

**STUDY COURSE DESCRIPTION**

**Classes on the discipline «Dentistry» for students 1st year 1st semester (2021/2022)**

**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 (2021/2022)**

**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 (2021/2022)**

**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.

10-11. 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 (2021/2022)**

**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 (2021/2022)**

**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 (2021/2022)**

**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 (2021/2022)**

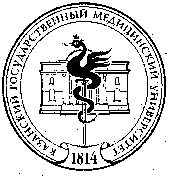
**Department of prosthetic dentistry**

**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.



**Утверждаю:**

Зав.кафедрой ортопедической стоматологии

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

«1» сентября 2020 год

**STUDY COURSE DESCRIPTION OF LECTURES, 2020-2021**

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| **№** | **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. |

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| **№** | **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. |

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| **№** | **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. |

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| **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. |

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| **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 |

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| **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 |