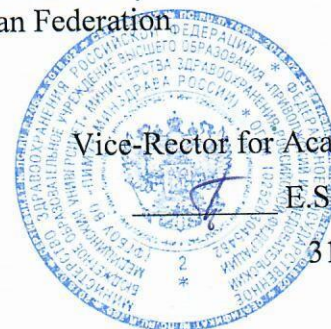


Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation



APPROVED

Vice-Rector for Academic Affairs

E.S. Bogomolova

31 August 2021

WORKING PROGRAM

Name of the academic discipline: **ORTHOPEDIC DENTISTRY**

Specialty: **31.05.03 - DENTISTRY**

Qualification: **DENTIST**

Department: **ORTHOPEDIC DENTISTRY AND ORTHODONTICS**

Form of study: **FULL-TIME**

Labor intensity of the academic discipline: **648 academic hours**

Nizhny Novgorod
2021

The working program has been developed in accordance with the Federal State Educational Standard for the specialty 31.05.03 «DENTISTRY» approved by Order of the Ministry of Science and Higher Education of the Russian Federation № 984 dated 12.08.2020.

Developers of the working program:

- Saakyan M.Yu., Doctor of Medical Sciences, Associate Professor, Head of the Department of Orthopedic Dentistry and Orthodontics «PRMU»;
- Goryacheva I. P., Candidate of Medical Sciences, Associate Professor of the Department of Orthopedic Dentistry and Orthodontics «PRMU»;
- Velmakina I. V., Candidate of Medical Sciences, Associate Professor of the Department of Orthopedic Dentistry and Orthodontics «PRMU»;
- Alekseeva N.A., Candidate of Medical Sciences, Associate Professor of the Department of Orthopedic Dentistry and Orthodontics «PRMU».

The program was reviewed and approved at the meeting of the Department of Orthopedic Dentistry and Orthodontics «PRMU» (Protocol № 1 of 30.08.2021).

Head of the Department,
Doctor of Medical Sciences, Associate Professor

 Saakyan M. Yu.

30 August 2021

AGREED
Deputy Head of EMA ph.d. of biology  Lovtsova L.V.
(signature)

30 August 2021

1. The purpose and objectives of mastering the academic discipline — ORTHOPEDIC DENTISTRY

1.1. The purpose of mastering the discipline: (participation in forming the relevant competencies): UC – 1, UPC – 5, PC – 6, PC – 7.

1.2. Tasks of the discipline:

To achieve this goal, the following tasks must be solved:

1. to familiarize students with the principles of organization and operation of the orthopedic dentistry clinic and dental laboratory;
2. to teach the peculiarities of examination of patients with defects and deformities of teeth and dentition, periodontal and TMJ diseases, deformities and defects of the maxillofacial region, pathological conditions of the dental system associated with the anomaly of the development of the dental system;
3. to teach the basics of diagnosis and planning of orthopedic treatment;
4. to teach students the methods of conducting the clinical stages of manufacturing fixed and removable denture structures;
5. to familiarize students with the laboratory stages of manufacturing various fixed and removable dentures;
6. to familiarize with possible complications in orthopedic treatment with fixed and removable dentures and methods of their elimination and prevention.

The objectives of mastering the discipline are also to master the necessary stock of theoretical knowledge and practical skills, the ability to use them in the treatment of patients, knowledge of the fundamental and organizational principles of orthopedic dentistry, dental materials science and dental prosthetic technology, prevention measures and recognition of major dental diseases, possession of clinical methods of treatment of orthopedic patients.

1.3. Requirements to the deliverables of mastering the discipline.

As a result of completing the discipline, the student should

To know:

1. Etiology, pathogenesis, diagnosis, clinic, treatment of periodontal diseases.
2. Types of splinting, requirements for tires.
3. Biomechanics of splinting structures.
4. Etiology, pathogenesis, diagnosis, clinic, treatment of deformities of the dentition.
5. Types of deformities, indications for treatment methods of each type.
6. Etiology, pathogenesis, diagnosis, clinic, treatment of pathological erasability.
7. Features of orthopedic treatment for pathological erasability.
8. Etiology, pathogenesis, clinic, treatment of parafunctions of masticatory muscles.
9. Modern methods of diagnosis of parafunctions of masticatory muscles.
10. Etiology, pathogenesis, clinic of TMJ diseases.
11. Modern methods of diagnosis of TMJ diseases.
12. Types of occlusal splints, indications for use, manufacturing methods.
13. Clinical anatomy of the toothless oral cavity.
14. The doctrine of fixing complete removable dentures.
15. Clinical and laboratory stages of prosthetics with removable plate prostheses with complete loss of teeth.
16. Principles of dispensary dental observation of various age-sex and social groups of the population, rehabilitation of patients
17. Maintenance of standard accounting and reporting medical documentation in medical organizations of dental profile

18. The complex relationship between dental health, nutrition, general health, diseases, and the use of medicines
19. General principles and features of the diagnosis of hereditary diseases and congenital anomalies.
20. Occlusion, biomechanics of the dental system.
21. Properties of dental materials and preparations used in dental practice,
22. Dental instruments and equipment
23. Stages of development of orthopedic dentistry, the role of leading scientists in the development of the discipline. Principles of the organization of the orthopedic office and department, methods of disinfection and sterilization of dental equipment and instruments
24. Classification, properties, indications for the use of impression materials, rules for working with them;
25. Methods of examination of the patient in the clinic of orthopedic dentistry, filling out the medical history, rules of deontology;
26. Indications and contraindications to dental implantation, methods of prosthetics on implants,
27. Principles and sequence of tooth preparation for stamped, solid-cast, plastic, combined and ceramic crowns;
28. Technology of various types of fixed and removable prostheses;
29. Classifications: partial loss of teeth; type of atrophy of the alveolar process with complete loss of teeth; mucous membrane; periodontal diseases; pathological erasability; deformities of the dentition; TMJ diseases;
30. Principles of cavity formation during tab prosthetics, tab modeling techniques;
31. Indications for prosthetics with pin structures with complete defects of the hard tissues of the teeth;
32. Features of treatment of patients with manifestations of intolerance to dental materials used in the manufacture of fixed prostheses.
33. Types of bites
34. Biomechanics of the maxillofacial system, occlusal theories in intact dentition;

Be able to:

1. To carry out differential diagnosis of periodontal diseases.
2. Determine indications for the choice of splinting structures.
3. Plan the splinting structure in the parallellometer.
4. To carry out differential diagnostics of deformities of dentition.
5. To determine the indications for the treatment of each type of deformities of the dentition.
6. To carry out differential diagnostics of pathological erasability.
7. To carry out various methods of orthopedic treatment for pathological erasability.
8. To carry out differential diagnostics of parafunctions of masticatory muscles.
9. To carry out modern methods of diagnostics of parafunctions of masticatory muscles.
10. To carry out differential diagnosis of TMJ diseases.
11. To carry out modern methods of diagnosis of TMJ diseases.
12. Apply various types of occlusal splints and techniques of selective grinding of teeth.
13. To determine the degree of bone atrophy of toothless jaws.
14. To carry out a technique for obtaining functional impressions from toothless jaws
15. To evaluate the immediate and long-term results of prosthetics with full removable prostheses.

16. Collect a complete medical history of the patient, including data on the condition of the oral cavity and teeth, conduct a survey of the patient and relatives (collect biological, medical, psychological and social information)
17. Interpret the results of examinations, make a preliminary diagnosis to the patient, outline the scope of additional studies to clarify the diagnosis
18. Formulate a clinical diagnosis
19. Maintain medical documentation of various types of dental outpatient and inpatient institutions
20. Promote a healthy lifestyle,
21. To carry out work on the promotion of dental health aimed at the prevention of hereditary and congenital diseases
22. Evaluate radiation and ultrasound diagnostics used in dental practice
23. Make a diagnostic impression, fix the bite with occlusal rollers, cast the model
24. Evaluate the effectiveness and safety of the treatment
25. Apply methods of asepsis and antiseptics, medical instruments, medical devices for laboratory diagnostic and therapeutic purposes
26. To carry out odontopreparation, to control laboratory production of crowns of bridge prostheses, partial and complete removable dentures, as well as to make their correction, to perform indirect restoration of the tooth crown
27. Work with dental instruments, materials, tools and equipment.
28. To determine the degree of mobility of teeth, as well as the degree of periodontal atrophy;
29. Determine the malleability and mobility of the oral mucosa;
30. Dissect cavities under tabs;
31. Prepare teeth for stamped, solid-cast, plastic, combined, metal-ceramic and ceramic crowns;
32. Perform application, infiltration, and conduction anesthesia when preparing teeth for fixed dentures;
33. Read radiographs (sighting, panoramic, orthopantomograms);
34. Simulate tabs, as well as stump pin designs on the phantom and in the oral cavity;
35. Prepare the plaster and get an impression with it, as well as compose and glue it;
36. Get impressions with elastic impression materials, cast models;
37. To store and fix tabs, pin teeth;
38. To store and fix metal, plastic and combined crowns and bridges;
39. Prepare cement for fixing fixed prostheses;
40. To stock the frames of solid-cast arch prostheses;
41. To determine the central occlusion in case of partial loss of teeth;
42. Determine the central ratio of the jaws with partial loss of teeth;
43. Check the designs of removable dentures;
44. Apply arc, partial and full removable plate prostheses;
45. To store and apply removable plates with bite pads, as well as plates with an inclined plane;
46. To carry out correction of all types of prostheses;
47. Work with fast-hardening plastics;
48. To produce wax bases with occlusal rollers;
49. To plaster the jaw models into the articulator;
50. To carry out parallelometry when planning the design of removable prostheses;
51. To repair and reconstruct removable dentures.

Possess:

1. Obtaining a functional impression from toothless jaws.

2. Determination of the central ratio of the jaws.
3. Carrying out the placement of artificial teeth in full removable dentures.
4. Checking the design of complete removable dentures.
5. Carrying out selective grinding of teeth.
6. Production of working, auxiliary and diagnostic plaster models.
7. Carrying out various methods of parallelometry in the planning of various splinting structures.
8. Production of wax bases with occlusal rollers.
9. Manufacturing of immediate prostheses according to the Oxman method.
10. By applying the facial arc.
11. By plastering models into the articulator.
12. Manufacture various types of occlusal splints.
13. Palpation of the masticatory muscles and TMJ.
14. To make a relaxing tire.
15. Correction of a removable plate prosthesis with complete loss of teeth.
16. By applying a complete removable prosthesis.
17. Methods of maintaining medical accounting and reporting documentation in medical organizations
18. Assessments of the state of dental health of the population of various age and gender groups
19. Methods of general clinical examination of children and adults
20. Clinical methods of examination of the maxillofacial area
21. Interpretation of the results of laboratory, instrumental diagnostic methods in patients of different ages
22. The algorithm of making a preliminary diagnosis to patients and, if necessary, with their subsequent referral for additional examinations and to specialist doctors
23. An algorithm for making a detailed clinical diagnosis of patients
24. The method of reading various types of radiographs
25. Determination of dental indices
26. Methods of diagnosis and treatment of defects of hard tissues of teeth with orthopedic structures
27. Methods of diagnosis and treatment of partial loss of teeth with removable and non-removable orthopedic structures
28. Methods of differential diagnosis of the main clinical syndromes and diseases of the maxillofacial system;
29. Methods of complex treatment of patients based on a rational and economic approach in outpatient settings, taking into account age, severity of the disease, the presence of concomitant pathology;
30. Primary and secondary prevention, rehabilitation of patients;

2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization

2.1. The discipline of orthopedic dentistry refers to the core part of Block 1 of the General Educational Program of Higher Education (GEP HE) of the organization.

The discipline is studied in the fourth, fifth, sixth, seventh, eighth, ninth and tenth semesters.

Orthopedic dentistry is a profile discipline of paramount importance. The main task of the Department of Orthopedic Dentistry is the theoretical and practical training of a doctor capable of solving issues of prevention, diagnosis and treatment of dental diseases. The general preventive orientation of the orthopedic dentist will be most fully disclosed to the student during the general medical examination of the population, which allows you to get acquainted with all dental diseases, their local and general treatment, preventive manipulations, as well as recommendations and tips that certainly accompany the therapeutic and preventive activities of the doctor.

Based on the knowledge gained by the student at the general clinical, general biological, dental departments and the Department of Children's Diseases, to teach students the peculiarities of prevention, clinic, diagnosis and treatment of dental diseases. To prepare a doctor who is able to work in a medical and preventive institution after the internship.

Orthopedic dentistry includes such a volume of theoretical material and practical skills that allows you to observe the principle of continuity of clinical training in the main sections of the discipline (prevention, therapy, orthodontics, surgery) and related specialties, providing an opportunity to teach, treat, study and put into practice new methods of prevention, treatment and medical examination.

Orthopedic dentistry is used in the formation of the content of the final state certification in the specialty dentistry.

2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:

human anatomy, radiation diagnostics and therapy, histology with embryology, pathological anatomy and physiology, normal physiology, pharmacology, microbiology, propaedeutic dentistry, therapeutic dentistry, surgical dentistry.

2.3. Mastering the discipline is required for forming the following knowledge, skills and abilities for subsequent academic disciplines:

therapeutic dentistry, surgical dentistry, orthodontics, pediatric dentistry.

3. Deliverables of mastering the academic discipline and metrics of competence acquisition

Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC) or/and professional (PC) competencies

p/ no.	Code comp etenci es	The content of the competence (or part of it)	Code and name of the competence achievement indicator	As a result of studying the discipline, students should:		
				To know	Be able to	Possess
1.	UC-1	He is able to carry out a critical analysis of problem situations based on a systematic approach, to develop a strategy of actions	IUC 1.1 Knows: methods of critical analysis and evaluation of modern scientific achievements; basic principles of critical analysis IUC 1.2 is able to: acquire new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related	Methods of information analysis and synthesis.	Think abstractly, analyze and synthesize information.	Abstract thinking, analysis and synthesis of the received information.

			to the professional field; search for information and solutions based on actions, experiment and experience IUC 1.3 Has practical experience: research of the problem of professional activity with the use of analysis, synthesis and other methods of intellectual activity; development of an action strategy for solving professional problems			
2.	GPC - 5	Able to conduct a patient examination in order to establish a diagnosis when solving professional tasks.	IGPC 5.1 Knows the methodology of collecting anamnesis of life and diseases, complaints in children and adults (their legal representatives); the methodology of examination and physical examination; clinical picture, methods of diagnosis of the most common diseases; methods of laboratory and instrumental studies to assess the state of health, medical indications for research, rules for interpreting their results; international statistical classification diseases and health-related problems (ICD); conditions requiring urgent medical care IGPC 5.2 is able to: collect complaints, anamnesis of life and disease in children and adults (their legal representatives), identify risk factors and causes of diseases; apply methods of examination and physical examination of children and adults; interpret the	Disciplinary, administrative, civil, criminal liability.	Be aware of disciplinary, administrative, civil and criminal liability.	Ability and willingness to analyze the results of their own activities to prevent medical errors.

			results of examination and physical examination of children and adults; diagnose the most common pathology in children and adults; identify risk factors of oncological diseases; formulate a preliminary diagnosis, make a plan for laboratory, instrumental and additional studies in children and adults in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care; send children and adults to laboratory, instrumental and additional studies in accordance with the current procedures for providing dental medical care, clinical recommendations, taking into account the standards of medical care; refer children and adults for consultations with specialist doctors in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care; interpret and analyze the results of consultations by specialist doctors of children and adults; interpret and analyze the results of basic (clinical) and additional (laboratory, instrumental) examination methods; to carry out differential			
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		<p>diagnosis of diseases in children and adults; to identify clinical signs of sudden acute diseases, conditions, exacerbations of chronic diseases without obvious signs of life-threatening, requiring urgent medical care</p> <p>IGPC 5.3 Has practical experience in: collecting complaints, anamnesis of life and disease in children and adults (their legal representatives), identifying risk factors and causes of diseases; examination and physical examination of children and adults; diagnosis of the most common diseases in children and adults; identification of risk factors for major oncological diseases; formulation of a preliminary diagnosis, drawing up a plan for instrumental, laboratory, additional studies, consultations of specialist doctors; referral of patients to instrumental, laboratory, additional studies, consultations of specialist doctors in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care; interpretation of data from additional (laboratory and instrumental) examinations of patients; setting a preliminary diagnosis in accordance with the international statistical classification of diseases and health-related problems (ICD); differential diagnosis of diseases;</p>			
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			recognition of conditions arising from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and requiring urgent medical care			
3.	PC -6	Readiness to collect, analyze complaints and other information from the patient (relatives/legal representatives), his anamnesis data, interpretation of examination results, laboratory, instrumental, pathoanatomic and other studies, including diagnostic studies using modern technical means and digital technologies, in order to recognize the condition or establish the presence or absence of dental diseases, symptoms, syndromes of dental diseases, establishment	<p>IPC 6.1 Knows:</p> <p>The methodology of collecting complaints and anamnesis from patients (their legal representatives). Methods of physical examination of patients (examination, palpation, percussion, auscultation). The procedure for providing medical care to adults with dental diseases</p> <p>The procedure for providing medical care to children with dental diseases</p> <p>Clinical recommendations on the provision of medical care to patients with dental diseases</p> <p>Standards of medical care</p> <p>IPC 6.2.Can:</p> <p>interpret the results of examination, laboratory, instrumental, pathoanatomic and other studies, including diagnostic studies using modern technical means and digital technologies, in order to recognize the condition or establish the presence or absence of dental disease, symptoms, syndromes of dental diseases, the establishment of nosological forms in accordance with the International Statistical Classification of Diseases and Related Problems with health, and other regulatory documents of the Ministry of Health of the Russian</p>	International Statistical Classification of Diseases .	Apply the International Statistical Classification of Diseases	The methodology for determining the main pathological conditions and syndromes in patients in accordance with the International Statistical Classification of Diseases.

		<p>of nosological forms in accordance with the International Statistical Classification of Diseases and Health-related Problems, and other regulatory documents of the Ministry of Health of the Russian Federation (Procedure for medical care, Standard of Medical Care, Clinical Recommendations on Medical Care, etc.)</p>	<p>Federation (the procedure for providing medical care, the Standard of medical care, Clinical recommendations on the provision of medical care, etc.)</p> <p>Develop a treatment plan for children and adults with dental diseases in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care.</p> <p>IPC 6.3 Has practical experience: interpretation of the results of examination, laboratory, instrumental, pathoanatomic and other studies, including diagnostic studies using modern technical means and digital technologies, in order to recognize the condition or establish the fact of the presence or absence of dental disease, symptoms, syndromes of dental diseases, the establishment of nosological forms in accordance with the International Statistical Classification of Diseases and Related Problems with health, and other regulatory documents of the Ministry of Health of the Russian Federation (the procedure for providing medical care, the Standard of medical care, Clinical recommendations on the provision of medical care, etc.)</p> <p>Development of a treatment plan for children and adults with dental diseases, taking</p>			
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			into account the diagnosis, age and clinical picture in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care			
4.	PC -7	The ability to determine the tactics of management of patients with various dental diseases in accordance with Clinical recommendations and other regulatory documents of the Ministry of Health of the Russian Federation in outpatient and day hospital conditions, taking into account the age of the patient.	<p>IPC 7.1 Knows:</p> <p>Methods of drug and non-drug treatment, medical indications for the use of medical devices for dental diseases</p> <p>Groups of medicines used to provide medical care in the treatment of dental diseases; the mechanism of their action, medical indications and contraindications to the appointment; compatibility, possible complications, side effects, adverse reactions, including serious and unforeseen</p> <p>Principles, techniques and methods of anesthesia, selection of the type of local anesthesia in the treatment of dental diseases</p> <p>Methods of preventing or eliminating complications, side effects, adverse reactions, including serious and unforeseen, that occurred during the examination or treatment of patients with diseases of the teeth, pulp, periodontal, periodontal, oral and lip mucosa</p> <p>Materials science, technologies, equipment and medical products used in dentistry</p> <p>Anatomy of the head, maxillofacial region, features of blood supply and innervation; structure of teeth; histology and</p>	Tactics of management of patients with diseases of the dental system.	To determine the tactics of management of patients with diseases of the dental system.	Tactics of management of patients with diseases of the dental system.

		<p>embryology of the oral cavity and teeth, the main disorders of embryogenesis IPC 7.2. Can:</p> <p>Develop a treatment plan for children and adults with dental diseases in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>To select and prescribe medications, medical devices (including dental materials), dietary nutrition, therapeutic and wellness regimen for the treatment of children and adults with dental diseases in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Determine medical indications and contraindications to local anesthesia techniques of the maxillofacial region</p> <p>To carry out local anesthesia (application, infiltration, conduction) in children and adults with dental diseases</p> <p>Perform medical interventions, including therapeutic, in children and adults with dental diseases on an outpatient basis (excluding repeated endodontic treatment):</p> <ul style="list-style-type: none"> - individual oral and dental hygiene training, selection of oral hygiene products and items - controlled teeth cleaning - professional oral and dental hygiene - injection of drugs in the 			
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		<p>maxillofacial region</p> <ul style="list-style-type: none"> - local application of remineralizing drugs in the tooth area - deep fluoridation of tooth enamel - sealing the fissure of the tooth with a sealant - professional teeth whitening - grinding of hard tooth tissues - restoration of the tooth with a filling using dental cements, chemical curing materials, photopolymers -restoration of teeth with violation of the contact point - restoration of the tooth with filling material using anchor pins - application of devitalizing paste - pulpotomy (amputation of the crown pulp) - pulp extirpation - instrumental and medical treatment of a well-traversed root canal - temporary filling of the root canal with a drug - filling of the root canal of the tooth with paste, gutta-percha pins - removal of superingival and subgingival dental deposits in the tooth area (by manual method) - ultrasound removal of supra-gingival and subgingival dental deposits in the tooth area - closed curettage for periodontal diseases in the tooth area - application of a therapeutic bandage for periodontal diseases in the area of one jaw - prescribing drug therapy for diseases of the oral 			
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		<p>cavity and teeth</p> <ul style="list-style-type: none"> - appointment of dietary therapy for diseases of the oral cavity and teeth <p>Perform medical interventions, including surgical, in children and adults with dental diseases on an outpatient basis (excluding the removal of retentive and dystopian teeth):</p> <ul style="list-style-type: none"> - tooth extraction - removal of a temporary tooth - permanent tooth removal - opening and drainage of an odontogenic abscess <p>To carry out step-by-step sanitation of the oral cavity (excluding sanitation of the oral cavity in children in the conditions of an anesthetic manual)</p> <p>Perform medical interventions, including orthopedic, in adults with dental diseases on an outpatient basis (excluding prosthetics on dental implants, technologies for automated manufacturing of orthopedic structures, complete removable plate and clasp prostheses):</p> <ul style="list-style-type: none"> - obtaining anatomical and functional impressions - restoration of the tooth with a crown - restoration of the integrity of the dentition with fixed bridges - prosthetics with partial removable plate prostheses - correction of removable orthopedic construction - removal of a non-removable orthopedic structure <p>Interpret the results of X-ray examinations of the maxillofacial region</p>			
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		<p>To consult children and adults with diseases of the mucous membrane of the mouth and lips, to determine indications for referral to specialist doctors</p> <p>Prevent or eliminate complications, side effects, undesirable reactions, including unforeseen ones, resulting from diagnostic or therapeutic manipulations, the use of medicines and (or) medical devices, non-drug treatment</p> <p>IPC 7.3 Has practical experience:</p> <p>Selection and appointment of medicines, medical devices (including dental materials) for the treatment of dental diseases in children and adults in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Prescribing dietary nutrition, therapeutic and health regime for the treatment of dental diseases in children and adults in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Performing medical interventions in children and adults with dental diseases in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Evaluation of the results of medical interventions in children and adults with</p>			
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		<p>dental diseases</p> <p>Selection of the type and implementation of local anesthesia (application, infiltration, conduction) in children and adults with dental diseases</p> <p>Evaluation of the effectiveness and safety of the use of medicines, medical devices and non-drug treatment in children and adults with dental diseases</p> <p>Counseling of children and adults with diseases of the mucous membrane of the mouth and lips, determining indications for referral to specialist doctors</p> <p>Selection and appointment of medicines and medical devices, taking into account the diagnosis, age and clinical picture of dental disease in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Determination of methods of administration, regimen and dose of drugs</p> <p>Selection and appointment of non-drug treatment for children and adults with dental diseases in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Prevention and treatment of complications, side effects, adverse reactions, including unforeseen ones, resulting from diagnostic or therapeutic manipulations, the use of medicines and (or) medical devices, non-</p>			
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			<p>drug treatment at a dental appointment</p> <p>Providing medical care to children and adults with sudden acute diseases, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life in an urgent form</p> <p>The use of medicines and medical devices in the provision of emergency medical care</p>			
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4. Sections of the academic discipline and competencies that are formed when mastering them

n/a	Competence code	Section name disciplines	The content of the section in teaching units
1	CC-1, GPC-5, PC-6, PC-7	Orthopedic treatment of dental hard tissue defects.	<p>Classification of dental defects. Principles of forming cavities for different types of tabs. Clinical and laboratory stages of prosthetics with tabs.</p> <p>Types of artificial crowns, methods of preparing teeth for various types of crowns. Clinical and laboratory stages of prosthetics with stamped, plastic, cast, combined and ceramic crowns.</p> <p>Classification of dental defects. Principles of preparation of tooth roots for various types of pin structures. Clinical and laboratory stages of prosthetics with pin teeth.</p>
2	CC-1, GPC-5, PC-6, PC-7	Orthopedic treatment of partial tooth loss	<p>Etiology, pathogenesis, clinic and classification of partial tooth loss. Biomechanics of bridges. Clinical and laboratory stages of prosthetics with stamped-soldered, plastic, cast, combined and ceramic bridge prostheses. The doctrine of fixing removable dentures. Types of removable prostheses, indications for prosthetics, methods of obtaining impressions. Components of removable dentures. Clinical and laboratory stages of prosthetics with arc and plate prostheses with metal and plastic bases.</p>
3	CC-1, GPC-5, PC-6, PC-7	Orthopedic treatment for complete loss of teeth.	<p>Examination of a patient with complete loss of teeth. Clinical anatomy of the toothless oral cavity.</p> <p>Functional impressions from toothless jaws. A technique for obtaining functional impressions from toothless jaws.</p> <p>Determination of the central ratio of the jaws</p> <p>Checking the design of complete removable dentures.</p> <p>Methods of setting artificial teeth in complete removable dentures. Methods of setting artificial teeth on a spherical surface in the Gnatomat articulator. Features of setting artificial teeth with abnormal jaw ratios. Application of a complete removable prosthesis</p> <p>The processes of adaptation to removable prostheses and the reaction of prosthetic bed tissues to removable prostheses.</p>

4	CC-1, GPC-5, PC-6, PC-7	Orthopedic treatment of periodontal diseases.	Types of traumatic occlusion (primary, secondary, combined). Etiology, pathogenesis, clinic, differential diagnosis of primary and secondary traumatic occlusion. Periodontal disease and periodontitis. Etiology, pathogenesis, clinic. Tasks of orthopedic treatment of periodontal diseases. Selective grinding of teeth (indications and methods). Indications for splinting in periodontal diseases. Biomechanical principles of splinting. Classification of tires, the requirements imposed on them. Types of splinting. Indications for the use of fixed tires and their design. Planning of solid-cast removable tires and prosthetic tires using a parallelometer. Direct prosthetics for periodontal diseases.
5	CC-1, GPC-5, PC-6, PC-7	Gnatology.	Clinic and orthopedic treatment of parafunctions of masticatory muscles. Etiology, pathogenesis, clinic and diagnosis of TMJ diseases Orthopedic treatment of TMJ diseases.

5. Volume of the academic discipline and types of academic work

Type of educational work	Labor intensity		Labor intensity by semester (AH)						
	volume in credit units (CU)	volume in academic hours (AH)	4	5	6	7	8	9	10
Classroom work, including	10,32	372	36	54	44	52	44	88	54
Lectures (L)	2,66	96	12	14	6	16	10	24	14
Laboratory practicum (LP)*									
Practicals (P)	7,66	276	24	40	38	36	34	64	40
Seminars (S)									
Student's individual work (SIW)	6,68	240	18	36	37	38	19	56	36
Mid-term assessment exam	1	36					exam		
TOTAL LABOR INTENSITY	18	648	54	90	81	90	63	144	90

6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

p/n o.	Semester No.	Name of the section of the academic discipline	Types of academic work* (in AH)					
			L	LP	PS	S	SIW	in total
1	4	Orthopedic treatment of dental hard tissue defects.	12		24		18	54
2	5	Orthopedic treatment of dental hard tissue defects. Orthopedic treatment of partial loss of teeth with fixed dentures.	14		40		36	90
3	6	Orthopedic treatment of partial loss of teeth with removable dentures.	6		38		37	81
4	7	Orthopedic treatment for complete loss of teeth.	16		36		38	90
5	8	Orthopedic treatment of periodontal diseases.	10		34		19	63
6	9	Orthopedic treatment of dental hard tissue defects. Orthopedic treatment of partial and complete loss of teeth. Orthopedic treatment of periodontal diseases.	24		64		56	144
7	10	Gnatology.	14		40		36	90
		total	96		276		240	612

* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; SIW – student’s individual work.

6.2. Thematic schedule of educational work types:

6.2.1 Thematic schedule of lectures

№	Name of lecture topics	Volume in AH							
		Semester 4	Semester 5	Semester 6	Semester 7	Semester 8	Semester 9	Semester 10	
1	Etiology, classification and clinic of defects of hard tissues of teeth. The reaction of pulp and periodontal to the preparation of teeth.	2							

	Features of clinical and laboratory techniques for prosthetics with tabs.							
2	Clinical and laboratory methods of prosthetics with stamped, solid-cast and metal-acrylic crowns.	2						
3	Prosthetics with metal-ceramic crowns.	2						
4	Clinical and laboratory methods of prosthetics with ceramic crowns.	2						
5	Clinical and laboratory methods of prosthetics with ceramic veneers.	2						
6	Types of pin structures. Clinical and laboratory methods of prosthetics in the complete absence of a tooth crown.	2						
7	Etiology, classification and clinic of partial tooth loss.		2					
8	Theory of traumatic occlusion. Types of traumatic occlusion.		2					
9	Orthopedic treatment of partial tooth loss with bridges: types, indications, biomechanics and planning of bridges.		2					
10	Features of conducting clinical and laboratory prosthetics with combined bridges.		2					
11	Features of clinical and laboratory methods of prosthetics with ceramic bridges. Modern systems of metal-free ceramics for non-removable prostheses.		2					
12	Prosthetics with fixed prostheses based on implants. Indications, methods, selection of supporting elements.		2					
13	Errors in prosthetics with fixed prostheses.		2					
19	Orthopedic treatment with removable plate prostheses in case of partial loss of teeth.			2				
20	Planning of arch prostheses. Parallelometry. Orthopedic treatment with arch prostheses.			2				
23	Prosthetics with removable dentures in case of partial loss of teeth with a locking and telescopic fixation system.			2				
25	Clinical anatomy of the toothless oral cavity. The doctrine of fixing complete removable dentures.				2			
27	Individual spoons for obtaining functional impressions. Functional impressions with complete loss of teeth.				2			
28	Determination of the central ratio of the jaws.				2			
29	Methods of setting artificial teeth in complete removable dentures.				2			
33	The imposition of complete removable dentures. Processes of adaptation to removable prostheses.				2			

34	Reactions of prosthetic bed tissues to removable dentures.				2			
35	Errors in prosthetics with full removable dentures.				2			
36	Prosthetics with removable dentures with complete loss of teeth with fixation on implants.				2			
37	Etiology, classification and pathogenesis of periodontal diseases. Clinic and differential diagnosis of periodontal diseases.					2		
39	Types of traumatic occlusion (primary, secondary, combined). Etiology, pathogenesis, clinic, differential diagnosis.					2		
40	Classification and types of tires in the treatment of periodontal diseases. Biomechanical basics of splinting.					2		
41	Orthopedic treatment of periodontal diseases.					2		
43	Features of orthopedic treatment of patients with periodontal diseases complicated by partial loss of teeth.					2		
47	Ceramic tabs. Materials and methods of manufacture.						2	
48	Modern CAD/CAM systems.						2	
49	Modern implant systems and indications for their use.						2	
50	Orthopedic treatment using mini-implant systems.						2	
51	Prosthetics with fixed prostheses based on implants. Indications, methods, selection of supporting elements.						2	
52	Prosthetics with removable dentures with complete loss of teeth based on implants.						2	
53	Modern systems of locking and telescopic fasteners for removable prostheses. Types, indications of prosthetics techniques.						2	
54	Features of orthopedic treatment of patients with periodontal diseases.						2	
55	Increased erasability. Etiology, pathogenesis, clinic and orthopedic treatment.						2	
56	Galvanic processes in dentistry.						2	
58	Methods for determining the color. Devices. Methods.						2	
59	The use of photography for planning orthopedic treatment.						2	
61	Functional anatomy of the TMJ and masticatory muscles. Biomechanics of the lower jaw.							2
62	Examination of patients with TMJ diseases. Methods of diagnosis of TMJ diseases. The use of the facial arch and articulator for the							2

	diagnosis of TMJ pathology.							
63	Differential diagnosis of TMJ diseases.							2
64	The concept of musculoskeletal dysfunction. Etiology, clinic, pathogenesis and orthopedic treatment.							2
66	Clinic, diagnosis and treatment of patients with habitual dislocations and subluxations of the lower jaw.							2
67	Selective grinding of teeth. Indications and methods.							2
68	Occlusive and sports tires. Types, indications for use.							2
	TOTAL (total - 96 AH)	12	14	6	16	10	24	14

6.2.2. The thematic plan of laboratory practicums

Laboratory workshops on maxillofacial orthopedics are not provided by the main educational program of higher education

6.2.3. Thematic plan of practicals

№	Name of the topics of practicals	Volume in AH						
		Sem ester 4	Sem ester 5	Sem ester 6	Sem ester 7	Sem ester 8	Sem ester 9	Semester 10
1	Classification of defects of hard tissues of teeth. General principles of the formation of cavities under tabs. Types of tabs. Biological factors of preparation. Clinical and laboratory methods of prosthetics of defects of hard tissues of teeth with tabs. The practical part: examination of patients by students. Dissection by students of cavities under tabs on the phantom. Taking prints by students.	5						
2	Artificial crowns, types, indications for use. Clinical and laboratory methods of prosthetics with metal (stamped and cast), plastic and metal acrylic crowns. Practical part: examination of patients by students. Preparation of teeth by students for cast and plastic crowns on a phantom. Taking prints by students.	5						
3	Clinical and laboratory methods of prosthetics with ceramic crowns. The practical part: examination of patients by students. Dissection of teeth by students	5						

	with a ledge for ceramic crowns on a phantom. Taking prints by students.							
4	Clinical and laboratory methods of prosthetics with combined (metal-ceramic) crowns. The practical part: examination of patients by students. Preparation of teeth by students with a ledge for metal-ceramic crowns on a phantom. Taking prints by students.	5						
5	Errors and complications in prosthetics with artificial crowns and their prevention. Practical part: examination of patients by students. Students receive impressions with elastic impression materials.	4						
6	Etiology, clinic and prosthetics with complete destruction of the tooth crown. Types of pin teeth, indications for use. Principles of formation of root canals for pin structures. Practical part: students receive impressions with elastic impression materials, prepare the tooth root canal on a phantom for a pin structure.	5						
7	Prosthetics of defects of the tooth crown with an artificial stump with a pin. Direct and indirect manufacturing methods. Practical part: simulation of an artificial stump with a pin by students on a phantom.	5						
8	Etiology, pathogenesis, clinic and classification of partial tooth loss. Practical part: examination by students of patients with partial loss of teeth, registration of medical history.	5						
9	Bridges (types, indications, biomechanics of bridges). Practical part: students receive impressions with elastic impression materials, modeling of the intermediate part of the bridge prosthesis on a phantom in the anterior and lateral sections.	5						
10	Clinical and laboratory techniques for prosthetics of partial loss of teeth with stamped-soldered and cast bridge prostheses. Practical part: preparation of supporting teeth by students for stamped-soldered and cast bridge prostheses on a phantom. Demonstration of laboratory	5						

	techniques of prosthetics with cast bridges in the dental laboratory.						
11	Clinical and laboratory methods of prosthetics of partial loss of teeth with combined bridges. Practical part: preparation of supporting teeth by students for combined bridge prostheses on a phantom. Demonstration of laboratory techniques of prosthetics with combined bridges in the dental laboratory.		5				
12	Clinical and laboratory methods of prosthetics of partial loss of teeth with ceramic bridges. Practical part: preparation of supporting teeth by students for ceramic bridge prostheses on a phantom. Demonstration of laboratory techniques of prosthetics with ceramic bridges in the dental laboratory.		5				
13	Errors and complications in prosthetics with bridges and their prevention. Practical part: determining the color of the tooth on the scale of Vita, 3D Master.		5				
14	Removable prostheses, types, indications for use, design features. The boundaries of removable dentures. Practical part: students receive impressions with elastic impression materials.			4			
15	The doctrine of fixing removable dentures. Types of fixing elements. The clamp system is not. Practical part: making a bent clamp by students.			5			
16	Planning the construction of removable prostheses in a parallelometer. Parallelometry, methods, indications. The concept of the path of introduction of the prosthesis and the boundary line. Practical part: determination by students of the path of introduction of the prosthesis and the position of the boundary line in the parallelometer.			5			
17	Features of obtaining impressions with partial loss of teeth. Determination of the central ratio of the jaws. Wax template technology. Practical part: making wax templates by students.			5			

18	Clinical and laboratory methods of prosthetics with removable arch prostheses. Practical part: students planning the construction of a removable arch prosthesis on a phantom model.			5				
19	Clinical and laboratory methods of prosthetics with removable plate prostheses with a metal base. Practical part: planning by students of the design of a removable plate prosthesis with a metal base on a phantom model.			5				
20	Clinical and laboratory methods of prosthetics with removable plate prostheses with a plastic base. Practical part: planning by students of the design of a removable plate prosthesis with a plastic base on a phantom model.			5				
21	Errors and complications in prosthetics with removable dentures and their prevention. Practical part: demonstration of the correction of removable dentures.			4				
22	Examination of a patient with complete loss of teeth. Clinical anatomy of the toothless oral cavity (demonstration of the patient). Instruction on labor protection and fire safety. Practical part: admission of patients by students, study of the clinical anatomy of toothless jaws on phantom models.				5			
23	Functional impressions from toothless jaws. The technique of obtaining functional impressions from toothless jaws (demonstration). Practical part: demonstration of obtaining functional impressions, admission of patients by students, production of individual spoons.				5			
24	Determination of the central ratio of the jaws (demonstration of the patient). Practical part: determination of the central ratio of the jaws by students from each other, admission of patients by students, production of bite patterns with occlusal rollers.				5			
25	Methods of setting artificial teeth in complete removable dentures. Methods of setting artificial teeth on a spherical surface				5			

	in the Gnatomat articulator. Practical part: admission of patients by students, demonstration of the technique of setting artificial teeth in the laboratory.						
26	Features of setting artificial teeth with abnormal jaw ratios. Checking the design of complete removable prostheses (demonstration). Practical part: admission of patients by students, planning the boundaries of removable prostheses by students.				5		
27	Application of a complete removable prosthesis (demonstration). Methods of correction of removable prostheses. Practical part: demonstration of the correction of removable prostheses, admission of patients by students.				5		
28	The processes of adaptation to removable prostheses and the reaction of prosthetic bed tissues to removable prostheses. Instructions on the rules of using prostheses. Assessment of the immediate and long-term results of prosthetics with complete removable prostheses. Practical part: admission of patients by students.				6		
29	Periodontal disease and periodontitis. Etiology, pathogenesis, clinic. Practical part: instruction on occupational safety and fire safety, examination of the patient, reading radiographs, diagnosis, documentation of the primary patient, removal of anatomical impressions with alginate impression material, production of diagnostic models of jaws, preparation of teeth for artificial crowns on a phantom.					5	
30	Types of traumatic occlusion (primary, secondary, combined). Etiology, pathogenesis, clinic, differential diagnosis. Practical part: examination of the patient, diagnosis, documentation of the primary patient, reading radiographs, removal of anatomical impressions with alginate impression material, production of diagnostic models of jaws, preparation of teeth for artificial crowns on a phantom.					5	
31	Orthopedic treatment of periodontal					5	

	diseases: tasks, indications, methods of planning orthopedic treatment. Indications for splinting in periodontal diseases, biomechanical principles of splinting, classification of tires. Requirements for tires. Types of splinting. Practical part: examination of the patient, diagnosis, documentation of the primary patient, reading radiographs, removal of anatomical impressions with alginate impression material, production of diagnostic models of jaws, preparation of teeth for artificial crowns on a phantom.						
32	The method of selective grinding of teeth in periodontal diseases. Practical part: reading radiographs, taking anatomical impressions with alginate impression material, studying the state of occlusion, obtaining occlusograms, conducting selective grinding of teeth on a phantom, preparing teeth for artificial crowns on a phantom.					5	
35	Direct prosthetics for periodontal diseases. The practical part: removal of impressions with silicone impression material, production of working and auxiliary plaster models, production of wax bases with occlusal rollers, methods of preparing a working model for a direct prosthesis, correction of an immediate prosthesis.					5	
36	Etiology, clinic and orthopedic treatment of parafunctions of masticatory muscles. Practical part: examination of the patient, examination and palpation of the masticatory muscles and TMJ, diagnosis of parafunctions, documentation of the primary patient, preparation of teeth for inlays and artificial crowns on the phantom.					5	
	Increased erasability. Etiology, clinic, pathogenesis. Orthopedic treatment. Practical part: examination of the patient, examination and palpation of the masticatory muscles, documentation of the primary patient, preparation of teeth for artificial crowns on the phantom.					5	
39	Examination of an orthopedic patient, filling out an outpatient card. Instruction on labor protection and fire safety. Practical part: admission of patients, diagnosis,						4

	documentation of the primary patient, reading radiographs, obtaining anatomical impressions with alginate material, production of diagnostic models of jaws.							
40	Impression materials. Practical part: admission of patients by students, obtaining anatomical impressions with alginate and silicone impression materials, production of diagnostic models of jaws.						5	
41	Prosthetics of dental defects with artificial ceramic crowns. Demonstration of preparation of a tooth for a ceramic crown. Practical part: obtaining impressions by students, casting plaster models, dissecting teeth on a phantom for a ceramic crown.						5	
42	Prosthetics of the complete absence of the tooth crown with pin structures. Demonstration of modeling of a tooth stump. Practical part: admission of patients by students, receipt of impressions by students, casting of plaster models, preparation of roots on a phantom for an artificial stump with a pin, modeling of a pin tooth with an artificial wax stump on the model and on the phantom.						5	
43	Clinical and technological features of orthopedic treatment of patients with porcelain, metal-plastic and metal-ceramic prostheses. Practical part: admission of patients by students, receipt of impressions by students, casting of plaster models, preparation of teeth for combined crowns on a phantom.						5	
44	Prosthetics of partial loss of teeth with bridges. Practical part: admission of patients by students, receipt of impressions by students, casting of plaster models, preparation of teeth on a phantom for a metal-ceramic bridge prosthesis.						5	
45	Prosthetics of partial loss of teeth of various localization with removable dentures. The practical part: taking impressions by students, casting plaster models, preparing teeth on a phantom for a stamped crown, drawing the boundaries of removable dentures on plaster models with partial loss of teeth of various localization.						5	

46	Planning of arch prostheses and removable dentures with a metal base. Parallelometry. Practical part: admission of patients by students, obtaining impressions, casting plaster models, planning of arch prostheses using a parallellometer.						5	
47	Prosthetics of patients with complete loss of teeth. Getting a functional impression. Practical part: admission of patients by students, obtaining impressions by students, casting plaster models, determining the boundaries of a removable prosthesis on the upper and lower jaw with complete loss of teeth, making individual spoons by students.						5	
48	Prosthetics of patients with complete loss of teeth. Determination of the central ratio of the jaws. Practical part: admission of patients by students, receipt of impressions by students, casting of plaster models, production of wax templates with bite rollers, determination of the central ratio of the jaws by students.						5	
49	Increased erasability. Etiology, clinic, pathogenesis. Orthopedic treatment. Practical part: examination of the patient, examination and palpation of the masticatory muscles, documentation of the primary patient, preparation of teeth for artificial crowns on the phantom.						5	
50	Direct prosthetics: indications and techniques. Practical part: marking of the model, phantom removal of plaster teeth, modeling of the fixing plate.						5	
51	Planning of splinting structures for systemic periodontal diseases. Types of splinting, tire requirements and their classification. Comparative evaluation of removable and non-removable tires. Practical part: admission of patients by students, obtaining impressions, casting plaster models, preparation of teeth on a phantom for fixed splinting structures, planning splinting structures of the upper and lower jaws using a parallellometer.						5	
52	Functional anatomy of the TMJ and masticatory muscles. Practical part:							5

	palpation and auscultation of the TMJ, the study of CT of the TMJ. Palpation of the masticatory muscles.							
53	Biomechanics of the dental system, the basics of occlusal diagnostics. Terminology. Practical part: reproduction of the central, anterior and lateral occlusions, the posterior contact position, checking the presence of super contacts by students with each other using occlusion paper.							5
54	Physiological occlusion. Modern theories. Practical part: the study of the closure of teeth in various occlusions.							5
55	Methods of examination of patients with diseases of the temporomandibular joint. Practical part: admission of patients by students, obtaining impressions by students, obtaining diagnostic models of jaws, imposition of the facial arch.							5
56	Etiology, clinic, pathogenesis and orthopedic treatment of habitual dislocations and subluxations of the lower jaw. Practical part: examination, palpation of the temporomandibular joint, reading radiographs.							5
57	Etiology, clinic and pathogenesis of musculoskeletal dysfunction of the TMJ. Practical part: examination, auscultation, palpation of the temporomandibular joint and masticatory muscles and neck muscles.							5
58	Treatment of patients with musculoskeletal dysfunction of the TMJ. Occlusive splints, types, indications for use. Practical part: obtaining double impressions of the upper and lower jaw from silicone material, making a separating occlusal splint on a phantom model.							5
59	Selective grinding of teeth in TMJ pathology. Indications, methods of conducting. Practical part: checking the presence of supercontacts of diagnostic models of jaws in the articulator using occlusion paper.							5
	TOTAL (total - 276 AH)	24	40	38	36	34	64	40

6.2.4. Thematic plan of seminars: not provided by the main educational program of higher education.

6.2.5. Types and topics of student's individual work (SIW)

p/ n o.	Types and topics of SIW	Volume in AH per semester						
		4	5	6	7	8	9	10
1	Work with lecture material, providing for the study of lecture notes and educational literature, solving situational problems.	8	15	12	15	10	21	15
2	Search and review of literature and electronic sources of information on an individually given course problem, writing an abstract on a given problem, preparing for discussion and control work.	6	10	15	13	10	15	10
3	Writing medical records, working with electronic educational resources posted on the educational portal of the Academy.	4	11	10	10	9	20	11
TOTAL (total - 240 AH)		18	36	37	38	19	56	36

7. Types of assessment formats for ongoing monitoring and mid-term assessment

During classes, only the current monitoring of academic performance is carried out.

The following methods of control are used for the current control of academic performance at the department:

1. control works;
2. individual survey;
3. testing;
4. writing essays;
5. solving situational problems

7.1. Forms of current control, types of evaluation tools:

n / a	Se me ste r No .	Types of control	Name of section of academic discipline	Assessment formats		
				Kinds	Number of questions in the task	Number of test task options
1	2	3	4	5	6	7
1.	4	Control of the developm	Examination of the patient. Orthopedic	Test tasks	20	160

		ent of the topic	treatment of dental hard tissue defects.	Testing of practical skills	5	5
				Interview	5	20
				Situational tasks	2	30
				Writing a fragment of the medical history	1	1
2.	5	Control of the development of the topic	Orthopedic treatment of dental hard tissue defects.	Test tasks	20	160
			Orthopedic treatment of partial loss of teeth with fixed dentures.	Testing of practical skills	8	8
				Interview	8	30
				Situational tasks	2	25
				Writing a fragment of the medical history	1	1
3.	6	Control of the development of the topic	Orthopedic treatment of partial loss of teeth with removable dentures.	Test tasks	20	160
				Testing of practical skills	8	8
				Interview	8	30
				Situational tasks	2	20
				Writing a fragment of the medical history	1	1
4.	7	Control of the development of the topic	Orthopedic treatment for complete loss of teeth.	Test tasks	20	140
				Testing of practical skills	7	7
				Report	1	1
				Interview	7	20
				Situational tasks	2	20
				Writing a fragment of the medical history	1	1
5	8	Control of the development of the topic	Orthopedic treatment of periodontal diseases.	Test tasks	20	140
				Testing of practical skills	10	10
				Report	1	1
				Interview	10	30
				Situational tasks	2	30
				Writing a fragment of the medical history	1	1
6	9	Intermediate certification (exam)	Sections of orthopedic dentistry 1 to 5	Testing	100	700
				Interview	3	55
7	10	Control of the development of the topic	Orthopedic treatment of dental hard tissue defects.	Test tasks	20	320
			Orthopedic treatment of	Testing of practical skills	13	13
				Report	1	1
				Interview	13	33

			partial and complete loss of teeth. Orthopedic treatment of periodontal diseases.	Situational tasks	2	26
				Writing a fragment of the medical history	1	1
8	11	Control of the development of the topic	Gnatology.	Test tasks	20	180
				Testing of practical skills	9	9
				Report	1	1
				Interview	9	27
				Situational tasks	2	25
				Writing a fragment of the medical history	1	1
9	12	Final state certification	All sections of dentistry: therapeutic dentistry, surgical dentistry, orthopedic dentistry, pediatric dentistry, orthodontics, maxillofacial surgery	Test tasks	100	More than 1000
				Interview	4	50

Examples of evaluation tools:

Example of exam tickets:

EXAMINATION TICKET No. 1

The patient, 55 years old, went to the clinic with complaints about the lack of teeth. From the anamnesis it was revealed that the patient suffers from hypertension, is afraid of dental manipulations.

Objectively: the face is symmetrical, the height of the lower third of the face has not been changed. Teeth 2.6; 3.8 have a mesial slope. On the lower jaw there is a metal-ceramic bridge-like prosthesis with support on 4.4;4.8 with a broken edge fit in the area of crowns. The tooth 1.5 is restored by a cast stump pin tab and a metal-ceramic crown, has a mesial slope. The marginal gum in the area of 1.5; 4.4 and 4.8 is hyperemic, edematous. The tooth is 1.6 under the seal, the mesial buccal canal is sealed to the physiological apex, the distal buccal and palatine are not sealed, there are no periapical changes. 2.4; 2.5; 3.6 and 3.7 are missing. There is a pronounced atrophy of the alveolar process of the upper jaw and the alveolar part of the lower jaw in the area of removed teeth. The gums are pale pink in color, moderately moistened.

Dental formula: FFCO4321 12345678
CIIC4321 12345008

Questions:

6. Make a diagnosis.
7. Make an orthopedic treatment plan
8. What additional research methods will be required?

EXAMINATION TICKET No. 2

Patient S., 50 years old, complained of a violation of appearance due to a decrease in the height of the crowns of the teeth, a feeling of numbness in the gums, pain in the chewing muscles in the morning, the habit of clenching teeth.

Objectively: the height of the lower third of the face is reduced, the nasolabial and chin folds are pronounced, the corners of the mouth are lowered, there is a symmetrical thickening in the area of the angle and branch of the lower jaw, when palpation, the tone of the chewing muscles is increased, the presence of painful points along the anterior edge of the chewing muscles proper on the right and left is revealed.

Dental formula: 87654321 12345670
07654321 12345678

The bite is straight. The clinical crowns of all teeth are intact, the chewing surfaces of the lateral and cutting edges of the anterior teeth are erased by $\frac{1}{2}$ height. The interocclusal space is 5 mm.

The height of the lower third of the face is reduced, the nasolabial and chin folds are pronounced, the corners of the mouth are lowered. Symmetrical thickening in the area of the angle and branch of the lower jaw.

The clinical crowns of all teeth are intact, the chewing surfaces of the lateral and cutting edges of the anterior ones are erased by $\frac{1}{2}$ of the height, the interocclusal space is 5 mm.

Questions:

1. Make a diagnosis.
2. What additional research methods should be carried out?
3. Make an orthopedic treatment plan.
4. Give an explanation of the figures presented in this problem.

EXAMINATION TICKET No. 3

Patient N. 55 years old applied to the clinic for prosthetics.

Objectively: the height of the lower third of the face is reduced, the nasolabial and chin folds are pronounced, the corners of the mouth are lowered.

Dental formula: 00054321 12345000
00004321 12345000

The bite is straight. The erasability of the clinical crowns of the remaining teeth to dentin is revealed. The pathological mobility of the I degree of all premolars is determined. The condition of the alveolar processes in the area of missing teeth corresponds to the second type according to the classification of Elbrecht. The interocclusal space is 10 mm.

Questions:

1. Make a diagnosis.
2. Perform a differential diagnosis.
3. Make an orthopedic treatment plan.
4. Give an explanation of the figures presented in this task.

EXAMINATION TICKET No. 4

Patient A. 45 years old, went to the clinic for prosthetics.

Objectively: the height of the lower third of the face is reduced, the nasolabial and chin folds are pronounced, the corners of the mouth are lowered. When opening the mouth, there is a shift of the lower jaw to the left. When palpating the TMJ on the left, clicks are detected at the beginning of the mouth opening phase.

On the TMJ tomogram: narrowing of the posterior-upper part of the articular gap on the left was revealed.

Dental formula: 07654321 12345670
80054321 12300000

Deep incisor overlaps. The clinical crowns of the remaining teeth are erased to ½ of their height. The free interocclusal space is 6mm.

Questions:

1. Make a diagnosis.
2. Explain the pathogenesis of the disease.
3. Make an orthopedic treatment plan.
4. Give an explanation of the figures presented in this problem.

Example of test tasks:

WHEN DETERMINING THE CENTRAL RATIO OF THE JAWS, IT SHOULD BE TAKEN INTO ACCOUNT:

topography of the sagittal occlusal curve

uniform and simultaneous contraction of the masticatory muscles on both sides

topography of the transversal occlusal curve

IN GENERALIZED PERIODONTITIS, A TEMPORARY SPLINT SHOULD PROVIDE STABILIZATION:

the front

in an arc

sagittal

parasagittal

INFLAMMATION OF THE MARGINAL PERIODONTAL AFTER FIXATION OF ARTIFICIAL CROWNS IS POSSIBLE DUE TO:

lack of contact with adjacent teeth

deep immersion of the edges of the crowns into the gingival grooves

their thick edges

the absence of an equator

loose fit of the edges of the crowns to the necks of the teeth

absence of contact of crowns with antagonist teeth

ARTIFICIAL CROWNS CAN BE DIVIDED:

by appointment

constructions

manufacturing method

material

the nature of patient reviews

LOCAL REACTIONS OF TOOTH TISSUES TO DISSECTION ARE CAUSED BY EXPOSURE TO:

temperatures

cutting tool material

vibrations

pressure

cutting tool shapes

ABSOLUTE INDICATIONS FOR GENERAL ANESTHESIA DURING DENTAL PREPARATION ARE:

inability to perform dental preparation under local anesthesia

intolerance to local anesthetics

inefficiency of local anesthetics

an insurmountable fear of dental interventions

Example of situational tasks:

Task №1

The patient (36 years old) applied to the clinic with complaints about the destruction of crowns 1.1, 1.3, 2.2 and the absence of 2.3.

Objectively: 1.1; 1.3; 2.2 - destroyed to the level of the gum. The roots are stable. Percussion is painless. 2.3 missing. 3.6, 3.7 are destroyed to the level of the gum, mobility of the 1st degree, percussion is weakly painful. The tooth-alveolar elongation is 2.6, 2.7 by 4 mm. 4.6 is missing. 4.7, 4.8 have a mesial slope.

Dental Formula: 87654R2R 1R045678
87054321 12345RR8

On the R-gram, the channels 1.3; 1.1; 2.2 are not sealed, 1.3 is the expansion of the periodontal gap, in the periapical region of the tooth 1.1 is the rarefaction of bone tissue with clear boundaries with a diameter of 3 mm, in the area of the tip of the tooth 2.2 is the rarefaction of bone tissue with clear boundaries with a diameter of 5 mm. Channels 3.6, 3.7 are not sealed, rarefaction of bone tissue in the bifurcation area 3.6. Foci of rarefaction of bone tissue in the area of the tips of the roots of a rounded shape with clear boundaries with a diameter of 3 mm of the tooth 3.6, a diameter of 5 mm of the tooth 3.7.

Questions:

1. Make a diagnosis.
2. Make a plan for preparing the oral cavity for prosthetics.
3. Suggest possible options for prosthetics of the patient and justify the most optimal one.

Task №2

A 62-year-old patient went to the clinic with complaints of pain and mobility 14 and 44. It was found out from the anamnesis that 2 years ago most of the teeth on the upper and lower jaw were removed, and 2 weeks after the removal, 2 removable plate prostheses were made. He was not given any instructions to re-apply.

Objectively: the face is symmetrical; the chin and nasolabial folds are moderately pronounced.

Dental formula:
$$\begin{array}{r}) \quad 0 \quad 0 \quad 0 \quad 4 \quad 0 \quad 0 \quad 0 \quad 0 \quad | \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \\) \quad 7 \quad 0 \quad 0 \quad 4 \quad 0 \quad 0 \quad 0 \quad 0 \quad | \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 0 \quad 7 \quad 0 \end{array}$$

The ratio of the jaws is orthognathic. All teeth have mobility of 1 degree. In the position of the central occlusion, only 14 and 44 are tightly closed.

Questions: 1. Make a diagnosis.

2. What should have been the correct management of the patient after the initial prosthetics.

3. Make a treatment plan.

Task № 3

The patient, 55 years old, went to the clinic with complaints about the lack of teeth. From the anamnesis it was revealed that the patient suffers from hypertension, vegetative-vascular dystonia, gastric ulcer. Has a fear of dental manipulations.

Objectively: the face is symmetrical, the height of the lower third of the face has not been changed. Dental formula: missing 35, 44, 45. 36 under the seal located on the occlusal and distal contact surfaces, treated 20 years ago. On the X-ray, the medial channels are not sealed to the tip, in the area of the medial root there is a rarefaction of bone tissue with clear contours, with a diameter of 3 mm. There are no changes in the distal root area, the canal is sealed to the tip, evenly throughout.

1. Make a diagnosis.
2. Make a treatment plan.

Task № 4

A 35-year-old patient came to the clinic with complaints about the absence of 24. Objectively: 24 are missing, there are carious cavities on the mesial surface 25 and distal surface 23. Probing is painful along the enamel-dentine border. Percussion is painless.

1. Make a diagnosis.
2. What additional examination methods are needed.
3. Make an orthopedic treatment plan.
4. Which supporting elements of the bridge prosthesis can be used.
5. Specify possible complications when using various supporting elements of bridge prostheses.

Task №5

A 40-year-old patient complained of difficulty chewing food and pain in the right temporal region.

Objectively: the face is symmetrical, the skin is physiologically colored, when opening the mouth, a zigzag movement of the lower jaw is observed. Palpation of the masticatory and temporal muscles on the right is painful. The height of the lower third of the face has not been changed. The mucous membrane is pale pink, without visible pathological changes, moderately moistened. The teeth are stable. The bite is a deep incisor overlap.

Dental formula: 87654321 12345678
87054321 12345678

Tooth 4.6 was removed 10 years ago, 4.7 touches the antagonist tooth only with a distal buccal bump. In the central occlusion, multiple contacts between antagonist teeth are determined. When the lower jaw is shifted to the left, the contacts between teeth 1.7 and 4.7, 1.8 and 4.8 are determined, on the left – the teeth are separated.

Questions:

1. Make a diagnosis.
2. What type of premature contacts was detected during the examination.
3. Describe the closure of teeth in central, anterior and lateral occlusions in persons with orthognathic bite.
4. Suggest an orthopedic treatment plan.

7.3 Evaluation funds recommended for inclusion in the fund of evaluation funds for the final state certification. In 2010, the Department of Orthopedic Dentistry created a fund of illustrated clinical situational tasks and test tasks for the final state certification of 5th-year students of the Faculty of Dentistry.

8.Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

8.1. Key literature references

n/a	Name according to bibliographic requirements	Number of instances	
		in the library	at the department
1	2	3	4
1	Orthopedic Dentistry (faculty course): textbook – 9th ed., reprint. Shcherbakov, L.M. Mishnev; edited by V.N. Trezubov. Moscow:GEOTAR – Media, 2019. – 688 p.	24 + electronic resource http://www.studmedlib.ru/ru/book/ISBN9785970445914.html	1
2	Orthopedic dentistry (non-removable dental prosthetics): textbook O.R. Kurbanov, A.I. Abdurakhmanov, S.I., Abakarov. Moscow: GEOTAR – Media, 2015. – 456 p.	73 + electronic resource http://www.studmedlib.ru/book/ISBN9785970432945.html	1
3	Functional occlusion: from the temporomandibular joint to smile planning. Dawson P.E. Publishing house:Practical Medicine Russia, 2016 - 592	1	4
4	Orthopedic dentistry: textbook. – 2nd Edited by E.S. Kalivrajian, I.Yu. Lebedenko, E.A. Bragina, I.P. Ryzhova.ed. Moscow: GEOTAR-Media, 2018. – 800 p.	https://www.rosmedlib.ru/book/ISBN9785970437056.html?custom_pat_file=rosmedlib&custom_pat_id=book.main_frame(id)&custom_pat_use_id=book.main_frame(x)&XPartner=medknigaservis	1
5	Diseases of the oral mucosa: a textbook. O. A. Uspenskaya, E. N. Zhulev. NizhGMA Publishing House, 2017. – 504 p.	20	1
6	Treatment of periodontal diseases: a textbook. E. N. Zhulev, N. V. Kruglova, A. V. Kochubeynik NizhGMA Publishing House, 2016. – 160 p.	48	1
7	Orthopedic dentistry. Zhulev E.N. Moscow: Medical Information Agency, 2012 – 824 p.	31 + electronic resource.	1
8	Integrative dentistry (monograph). Zhulev E.N., Troshin V.D. Publishing house NizhGMA – 2014 - 651c.	24 + electronic resource	1

8.2. Further reading

n/a	Name according to bibliographic requirements	Number of instances	
		in the library	at the department
1	2	3	4
1.	Preliminary treatment of patients before dental prosthetics. Study guide. Trezubov V. N. 2009, Moscow, publishing house MIA	1	1

2.	Orthopedic treatment of periodontal diseases. The most important issues of dentistry. Kopeikin V. N. M., Triad-X. – 1998	3	1
3.	Orthopedic dentistry (test tasks). Zhulev E.N. Shcherbakov A.S 2004. N.Novgorod publishing house NizhGMA	56	1
4.	Dental ceramics. Current aspects of clinical application. To. Hemmerle. 2011 Moscow: Publishing house "Abc of the dentist"	1	1
5.	Precision and Aesthetics. Clinical and dental stages of dental prosthetics Massironi D., Paschetta R., Romeo D. 2008 Moscow: Publishing house "Abc of the dentist"	1	1
6.	Fundamentals of dental preparation for the manufacture of cast metal, metal-ceramic and ceramic restorations. G. Schillinburg, R. Jacobi, S. Brackett. 2011 Moscow: Publishing house "Abc of the dentist"	1	1
7.	"Dentistry", "New in stomatology", "Quintessence", "Dentart", "STM", "Panorama of orthopedic dentistry", "Clinical dentistry", "Dent-art" Periodical literature – dental journals. Various publishing houses of the cities: Moscow, St. Petersburg and N. Novgorod	One copy for each release period.	0
8.	Fixed prostheses: theory, clinic and laboratory equipment, 5th edition Zhulev E. N. 2010, Moscow, "Medical Information Agency»	24 + electronic resource	1

9.	Partial removable prostheses (theory, clinic and laboratory equipment): A guide for doctors. 2nd edition. Zhulev E.N. 2011. Moscow, "Medical Information Agency	73 + electronic resource	1
10.	Clinic, diagnosis and orthopedic treatment of periodontal diseases. Zhulev E. N. 2003, N.Novgorod, NizhGMA publishing house	53	1
11.	Metal-ceramic prostheses. Study guide. Zhulev E. N. 2004, N. Novgorod, NizhGMA publishing house	57	1
12.	Orthopedic dentistry. The phantom course. Zhulev E.N., Kuryakina N.V., Mitin N.V. Moscow, Medical Information Agency, 2011. – 720 p.	100	1

13.	Maxillofacial orthopedic dentistry Zhulev E.N., Arutyunov S.D., Lebedenko I.Yu. Moscow: Medical Information Agency, 2008 – 156 p.	31 + electronic resource.	1
14.	Fixed prostheses: theory, clinic and laboratory equipment, 5th edition Zhulev E. N. 2010, Moscow, "Medical Information Agency	24 + electronic resource	1
15.	Partial removable prostheses (theory, clinic and laboratory equipment): A guide for doctors. 2nd edition. Zhulev E.N. 2011. Moscow, "Medical Information Agency".	73 + electronic resource	1

8.3. Electronic educational resources for teaching academic subjects

8.3.1. Internal Electronic Library System of the University (IELSU)

<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
Internal Electronic Library System (EBS)	The works of the academic staff of the Academy: textbooks and manuals, monographs, collections of scientific papers, scientific articles, dissertations, abstracts of dissertations, patents.	from any computer located on the Internet, using an individual login and password [Electronic resource] – Access mode: http://95.79.46.206/login.php	Not limited

8.3.2. Electronic educational resources acquired by the University

<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
Electronic database "Student Consultant"	Educational literature + additional materials (audio, video, interactive materials, test tasks) for higher medical and pharmaceutical education. Publications are structured by specialties and disciplines in accordance with the current Federal State Educational Standards of Higher Education.	from any computer on the Internet, using an individual login and password [Electronic resource] – Access mode: http://www.studmedlib.ru/	General PIM subscription
Electronic library system "Bukap"	Educational and scientific medical literature of Russian publishers, including translations of foreign publications.	from any computer located on the Internet by login and password, from the computers of the Academy. The subscription editions are available for reading. [Electronic resource] – Access mode: http://www.books-up.ru/	General PIM subscription
"Bibliopisk"	Integrated "single window" search service for electronic catalogs, EBS and full-text databases. The results of a single search in the demo version include documents from domestic and foreign electronic libraries and databases available to the university as part of a subscription, as well as from open access databases.	PIM has access to the demo version of the Bibliopisk search engine: http://bibliosearch.ru/pimu .	General PIM subscription
Domestic electronic periodicals	Periodicals on medical subjects and on higher school issues	- from the academy's computers on the electronic library platform eLIBRARY.RU -magazines Media Sphere Publishing house - from library computers or provided by the library at the request of the user [Electronic resource] – Access mode: https://elibrary.ru/	

International scientometric database "Web of Science Core Collection"	Web of Science covers materials on natural, technical, social, and humanitarian sciences; takes into account the mutual citation of publications developed and provided by Thomson Reuters; has built-in capabilities for searching, analyzing, and managing bibliographic information.	Access is free from PIM computers [Electronic resource] – Access to the resource at: http://apps.webofknowledge.com	Access is free from PIM computers
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8.3.3 Open access resources

<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>
Federal Electronic Medical Library (FEMB)	It includes electronic analogues of printed publications and original electronic publications that have no analogues recorded on other media (dissertations, abstracts, books, magazines, etc.). [Electronic resource] – Access mode: http://H396.pdf/	from any computer located on the Internet
Scientific Electronic Library eLIBRARY.RU	The largest Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of scientific articles and publications. [Electronic resource] – Access mode: https://elibrary.ru/	from any computer located on the Internet.
Open Access Scientific Electronic Library CyberLeninka	Full texts of scientific articles with annotations published in scientific journals of Russia and neighboring countries. [Electronic resource] – Access mode: https://cyberleninka.ru/	from any computer located on the Internet
Russian State Library (RSL)	Abstracts for which there are copyright agreements with permission for their open publication [Electronic resource] – Access mode: http://www.rsl.ru/	from any computer located on the Internet
Legal reference system "Consultant Plus"	Federal and regional legislation, judicial practice, financial advice, comments on legislation, etc. [Electronic resource] – Access mode: http://www.consultant.ru/	from any computer located on the Internet
Official website of the Ministry of Health of the Russian Federation	National clinical guidelines [Electronic resource] – Access mode: cr.rosminzdrav.ru - Clinical recommendations	from any computer located on the Internet

9. Material and technical support for mastering an academic discipline

9.1. List of premises for classroom activities for the discipline

The department is located on the basis of the dental polyclinic of PIMU, where there are: three offices for 4 chairs (40 sq.m.) 2 offices for 3 chairs (18 sq.m each), a functional diagnostics room. Lecture hall with 150 seats.

9.2. List of equipment for classroom activities for the discipline

The staff of the department provides teaching of orthopedic dentistry to students of 2,3,4,5 courses of the Faculty of Dentistry and FOIS, as well as orthodontics to students of the 4th, 5th courses of the Faculty of Dentistry and FOIS.

Lecture classes:

- a set of electronic multimedia presentations,
- an audience equipped with presentation equipment: a projector, a screen, a laptop.

Practical exercises:

Classes at the department are held in two shifts, about 25-30 students are engaged at the same time. The classrooms are equipped with modern equipment, including dental units: Azimut-200 – 8 pieces., CHIRANA- 2 pieces., Siger – 4 pieces. and Stomadent – 1 piece, SIRONA-1 pieces, LEGRIN – 2 pieces, as well as all the equipment, tools and materials necessary for conducting the educational process, ensuring admission patients and the manufacture of prostheses and orthodontic devices.

The department has created a large fund of X-ray studies, including CT of the maxillofacial region and museum exhibits of various types of prostheses and orthopedic devices in all sections of orthopedic dentistry and orthodontics (257 items).

The department has the opportunity to use computing and office equipment for scientific and pedagogical purposes: 8 personal computers, a copier, a scanner, a multimedia projector; the educational and laboratory equipment necessary to ensure the educational process is regularly updated: presentations, museum exhibits, collections of videos on the stages of orthopedic treatment; the department has a video camera, digital the camera. Classrooms are equipped with posters, stands and showcases corresponding to the subject of classes, as well as chalkboards for writing. The department has stands providing information for students of all courses, separate stands are dedicated to the history of the department, scientific achievements in the field of orthopedic dentistry, patents and inventions of employees, there is an information stand for patients.

Internet resources are a significant support in providing educational and methodological materials.

In order to ensure the high quality of the educational process and the development of clinical and practical skills in the orthopedic treatment of various nosological forms of diseases, students master practical skills on 10 dental simulation devices from A-dec.

The department has a modern material base of research, which is replenished with modern equipment:

- 1) apparatus for the study of microcirculation LAKK-01 (2003), providing research at a high scientific level;
- 2) diagnostic complex "Neuromyostom" for electromyography (2009),
- 3) parallellometer (2010).
- 4) T-scan 3. Apparatus for the diagnosis of occlusive disorders (2017).
- 5) Cone-beam computed tomography – PAX-I3D. Conducting and analyzing CT scans of the maxillofacial region (2015).
- 6) Individual articulator SAM-3. Analysis of diagnostic models.

9.3. A set of licensed and freely distributed software, including domestic production

Item no.	Software	number of licenses	Type of software	Manufacturer	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovich	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOLOGIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscription	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	170	Office Application	Microsoft		23618/HN10 030 LLC "Softline Trade" from 04.12.2020

10. List of changes to the working program (to be filled out by the template)

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation
(FSBEI HE "PRMU" of the Ministry of Health of Russia)

Department of
Orthopedic dentistry and orthodontics

CHANGE REGISTRATION SHEET

working program for the academic discipline
ORTHOPEdic DENTISTRY

Field of study / specialty / scientific specialty: **31.05.03 - DENTISTRY**

Training profile: _____
(name) - for master's degree programs

Mode of study: FULL-TIME

Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1				

Approved at the department meeting
Protocol No. _____ of _____ 20__

Head of the Department,
Doctor of medical sciences, associate professor
M.Y. Saakyan

_____ (decryption)
(signature)