manufacturing clasp prostheses. The sequence of clinical and laboratory stages of the manufacture of clasp prostheses. Casting technique. Packing and checking the frame of the clasp prosthesis in the clinic, criteria for evaluating its quality.

4. Parallelometry. Parallelometer. The main structural elements. Principles of operation. Definition of the concept of "prosthetic equator" ("line of sight", "boundary line", "general equator line", "clinical equator" are synonyms); change of its topography depending on the position of the dentition of the model to the diagnostic pin; relationship with the choice of the type of support-retaining clamp and the axis of introduction (landing) of the frame a clasp prosthesis.

5-6. Orthopedic treatment of partial absence of teeth with clasp prostheses with telescopic, lock and beam fixation systems. Definition of the concepts of "combined dentures" – fixed and removable (combined). Clinical and laboratory stages of manufacturing. Casting technology.

7-8. Pathological erasability. Methods of orthopedic treatment. A differentiated approach in the complex treatment of pathological erasability. Features of treatment with the preserved integrity of the dentition and partial absence of teeth.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «** **Aesthetic aspects of prosthetic treatment » for students 4th year 7th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1 - Aesthetic aspects of orthopedic treatment**

1. Introduction to aesthetics. Basic concepts, definitions. Anthropometric regularities of the structure of the human body. constitutional types. Facial proportions. Golden section. facial harmony. Smile analysis. Facial proportions. face components. Fundamentals of aesthetic analysis. cephalometric analysis. Proportionality of the face. Reference lines (horizontal, vertical). Profile view: line E, nasolabial angle and lips). Classification of face profiles. Disharmony of horizontal lines. Facial index according to Isar IFM. Ideal face proportions. Analysis of the position of the lips and teeth. Lip movements. Visualization of dentition at rest. Cutting edge. Types of smiles Smile line. Smile width. Lip gap. Cheek corridor. Occlusal plane and commissural lines.

2-3 Phonetic analysis. Teeth analysis. Morphology of the dentition. Morphology of teeth. color theory. Physical, optical and biological aspects of color perception. Evaluation of the length of the incisors. Assessment of the height of the central occlusion. Evaluation of the incisal edge profile. Evaluation of the position of the teeth. Morphology of the dentition. Morphology of teeth (incisors, canines). Morphology of teeth (premolars, molars). Shape and color of teeth. Characteristics of teeth inherent in different age groups. visual illusions. Micro and macro texture of the tooth. Shape and contour. Dimensions and proportions. Incisal edge and buccal surface profile. Evaluation of the dentition. color theory. Physical, optical and biological aspects of color perception. The main problems of color perception in aesthetic restorations of teeth. Psychophysical perception of color. Intuitive color matching method. Age features of a person in the selection of colors, color adaptation. Optimal conditions for correct color determination.

4 Methods for determining the color of teeth. Modern methods of aesthetic treatment. Comparative characteristics of restorations. Electronic devices for determining the color of teeth: spectrophotometers, colorimeters, digital cameras, shadowless lamps.

5. Teeth color correction. Whitening. Influence of bleaching agents on tooth tissues and oral mucosa.

6. Photography is a means of achieving an aesthetic result. Dental photography. Oral photography technique. Types of photography to achieve an aesthetic result. Accessories for intraoral photography. Intraoral mirrors. Focus points. Photography technique. Image display software. Interpretation of the received data.

7. The aesthetic component in the prosthetics of defects in the dentition with non-removable structures.

8-9. Aesthetic component in the prosthetics of dentition defects on implants. Building an aesthetic treatment plan depending on the clinical situation.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 4th year 8th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1st – Prosthetics of dentition (complex prosthetics).**

1. Orthopedic treatment of patients with periodontal diseases. The study of X-ray images, filling in the odontoparodontogram and its analysis. Taking impressions. The study of diagnostic models in the medium-anatomical articulator, the identification of characteristic sites of closure and supercontacts (premature contacts). Comparison with occlusogram data.

2. Orthopedic methods of treatment of periodontal diseases. Drawing up a comprehensive treatment plan for periodontitis, an integrated approach to radiation. The role of oral hygiene in patients with dentures in periodontal diseases.

3. Traumatic periodontal overload. Focal periodontitis. Substantiation of the design of the splint (or splint-prosthesis) and its length on the basis of examination data and analysis of odontoparodontograms. Types of stabilization and their justification.

4-5. Direct prosthetics in the complex treatment of periodontal diseases, manufacturing methods. The technique of applying immediate prostheses. Application of complex splints and prosthetic splints.

6-7. Deformations of the dentition. The study of diagnostic models in an occluder (articulator). Biometrics of models. Radiography. Overview radiography. Diagnostics. Differential diagnosis. Formulation of the diagnosis. Substantiation of the tactics of management of patients with this pathology.

8-9. Errors and complications in orthopedic dentistry. Diagnosis and prevention of complications and errors in orthopedic treatment of various types of dentures and devices. Mistakes made at various clinical and laboratory stages of orthopedic treatment (prosthetics with pin structures, crowns, bridges, clasp, partially removable prostheses).

10. Features of orthopedic treatment of patients with complete absence of teeth during repeated prosthetics. Correction of prostheses. Methods of prevention and elimination.

11-12. Features of orthopedic treatment of patients with somatic diseases. The choice of orthopedic structures with chronic somatic diseases.

13. Diagnostics and orthopedic treatment of patients with extensive defects of the dentition and single teeth preserved on the jaws, and the roots of the teeth. Covering prostheses. Clinical picture, methods of examination.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 5th year 9th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1 - Clinical Dentistry.**

1. Organization of the work of a dentist at an outpatient appointment. Organization of orthopedic dental care for the population. Organization of work and equipment of the dental clinic. Infection control in dentistry. Occupational health and safety measures. Medical documentation. Informed consent. Deontology.

2. Evaluation of the dental system by the main clinical categories: periodontal, biomechanics, aesthetics. The main parameters of the assessment of the functional competence of the dental system. The main functions of the dentofacial system, the features of the functioning of individual components of the dentofacial system of dentofacial competence. The main parameters of the assessment of facial aesthetics, smile harmony. Anthropometric patterns of human body structure. Constitutional types. The proportions of the face. Fundamentals of aesthetic analysis.

3. Examination of a dental patient. Drawing up a plan of therapeutic and preventive measures. The main methods of examination of teeth, dentition, periodontal and oral mucosa. Additional research methods. Functional and laboratory research methods. Functional and laboratory research methods.

**Module 2 – Gnathology.**

4. Introduction. Morphofunctional elements of the dental system, their relationship. Biomechanics of the chewing apparatus. Methods for determining the central occlusion and the central ratio of the jaws. The functional state of the dental system in the partial absence of teeth. The choice of denture design (fixed dentures, removable dentures, combined dentures, dentures based on implants). Modeling of dentures in an individually configured articulator. Formation of physiological occlusal contacts in the manufacture of dentures, taking into account the biomechanics of the maxillary system and the state of the TMJ.

5. Diagnosis of the functional state of the periodontal. Odontoparodontogram. Orthopedic treatment of functional overload of periodontal tissues. Prosthetics with partial absence of teeth, accompanied by traumatic occlusion. Principles of splinting teeth, temporary and permanent splints, splinting dentures. The concept of complex treatment of periodontal diseases. The place of orthopedic treatment in the complex treatment of periodontal diseases.

**Module 3 – Implantology.**

6. The history of the development of dental (dental) implantology. Anatomical and morphological prerequisites of dental implantation. Regulatory and legal framework. Prospects and trends in the development of implantology as a science. The possibilities of modern implantology. The causes of bone loss in the area of missing teeth and their consequences. The problem of choice is an implant or a bridge prosthesis, arguments for and against. The current state of Russian implantology. Possibilities of rehabilitation of patients with dental implants.

7. Anatomical and morphological prerequisites of dental implantation. The phenomenon of osseointegration, factors affecting the optimization of this process. Morphological features of bone wound healing. Morphological features of the bone-implant contact zone. Types of defects and deformations of the alveolar part of the jaws. Indications and contraindications for the use of dental implants.

8. Diagnosis and treatment planning of patients using dental implants. Basic and additional examination methods necessary for the planning of treatment with dental implants. Types of surgical templates and methods of their manufacture. Surgical instruments used for the installation of dental implants and reconstructive interventions on the jaw bones. Medical support of implantation and related reconstructive interventions.

**Module 4 – Geriatric dentistry.**

9. Features of orthopedic treatment of elderly patients with fixed prostheses.

10. Features of orthopedic treatment of elderly patients with removable dentures. Problems of restoration of speech function (sound formation during prosthetics of patients with missing teeth.

11. Diagnosis and prevention of complications and errors in orthopedic treatment of various types of dentures and devices of elderly patients.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 5th year 10th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1 - Clinical Dentistry.**

1. Communication with patients. Psychodiagnostics and psychocorrection of the patient's emotional state at a dental appointment. Motivation of the patient for dental treatment. Modern methods of orthopedic treatment with fixed structures of prostheses.

2. Modern methods of orthopedic treatment with removable structures of prostheses. Prosthetics of dental row defects on implants. Building a treatment plan depending on the clinical situation.

**Module 2 – Gnathology.**

3. Diagnostics and orthopedic treatment of patients with deformities of the dentition and bite. Features of the diagnosis of occlusive disorders in deformities of the dentition and bite. Planning of orthopedic treatment of dental defects or dentition defects complicated by deformations of the dentition in an individually configured articulator. Malocclusion with multiple defects of the hard tissues of the teeth and partial absence of teeth. Methods of orthopedic treatment of patients with deformities of the dentition. Planning (in an individually configured articulator) orthopedic treatment of dental defects and dentition complicated by deformities of the dentition.

4. Diagnostics and orthopedic treatment of patients with TMJ pathology. Devices for examination of patients with TMJ pathology (facial arches, articulators, axiographs). Pathological conditions of the masticatory muscles. Medical tactics and types of orthopedic devices and prostheses used in the treatment of patients with TMJ pathology.

**Module 3 – Implantology.**

5. Surgical methods of dental implantation. One-stage and two-stage approaches in the use of dental implants. Implantation in complex clinical cases. Modern ideas about osteoplastic materials. Their use in dental implantology and in reconstructive interventions in the oral cavity, tooth-preserving operations. Types of reconstructive interventions on the jaw bones and the technique of their implementation.

6. Prosthetics on implants. General principles. Features of prosthetics using various implant systems. Features of prosthetics with a single-stage implantation technique. Features of prosthetics with a two-stage implantation technique. Prevention and treatment of complications arising in the early postoperative period and in the long term of dental implantation. Features and justification of professional oral hygiene during implantation and reconstructive interventions on the jaw bones.

**Module 4 – Geriatric dentistry.**

7. Diagnostics and orthopedic treatment of patients with extensive defects of the dentition and single teeth preserved on the jaws, the roots of the teeth. Problems of speech function restoration

8. Features of orthopedic treatment of patients with somatic diseases. Orthopedic treatment of patients with chronic diseases of the oral cavity.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «** **Maxillofacial surgery» for students 5th year 9th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1 - Maxillofacial Surgery - 1**

1. Prospects for the development of maxillofacial prosthetics.
2. Multidisciplinary approach in diagnostics, treatment planning of patients with diseases and injuries of the maxillofacial region.
3. Clinical and laboratory stages of manufacturing maxillofacial and prostheses in the treatment of patients with fractures of the upper jaw.
4. Orthopedic treatment of mandibular fractures. The method of obtaining impressions and features of the manufacture of a plaster model. Clinical and laboratory stages of manufacturing. Features of hygienic care for the prosthesis and prosthetic bed.
5. Features of taking impressions in the manufacture of maxillofacial prostheses in patients with resection of the upper jaw with oncological diseases.



**STUDY COURSE DESCRIPTION**

**Classes on the discipline «** **Maxillofacial surgery» for students 5th year 10th semester (2023/2024)**

**Department of prosthetic dentistry**

**Module 1 - Maxillofacial Surgery – 2**

1. Types and clinical and laboratory stages of manufacturing dental prostheses for the treatment of patients with oncological diseases of the lower jaw.
2. Types and clinical and laboratory stages of manufacturing dental prostheses for the treatment of patients with congenital and acquired defects of the soft and hard palate.
3. Features of care for patients with defects in the maxillofacial region.
4. Classification of maxillofacial and facial prostheses, methods of retention. The method of obtaining impressions and the features of making a plaster model of the face, auricle, intraocular space. Features of hygienic care for the prosthesis and prosthetic bed.
5. Prosthetics on implants. General principles in patients with maxillofacial defects. Features of prosthetics using various systems of implants. Orthopedic treatment planning using CAD/CAM technologies. Obtaining models by computer prototyping (stereolithography). Application of methods of radiation diagnostics (MSCT, MRI) in the planning of complex rehabilitation of patients.



**Утверждаю:**

Зав.кафедрой ортопедической стоматологии

профессор, д.м.н. \_\_\_\_\_\_\_\_\_\_ Г.Т.Салеева

«1» сентября 2023 год

**STUDY COURSE DESCRIPTION OF LECTURES, 2022-2023**

|  |  |
| --- | --- |
| **№**  | **Topics of lectures** |
| **1st year 2nd semester The discipline «Dentistry» Module –** **Dental materials science – 18 hours (9 lectures).**  |
| 1. | Dental materials science. The historical aspect of dental materials science. The subject of dental materials science, the main content, tasks and research methods. Safety information for working with dental materials - 2 hours. |
| 2. | Methods of processing materials. Dental laboratory equipment - 2 hours. |
| 3-4. | Physico-chemical and mechanical properties. Theoretical strength and stress concentration. Properties of natural tooth tissues and restorative materials. Adhesion, adhesive and substrate, adhesive and cohesive forces. Classification of adhesive compounds in dentistry. Types of adhesive bonds. Factors affecting the perception of appearance. Subjective and objective methods for assessing aesthetic properties. Biomaterial, bioinertness, biocompatibility. Types of biomaterial effects on the body. Categories of dental biomaterials. The biocompatibility test program - 4 hours. |
| 5. | Metals and alloys for reconstructive dentistry. General characteristics. Advantages and disadvantages. Metals and alloys used in combined designs of dentures. The main technological processes for the manufacture of prostheses from metals and alloys. Casting technique: heating, casting, gating system development - 2 hours. |
| 6. | Dental ceramics. Basic ideas about the composition, properties and manufacturing processes. Dental ceramics in combined designs of dentures. Solid cast ceramics. Materials for CAD-CAM technology. Ceramic blocks for CEREC. Prospects for the development of dental ceramics - 2 hours. |
| 7-8. | Auxiliary materials in orthopedic dentistry. Classification of auxiliary materials. Auxiliary materials at the stages of manufacturing dentures. - 4 hours. |
| 9. | Definition and general characteristics of amalgam. Composition and hardening mechanism. Classification and properties. Metal "mercury-free" filling materials - 2 hours. |

|  |  |
| --- | --- |
| **№**  | **Topics of lectures** |
| **2nd year 3rd semester The discipline «Dentistry» Module – Propaedeutics of dentistry – 20 hours (10 lectures).**  |
| 1. | Phylogenesis and ontogenesis of the masticatory apparatus and temporomandibular joint. – 2 hours. |
| 2. | Bones of the chewing apparatus, features of the structure of the jaws due to their functional load. The structure of the palatine bone. Age-related changes in the bone tissue of the jaws – morpho-biochemical changes. Topography and functions of the muscles of the maxillofacial region: masticatory muscles-raising, lowering, shifting back and forth, to the side-the lower jaw. The point of attachment and the mechanism of action. – 2 hours. |
| 3. | Features of the structure of the oral mucosa. Soft tissues of the oral cavity, functional anatomy of the oral mucosa: the mucous membrane – its "mobility" and "pliability". Topography of the frenulum folds of the mucous membrane. Changes in the mucous membrane with age and in the lose of teeth. Salivary glands, and the role of saliva in the initial period of digestion. – 4 hours. |
| 4. | Biomechanics of the mandible. The apparatus, reproducing the movements of the lower jaw. – 2 hours.  |
| 5. | Articulation, occlusion, its types. Muscular, articular and dental signs of various types of occlusion. – 2 hours. |
| 6. | Issues of organization of dental care, dental department. Structure of dental clinic, prosthetic department, dental laboratory. – 4 hours. |
| 7. | Equipment and tools for clinical admission of patients. Dental unit. Basics of preparation. Basic principles of dissection. Biological aspects of preparation. – 2 hours. |
| 8. | Methods of examination of the dental patient. Clinical methods of examination. Survey of the patient (anamnesis). – 2 hours. |
| 9. | Additional methods of examination of the patient. Paraclinic methods of examination. Instrumental (an electromyography, electroodontodiagnosis, chewing samples and other methods). – 2 hours. |
| 10. | X-ray methods of examination. Types of research, advantages and disadvantages. Indications. Reading techniques. – 2 hours. |

|  |  |
| --- | --- |
| **№**  | **Topics of lectures** |
| **2nd year 4th semester The discipline «Dentistry» Module – Propaedeutics of dentistry – 6 hours (3 lectures).**  |
| 1. | Stages of the diagnostic process. General methodology. - 2 hours. |
| 2. | Treatment plan, steps. Preparation of the oral cavity for prosthetics. - 2 hours. |
| 3. | Removable and non-removable prostheses. - 2 hours. |
| **2nd year 4th semester The discipline «Dentistry» Module – Ethics, law, managment – 10 hours (5 lectures).**  |
| 1. | Ethical aspects of the professional activities of the dentist. Ethics in dentistry. Ethical and moral aspects of medical dental work. Denist as a subject of law. Control and self-control of the professional competence of the dentist from an ethical perspective. Ethics and morality within a paid medical dental service - 2 hours. |
| 2. | Common law in dentistry: legal acts and their systematization in dentistry. Law regulation of labor relations in dentistry. Medical law in dentistry. Legal aspects of information in dentistry. Medical law in dentistry. Legal qualification of medical errors in dentistry. The principle of voluntary informed consent in dentistry. Responsibility for harm to health in dentistry - 2 hours. |
| 3. | Quality management in dentistry - 2 hours. |
| 4. | The organizational structure of the dental clinic (department). Automation of processes in the dental organization (department). Strategic management of a dental organization. Business models of a dental organization. - 2 hours. |
| 5. | The formation of the market for dental services. Concept and components of dental services. Marketing system of the dental clinic. Legal aspects of marketing in dentistry - 2 hours. |

|  |
| --- |
| **3rd year 5th semester The discipline «Dentistry» Module – Prosthetic treatment of dentition – 10 hours (5 lectures).**  |
| 1. | Pathology of the hard tissues of the teeth. Classification and etiological factors. Survey methods. Diagnostics. Differential diagnosis. Methods of orthopedic treatment using fixed structures of dentures. Types of dentures that restore the anatomical shape of the tooth. – 2 hours. |
| 2. | Prosthetic treatment of dental hard tissue defects with inlays. Types of inlays. Principles of formation of cavities beneath the inlays. Indications for different types of inlays. Direct and indirect method of making inlays. Modern technologies for manufacturing inlays in prosthetic dentistry. Impressions. – 2 hours. |
| 3. | The principle of choosing the type of orthopedic structure and the material for its manufacture using CEREC, depending on the clinical situation. Rules for preparing teeth for the manufacture of orthopedic structures using CEREC. – 2 hours. |
| 4. | Prosthetic treatment of dental hard tissue defects with artificial crowns. Types of artificial crowns. Principles of preparation of teeth in the treatment of artificial crowns. – 2 hours. |
| 5. | Types of prosthetic pin structures (pin teeth and stump crowns). Indications and contraindications for various types of pin structures. Preparation of the root. Modern technologies for manufacturing pin structures. Complications of orthopedic treatment – 2 hours. |

|  |
| --- |
| **3rd year 6th semester The discipline «Dentistry» Module – Prosthetic treatment of dentition. – 12 hours (6 lectures).**  |
| 1. | Partial absence of teeth: basic concepts, terms, definitions, identification. Causes of development. Classification of dentition defects (Kennedy, Betelman, Gavrilov). Preparation of the oral cavity for prosthetics with bridges. Biological, clinical and biomechanical substantiations of orthopedic treatment with fixed bridges. The effect on the functional state of the dentoalveolar system is the partial absence of teeth. The goal of treatment with partial absence of teeth. Classification of prostheses. Types of bridge prostheses: stamped-soldered. Clinical and laboratory stages of manufacturing bridges. Features of the preparation of the abutment teeth.– 2 hours |
| 2. | Indications for orthopedic treatment with removable prostheses. Features of prosthetics of the removable dentures are included at the end of the defects. Objective methods of examination of prosthetic bed tissues. Methods for the diagnosis of patients with dental row defects for the manufacture of removable denture structures. The choice of supporting teeth. Types of removable dentures, their positive and negative properties.– 2 hours. |
| 3. | Clinical and laboratory stages of manufacturing partial removable prostheses. Biomechanics of removable plate prosthesis – 2 hours |
| 4. | The concept of articulation, central occlusion and the central ratio of the dentition and jaws. Methods for determining the central occlusion and the central ratio in various clinical variants of dentition defects. Guidelines for the selection and placement of artificial teeth. – 2 hours |
| 5. | Methods of fixing partial removable dentures (adhesion, clamp fixation, interdental spaces). Types of fixation of plate, clasp and removable bridge prostheses: single-shoulder bent, support-holding clasps, telescopic fastening system, lock connections (attachments, magnets). The variety of clasps. – 2 hours |
| 6. | Packing and applying a removable prosthesis. Physiological basis of adaptation to removable dentures. Possible complications and methods of correction. The immediate prosthesis, the indications, characteristics. Hygienic knowledge bases for patients using removable dentures – 2 hours |
| **3rd year 6th semester The discipline «Dentistry» Module – Сomplete absence of teeth. – 10 hours (5 lectures).**  |
| 1. | Reconstruction of the organs of the maxillofacial region due to the complete loss of teeth. The structure and the ratio of the edentulous jaws, their classification. Methods of examination of patients with complete absence of teeth. Diagnosis, prognosis – 2 hours |
| 2. | Choosing a treatment method, predicting the results. Biophysical and functional factors underlying the fixation of removable dentures on toothless jaws. The concept of the valve zone. Pliability and mobility of the oral mucosa. Classification – 2 hours |
| 3. | The doctrine of fixation and stabilization of prostheses. Anatomical and functional casts from toothless jaws. Methods of making individual spoons. Functional tests according to Herbst. Impression materials – 2 hours |
| 4. | Anatomical and physiological method of restoration of occlusal ratios of the height of the lower part of the face. Fixation of the central ratio of the toothless jaws. Anthropometric landmarks and anatomical patterns of facial structure in orthognathic occlusion – 2 hours |
| 5. | Checking the design of dentures on toothless jaws (anatomical, aesthetic, phonetic, functional) – 2 hours |

|  |
| --- |
| **3rd year 6th semester The discipline «Clinical Anatomy and Radiology in Dentistry» – 10 hours (5 lectures).** |
| 1. | he use of the X-ray method in dentistry. Organization of specialized dental X-ray rooms. X-ray equipment – 2 hours |
| 2. | Methods of X-ray examination. Interpretation of radiological data. Errors in the execution and interpretation of radiographs, ways to eliminate them – 2 hours |
| 3. | Basic patterns of vital activity and structure of bone tissue and teeth – 2 hours |
| 4. | X-ray diagnostics of injuries of the maxillofacial region – 2 hours |
| 5. | X-ray diagnostics of tumors and tumor-like formations of the jaw bones – 2 hours |

|  |
| --- |
| **4th year 7th semester The discipline «Dentistry» Module – Сomplex dental prosthetics. – 14 hours (7 lectures).**  |
| 1. | Orthopedic treatment with clasp prostheses with partial absence of teeth. Clinical indications for treatment with clasp prostheses. Parts of clasp prostheses - 2 hours. |
| 2. | Clasp prostheses with a clasp fixation system, manufacturing methods - 2 hours. |
| 3. | Parallelometry. Parallelometer. Basic structural elements. Work principles. Definition of the concept of "prosthetic equator" ("line of sight", "boundary line", "common equatorial line", "clinical equator" - synonyms); change in its topography depending on the position of the dentition of the model to the diagnostic pin; relationship with the choice of the type of support-retaining clasp and the axis of insertion (fitting) of the frame of the clasp prosthesis - 2 hours. |
| 4-6. | Orthopedic treatment of partial absence of teeth with clasp prostheses with telescopic, locking and beam fixation systems. Definition of the concepts of "combined dentures" - non-removable and removable (combined) - 6 hours. |
| 7. | Pathological abrasion of teeth. Etiology and clinic. Definition of the concepts of "physiological", "delayed" and "pathological" abrasion of hard tissues of dental crowns. Methods of objective examination. The study of diagnostic models. Classification of pathological abrasion according to severity and extent. Tasks of orthopedic treatment of localized form. The role of surgical interventions (compact osteotomy) in (acceleration of the restructuring of the bone tissue of the alveolar processes. Generalized form. Clinical manifestations with and without a decrease in the height of the occlusion Costen's syndrome. Otoneurological syndrome. Tomography of the TMJ. a form of pathological wear with intact dentition without a decrease in the height of the lower face in central occlusion Diagnosis The concept of "myotatic reflex according to Rubinov" and its restructuring in the second or third degree of severity of the disease - 2 hours. |
| **4th year 8th semester The discipline «Dentistry» Module – Сomplex dental prosthetics. – 18 hours (9 lectures).**  |
| 1. | Orthopedic treatment of patients with periodontal disease. Methods for studying the condition of the periodontium and their diagnostic significance: probing, determining the mobility of teeth (periodontometry), occlusography, the study of odontoparodontograms (panoramic x-rays). Orthopedic methods of treatment of periodontal diseases. The basics of choosing designs for medical devices - 2 hours. |
| 2. | Traumatic overload of the periodontium. Identification of areas of the teeth that block the movement of the lower jaw. Occlusogram. Selective grinding of teeth that block the movement of the lower. Orthopedic methods of treatment of periodontal diseases. Fixed and removable tires. Use in the treatment of periodontal disease. Permanent and temporary tires in the treatment of periodontal diseases. Indications for temporary splinting - 2 hours. |
| 3-4. | Direct prosthetics in the complex treatment of periodontal diseases, manufacturing methods. Immediate prostheses. Complex therapy of periodontitis. Indications for extraction of teeth in periodontal diseases. The method of temporary splinting, as a therapeutic stage, aimed at creating stability of the teeth and dentition in general. Indications for the use of temporary splints. Temporary removable lamellar dentures - immediate dentures. Indications for manufacturing, their purpose: elimination of aesthetic and phonetic defects when extracting teeth with affected periodontium, redistribution of masticatory pressure and achievement of the splinting effect. Fixed and removable types of immediate prostheses. The main stages in the manufacture of immediate prostheses. Preparation of plaster models in the manufacture of immediate prostheses - 4 hours. |
| 5. | Deformation of the dentition and bite in the partial absence of teeth. Pathogenesis. Classification. Clinic - 2 hours. |
| 6. | Mistakes and complications in orthopedic treatment with removable and non-removable orthopedic structures - 2 hours. |
| 7. | Orthopedic treatment of patients with complete absence of teeth with repeated prosthetics. Features of orthopedic treatment of patients with complete absence of teeth with repeated prosthetics, lowering the height of the lower face. Complications when using lamellar prostheses - 2 hours. |
| 8. | Orthopedic treatment of patients with somatic diseases. Features Orthopedic treatment of patients with chronic diseases of the oral cavity - 2 hours. |
| 9. | Diagnosis and orthopedic treatment of patients with extensive defecations of the dentition and single teeth and teeth roots preserved on the jaws. Covering prostheses. Clinical picture, examination methods - 2 hours. |
| **5th year 9th semester The discipline «Dentistry» Module Implantology - 18 hours (9 lectures).** |
| 1. | History of formation, current state and prospects for the development of dental (dental) implantology. Possibilities of rehabilitation of patients with the help of dental implants.Anatomical and morphological prerequisites for dental implantation. The phenomenon of osseointegration. Prerequisites and factors affecting the interaction of the implant with bone tissue. Indications and contraindications for dental rehabilitation with dental implants - 2 hours. |
| 2-3. | Diagnosis and planning of implantation. Diagnosis and planning of treatment of patients using dental implants. Surgical instruments and medical support of dental implantation. The use of biocomposite materials in dental implantology and reconstructive surgery of the oral cavity - 4 hours. |
| 4-5. | Surgical techniques of dental implantation. Types of implants and features of various implant systems. Types of reconstructive interventions on the jaw bones and the technique of their implementation. Sinus lifting and options for subantral implantation. Veneer plastics and intercortical osteotomy. Basic methods of guided tissue regeneration. The use of membrane technology and titanium frames - 4 hours. |
| 6-8. | Orthopedic stage of implant treatment. Designs of various types of prostheses on dental implants - 6 hours. |
| 9. | Prevention and treatment of complications of dental implantation. Possible complications at the stage of installation of dental implants and ways to eliminate them. Prevention and treatment of complications of dental implantation - 2 hours. |
| **5th year 9th semester The discipline «Dentistry» Module Dentistry for the elderly - 4 hours (2 lectures).** |
| 1. | Features of orthopedic treatment of senile patients with fixed and removable dentures. Features of orthopedic treatment of patients with chronic diseases of the oral mucosa against the background of somatic pathology - 4 hours. |
| **5th year 10th semester The discipline «Dentistry» Module Gnatology - 18 hours (9 lectures).** |
| 1. | Gnathology as a scientific and practical direction in orthopedic dentistry - 2 hours. |
| 2. | Methods for determining the central occlusion and the central ratio of the jaws - 2 hours. |
| 3. | The functional state of the dentoalveolar system in the partial absence of teeth. Instrumental functional diagnostics of the dentoalveolar system with partial absence of teeth - 2 hours. |
| 4. | Diagnosis and orthopedic treatment of functional overload of periodontal tissues. Causes of functional overload of periodontal tissues. Traumatic occlusion. Direct and reflected traumatic nodes. Morphofunctional changes in periodontal tissues during its functional overload. Functional overload of the periodontium in periodontitis. Secondary deformations of the dentition in periodontitis - 2 hours. |
| 5. | Instrumental methods for diagnosing occlusal relationships in functional overload of the periodontium. Orthopedic treatment of functional overload of periodontal tissues. Selective grinding of teeth - 2 hours. |
| 6. | Features of the diagnosis of occlusal disorders in deformities of the dentition and occlusion associated with the pathology of hard dental tissues, with parafunctions, partial absence of teeth. Pathogenesis of vertical and horizontal deformations of the dentition. Clinic, classification, hardware functional diagnostics of dentition deformities - 2 hours. |
| 7. | Methods of orthopedic treatment of patients with deformities of the dentition Violations of occlusion with multiple defects in the hard tissues of the teeth and partial absence of teeth. The pathogenesis of deep incisal overlap and distal displacement of the lower jaw - 2 hours. |
| 8. | Clinical-instrumental and instrumental methods of examination of patients with TMJ pathology. Classification, etiology, pathogenesis, clinic, diagnosis and treatment - 2 hours. |
| 9. | Pathological conditions of the masticatory muscles, their relationship with the TMJ and occlusion, compensatory changes in the work of the masticatory muscles, treatment of pathological conditions of the masticatory muscles - 2 hours. |
| **5th year 9th semester Discipline Maxillofacial surgery - 10 hours (5 lectures).** |
| 1-2. | Tasks of the orthopedic stage in the complex rehabilitation of patients with diseases and injuries of the maxillofacial region. Organizational and therapeutic measures in the staged rehabilitation of patients with multiple trauma - 4 hours. |
| 3. | Fractures of the upper jaw. Classification of devices and prostheses. Methods of fixation of maxillofacial and prostheses in the treatment of patients with fractures of the upper jaw - 2 hours. |
| 4-5. | Classification of maxillofacial apparatuses and prostheses. Methods of retention in the treatment of mandibular fractures. Features of hygienic care for the prosthesis and prosthetic bed. Orthopedic treatment of patients with complicated jaw injuries - 4 hours. |
| **5th year 10th semester Discipline Maxillofacial surgery - 12 hours (6 lectures).** |
| 1. | Classification of postoperative defects in patients with oncological diseases of the maxillofacial region. Prosthetics for resection of the upper jaw - 2 hours. |
| 2. | Orthopedic stage of complex treatment of patients with oncological diseases of the lower jaw. The main bioadapted polymeric materials used in the manufacture of facial prostheses - 2 hours. |
| 3-4. | Features of orthopedic treatment of patients. Types of prostheses for the rehabilitation of patients with congenital and acquired defects of the soft and hard palate - 4 hours. |
| 5-6. | Modern diagnostic methods in maxillofacial prosthetics. Implantology in maxillofacial prosthetics - 4 hours. |
| **4th year 7th semester Discipline Aesthetic aspects of orthopedic treatment – 10 hours (5 lectures).** |
| 1. | Introduction to aesthetics - 2 hours. |
| 2. | Modern methods of aesthetic treatment - 2 hours. |
| 3. | Teeth color correction. Whitening - 2 hours. |
| 4. | Photography is a means of achieving an aesthetic result - 2 hours. |
| 5. | The aesthetic component in the prosthetics of defects in the dentition with fixed structures is 2 hours. |