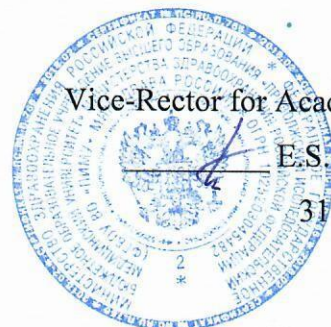


Federal State Budgetary Educational Institution of Higher Education
«Privolzhsky Research Medical University»
Ministry of Health of the Russian Federation



APPROVED
Vice-Rector for Academic Affairs

E.S. Bogomolova

31 August 2021

WORKING PROGRAMM

Name of the academic discipline: ORTHOPEDIC TREATMENT OF DISEASES OF THE TMJ (TEMPOROMANDIBULAR JOINT)

Specialty: 31.05.03 DENTISTRY

Qualification: DENTIST

Department: DEPARTMENT OF ORTHOPEDIC DENTISTRY AND ORTHODONTICS

Mode of study: FULL-TIME

Labor intensity of the academic discipline: 72 academic hours

Nizhny Novgorod
2021

The working program has been developed in accordance with the Federal State Educational Standard of Higher Education for the specialty 31.05.03 "DENTISTRY" approved by Order of the Ministry of Education and 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 – to master universal and professional competences: UC-1, PC-6, PC-7: formation of the foundations of the doctor's clinical thinking, mastering the skills of examination, differential diagnosis, rationale for the diagnosis of the disease, determining the prognosis of the disease, drawing up a treatment plan for patients, mastering the basic manual skills in carrying out orthopedic treatment necessary to start the professional activity of a future dentist, as well as in-depth study by students of sections of orthopedic dentistry necessary for the formation of systemic knowledge in the field of materials science, prevention, diagnosis and orthopedic methods of treating defects in hard tissues of teeth and dentition.

1.2. Tasks of the discipline.

The main task is to develop students' knowledge about orthopedic dentistry, as the leading one among dental disciplines, dealing with the problems of treatment and prevention of diseases of the oral cavity, as well as familiarization with new materials used in the clinic of orthopedic dentistry, a detailed study of the main and additional methods of examining an orthopedic patient, semiology, ergonomics in the clinic of orthopedic dentistry, to master the diagnosis, prevention and orthopedic methods of treating defects in teeth and dentition resulting from any pathology, the study of modern technologies for the manufacture of orthopedic structures, materials science of dental materials. In addition, the student must be able to conduct a complete examination of the patient, make a diagnosis, and prescribe treatment.

In the lecture course and in practical classes, much attention is paid to deontological principles, the formation of the worldview of a generalist doctor who is able to provide qualified dental care to children, pre-conscriptors, pregnant women, and people suffering from chronic diseases.

To accomplish this position, the teacher sets himself the following tasks:

1. By his personal example, demeanor, appearance, technique of examination and communication with the patient - to demonstrate to the student the basic provisions that must be observed in communicating with the patient, the ability to get in touch with him.
2. Demonstrate in practice a sample of a consistent methodical examination of a patient, if possible, show the symptoms of a particular disease as much as possible.
3. Actively involve students in conversations with patients, in individual stages and moments of patient examination (palpation, percussion, probing, identification of various symptoms) and thereby facilitate their first independent steps, help overcome the "barrier" in communicating with patients.
4. By analyzing the data obtained during the history taking and objective data, give an example of clinical thinking at the patient's chair.
5. Involve students in primary preventive measures to reduce dental diseases, as well as in conducting health education work (issuing health bulletins, brochures, writing lectures and talks on topical dental topics for patients).
6. The study of the disease of the hard tissues of the tooth, pulp, periodontium, periodontal and oral mucosa is accompanied by a demonstration of patients, analysis of the anamnesis, etiology and course of the disease, the treatment of pathology is complex and local, focusing on modern aspects in the practice of treating a particular disease.

The practical orientation of the classes is realized by involving students in direct work with patients, which contributes to the fulfillment of the main task: to teach students not only to know, but also to be able to.

1.3. Requirements to the deliverables of mastering the discipline.

As a result of completing the discipline, the student should

Know:

1. Principles of dispensary dental observation of various age, sex and social groups of the population, rehabilitation of patients
2. Maintenance of standard accounting and reporting medical documentation in medical organizations of the dental profile
3. The complex relationship between dental health, nutrition, general health, disease, drug use
4. General principles and features of the diagnosis of hereditary diseases and congenital anomalies.
5. Occlusion, biomechanics of the dentition.
6. Properties of dental materials and preparations used in dental practice
7. Dental instruments and equipment
8. Stages of development of orthopedic dentistry, the role of leading scientists in the development of the discipline. Principles of organizing the work of the orthopedic office and department, methods of disinfection and sterilization of dental equipment and instruments
9. Classification, properties, indications for the use of impression materials, rules for working with them;
10. Methods of examining a patient in the clinic of orthopedic dentistry, filling out a medical history, rules of deontology;
11. Indications and contraindications for dental implantation, methods of prosthetics on implants,
12. Principles and sequence of tooth preparation for stamped, cast, plastic, combined and ceramic crowns;
13. Technology of various types of fixed and removable prostheses;
14. Classifications: partial loss of teeth; type of atrophy of the alveolar process with complete loss of teeth; mucous membrane; periodontal diseases; pathological abrasion; deformations of the dentition; TMJ diseases;
15. Principles of formation of cavities during prosthetics with inlays, methods for modeling inlays;
16. Indications for prosthetics with pin structures for complete defects in hard dental tissues;
17. Features of the treatment of patients with manifestations of intolerance to dental materials used in the manufacture of fixed prostheses.
18. Types of bites
19. Biomechanics of the dentofacial system, occlusal theories with intact dentition;

Be able to:

1. Collect a complete medical history of the patient, including data on the state of the oral cavity and teeth, conduct a survey of the patient and relatives (collect biological, medical, psychological and social information)
2. Interpret the results of examinations, make a preliminary diagnosis to the patient, outline the scope of additional studies to clarify the diagnosis
3. Formulate a clinical diagnosis
4. Maintain medical records of various types of dental outpatient and inpatient facilities
5. Promote a healthy lifestyle,
6. Carry out work to promote dental health aimed at preventing hereditary and congenital diseases
7. Evaluate the results of radiation and ultrasound diagnostics used in dental practice
8. Make a diagnostic impression, fix the bite with occlusal rollers, cast the model
9. Assess the effectiveness and safety of the treatment
10. Apply aseptic and antiseptic methods, medical instruments, medical supplies for laboratory diagnostic and therapeutic purposes
11. Carry out odontopreparation, control the laboratory production of the crown of bridges, partial and complete removable dentures, as well as correct them, perform indirect restoration of the tooth crown
12. Work with dental instruments, materials, tools and equipment.
13. Determine the degree of tooth mobility, as well as the degree of periodontal atrophy;
14. Determine the compliance and mobility of the oral mucosa;
15. Prepare cavities for inlays;
16. Prepare teeth for stamped, cast, plastic, combined, metal-ceramic and ceramic crowns;
17. Perform application, infiltration, conduction anesthesia when preparing teeth for fixed dentures;

18. Read radiographs (sighting, panoramic, orthopantomograms);
19. Model inlays, as well as stump pin structures on the phantom and in the oral cavity;
20. Prepare plaster and get an impression with it, as well as compose and glue it;
21. Take impressions with elastic impression materials, cast models;
22. Fit and fix inlays, pin teeth;
23. To fit and fix metal, plastic and combined crowns and bridges;
24. Prepare cement for fixed dentures;
25. To fit frames of solid-cast arc prostheses;
26. Determine central occlusion in case of partial loss of teeth;
27. Determine the central relationship of the jaws with partial loss of teeth;
28. Check designs of removable dentures;
29. Apply arched, partial and complete removable lamellar dentures;
30. To fit and apply removable plates with bite pads, as well as plates with an inclined plane;
31. Correction of all types of prostheses;
32. Work with fast-hardening plastics;
33. To make wax bases with occlusal rollers;
34. Plaster the jaw models in the articulator;
35. Conduct parallelometry when planning the design of removable dentures;
36. Repair and reconstruct removable dentures.

Possess:

1. Methods of maintaining medical accounting and reporting documentation in medical organizations
2. Assessments of the state of dental health of the population of various age and sex groups
3. Methods of general clinical examination of children and adults
4. Clinical methods of examination of the maxillofacial region
5. Interpretation of the results of laboratory, instrumental diagnostic methods in patients of different ages
6. An algorithm for making a preliminary diagnosis to patients and, if necessary, with their subsequent referral for additional examinations and to specialist doctors
7. Algorithm for making a detailed clinical diagnosis for patients
8. The method of reading various types of radiographs
9. Determination of dental indices
10. Methods for diagnosing and treating defects in hard tissues of teeth with orthopedic structures
11. Methods for the diagnosis and treatment of partial loss of teeth with removable and non-removable orthopedic structures
12. Methods of differential diagnosis of the main clinical syndromes and diseases of the maxillofacial system;
13. Methods of complex treatment of patients based on a rational and economical approach on an outpatient basis, taking into account age, severity of the disease, the presence of concomitant pathology;
14. 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 Orthopedic treatment of diseases of the TMJ (temporomandibular joint) refers to the part formed by the participants of educational relations of Block 1 of GEP HE (C 1.2.4).

The discipline is taught in 10 semester/5 year of study.

Orthopedic dentistry is a core discipline of paramount importance. The main task of the Department of Orthopedic Dentistry is the theoretical and practical training of a doctor who is able to solve the issues of prevention, diagnosis and treatment of dental diseases. The general preventive

orientation of an 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 advice that will certainly accompany the medical 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 childhood diseases, to teach students the features of prevention, clinic, diagnosis and treatment of dental diseases. Prepare a doctor who is able to work in a medical institution after completing an internship.

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

1. Human anatomy:

Knowledge: Anatomical structure of the maxillofacial region, TMJ, blood supply to the teeth and maxillofacial region, innervation of the teeth and maxillofacial region, lymphatic system of the maxillofacial region, anatomical structure of temporary and permanent teeth.

Skills (be able to): Determine the boundaries of the maxillofacial region, TMJ, lower and upper jaw, floor of the mouth.

Skills: Palpate masticatory muscles, salivary glands, TMJ.

2. Histology with Embryology.

Knowledge: Histological structure of dental hard tissues, histological structure of dental pulp, histological structure of dental hard tissues with hard tissue defects, histology of oral cavity organs and teeth, embryology of oral cavity organs and teeth.

Skills (be able to): To study sections of teeth and histological preparations of the oral mucosa.

Skills: To receive thin sections of teeth and histological preparations of the oral mucosa.

3. Pathological anatomy and physiology.

Knowledge: Inflammation of the dental pulp, inflammation of the periodontium, TMJ arthritis, inflammation of the salivary glands, tumors of the maxilla.

Skills (be able to): Determine the presence of inflammation of the dental pulp, periodontium, TMJ, salivary glands.

Skills: Diagnose tumors and tumor-like diseases of the oral cavity.

4. Normal physiology.

Knowledge: Saliva, its properties and role in the nutrition of hard tissues of the tooth, the functions of the teeth and their role in the body, pain syndrome with defects in the hard tissues of the teeth.

Skills (be able to): Methods of registering pain in the maxillofacial area.

Skills: Analyze saliva and gingival fluid.

5. Medical physics and informatics.

Knowledge: Physical properties of hard tissues of teeth, physical properties of materials used in dental prosthetics.

Skills (be able to): Principal device, purpose, use of dental equipment.

Skills: Working on a personal computer.

6. Pharmacology.

Knowledge: Antiseptics in the clinic of orthopedic dentistry, local anesthetics, antibiotics in the treatment of diseases of the maxillofacial area, antimicrobial and antiparasitic agents, tranquilizers and sedatives, NSAIDs.

Skills (be able to): Appointment of NSAIDs, antibiotics and antimicrobial agents in the treatment of various inflammatory diseases of the maxillofacial area. The choice of local anesthetics in various local anesthesia techniques.

Skills: To carry out disinfection of impressions, dental tips, orthopedic constructions in the clinic of orthopedic dentistry. Write prescriptions for medicines.

7. Organic and inorganic chemistry.

Knowledge: Trace elements of hard tissues of teeth, proteins of hard tissues of teeth.

Skills (be able to): Appointment and properties of remineralizing and fluorinating drugs

Skills: Determine oral fluid pH.

8. Microbiology.

Knowledge: The microflora of the oral cavity in normal and caries, infection in periodontal disease, physiology of microorganisms, local immunity of the oral cavity.

Skills (be able to): Assess the results of analyzes of the microflora and the state of local immunity of the oral cavity.

Skills: Take a swab from the oral cavity, get a scraping from the oral mucosa.

9. Propaedeutic dentistry.

Knowledge: Biomechanics of the lower jaw, types of bites, types of medical records of a dentist, methods of examining a patient at a dental appointment, dental materials used by a doctor and a dental technician for the manufacture of orthopedic structures.

Skills (be able to): Examination of a patient in the clinic of orthopedic dentistry, determination of bite, reading X-rays of the maxillofacial area, making a diagnosis, drawing up a plan for orthopedic treatment, filling out medical documentation.

Skills: Take impressions with elastic impression materials, make working and diagnostic models from plaster, analyze the occlusion of teeth in various occlusions, prepare teeth on a phantom for various types of fixed prostheses.

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

1. Therapeutic dentistry.

Knowledge: Etiology, classification, pathogenesis, clinic and treatment of defects in hard tissues of teeth.

Skills (be able to): Examination of a patient with defects in hard tissues of teeth in an orthopedic dentistry clinic, reading a dental x-ray of a tooth, making a diagnosis, drawing up a plan for therapeutic preparation of the oral cavity for prosthetics, filling out medical documentation. Determine the indications for choosing a treatment method: filling with a composite material or prosthetics with an inlay.

Skills: Preparation of cavities for various localizations of defects in hard tissues of teeth on a phantom.

2. Surgical dentistry:

Knowledge: Etiology, classification, pathogenesis, clinic and treatment of defects in hard tissues of teeth and partial loss of teeth.

Skills (be able to): Examination of a patient with defects in hard tissues of teeth and partial loss of teeth in an orthopedic dentistry clinic, reading a dental x-ray of a tooth and orthopantomograms, making a diagnosis, drawing up a plan for surgical preparation of the oral cavity for prosthetics, filling out medical documentation. Determine the indications for tooth preservation and implant placement in case of partial loss of teeth.

Skills: Get impressions for immediate prostheses, master the methods of direct prosthetics.

3. Orthodontics:

Knowledge: Types of bites, biomechanics of the lower jaw and TMJ, etiology, clinic and treatment of deformities of teeth and dentition.

Skills (be able to): Examination of a patient in the clinic of orthopedic dentistry, determination of bite, reading X-rays of the maxillofacial area, making a diagnosis, drawing up a treatment plan, filling out medical documentation.

Skills: Take impressions with elastic impression materials, make working and diagnostic models from plaster, analyze the occlusion of teeth in various occlusions.

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

Mastering the discipline aims at acquiring the following universal (UC) and professional (PC) competencies:

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	possess
1.	UC-1	Able to carry out a critical analysis of	IUC 1.1. Knows: methods of critical analysis and evaluation of modern	Methods of analysis and	Obtain new knowledge in	Has practical experience:

		<p>problem situations based on a systematic approach, develop an action strategy</p>	<p>scientific achievements; basic principles of critical analysis</p> <p>IUC 1.2. Able to: gain new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related to the professional field; search for information and solutions based on action, experiment and experience</p> <p>IUC 1.3. Has practical experience: researching the problem of professional activity using analysis, synthesis and other methods of intellectual activity; developing an action strategy to solve professional problems</p>	<p>evaluation of modern scientific achievements of dentistry; basic principles of critical analysis</p>	<p>dentistry based on analysis, synthesis, etc.; collect data on complex scientific problems related to the professional field; to search for new information and solutions based on actions, experimentation and experience carried out in dentistry</p>	<p>researching the problem of professional activity in dentistry using analysis, synthesis and other methods of intellectual activity; development of an action strategy for solving professional problems in dentistry</p>
2.	PC-6	<p>PC-6</p> <p>readiness to collect and analyze complaints and other information from the patient (relatives/legal representatives), his medical history, interpretation of examination results, laboratory, instrumental, pathological and other studies, incl. diagnostic studies using modern technical means and digital technologies, in order to recognize the state or establish the presence or absence of a dental disease, symptoms, syndromes of dental diseases, the establishment of nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems, and other regulatory documents of the Ministry of Health of the Russian Federation (Procedure for the provision of medical care, Standard of medical care, Clinical recommendations</p>	<p>IPC 6.1 Knows:</p> <p>The method of collecting complaints and medical history from patients (their legal representatives).</p> <p>Methods of physical examination of patients (examination, palpation, percussion, auscultation).</p> <p>The procedure for providing medical care to the adult population with dental diseases</p> <p>The procedure for providing medical care to children with dental diseases</p> <p>Clinical guidelines on the provision of medical care to patients with dental diseases</p> <p>Medical care standards</p> <p>IPC 6.2. Able to:</p> <p>interpret the results of examination, laboratory, instrumental, pathological and other studies, incl. diagnostic studies using modern technical means and digital technologies, in order to recognize the state or establish the presence or absence of a dental disease, symptoms, syndromes of dental diseases, the establishment of nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems, and other regulatory documents of the Ministry of Health of the Russian Federation (Procedure for the provision of medical care, Standard of medical care, Clinical recommendations on the provision of medical care, etc.)</p> <p>Develop a plan for the treatment of children and adults with dental diseases in accordance with the procedures for the provision of medical care, clinical guidelines, taking into account the standards of medical care.</p> <p>IPC 6.3 Has practical experience:</p> <p>interpretation of the results of examination, laboratory, instrumental, pathoanatomical and other studies, incl. diagnostic studies using modern technical means and digital technologies, in order to recognize the</p>	<p>Methods of diagnosis, treatment, rehabilitation and prevention among the adult population and adolescents, taking into account their age and sex groups</p>	<p>Обосновывать патогенетически оправданные методы (принципы) диагностики, лечения, реабилитации и профилактики среди взрослого населения и подростков</p>	<p>Проводить патофизиологический анализ клинических синдромов</p>

		on the provision of medical care, etc.)	<p>state or establish the presence or absence of a dental disease, symptoms, syndromes of dental diseases, the establishment of nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems, and other regulatory documents of the Ministry of Health of the Russian Federation (Procedure for the provision of medical care, 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 into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care</p>			
3.	PC-7	<p>PC-7</p> <p>the ability to determine the tactics of managing patients with various dental diseases in accordance with the Clinical Guidelines and other regulatory documents of the Ministry of Health of the Russian Federation on an outpatient basis and in a day hospital, taking into account the age of the patient.</p>	<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 drugs 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 unexpected</p> <p>Principles, techniques and methods of anesthesia, selection of the type of local anesthesia in the treatment of dental diseases</p> <p>Ways to prevent or eliminate complications, side effects, adverse reactions, including serious and unforeseen, that occurred during the examination or treatment of patients with diseases of the teeth, pulp, periodontium, periodontium, oral mucosa and lips</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; the structure of the teeth; histology and embryology of the oral cavity and teeth, the main violations of embryogenesis</p> <p>IPC 7.2. Able to:</p> <p>Develop a plan for the treatment of children and adults with dental diseases in accordance with the procedures for the provision of medical care, clinical guidelines, taking into account the standards of care</p> <p>Select and prescribe medicines, medical devices (including dental materials), dietary nutrition, medical and recreational regimen for the treatment of children and adults with dental diseases in accordance with the current procedures for the provision of medical care, clinical</p>	Tactics of managing patients with diseases of the dentoalveolar system.	Determine the tactics of managing patients with diseases of the dentoalveolar system.	Tactics of managing patients with diseases of the dentoalveolar system.

recommendations, taking into account the standards of medical care

Determine medical indications and contraindications for local anesthesia techniques in the maxillofacial region

Perform local anesthesia (application, infiltration, conduction) in children and adults with dental diseases

Perform medical interventions, including therapeutic ones, in children and adults with dental diseases on an outpatient basis (excluding repeated endodontic treatment):

- individual training in oral and dental hygiene, selection of means and items for oral hygiene
- controlled brushing of teeth
- professional oral and dental hygiene
- injection of drugs in the maxillofacial area
- local application of remineralizing preparations in the area of the tooth
- deep fluoridation of tooth enamel
- sealing the fissure of the tooth with a sealant
- professional teeth whitening
- grinding of hard tissues of the tooth
- restoration of a tooth with a filling using dental cements, chemical curing materials, photopolymers
- restoration of teeth with a violation of the contact point
- tooth restoration with filling material using anchor pins
- application of devitalizing paste
- pulpotomy (amputation of the coronal pulp)
- pulp extirpation
- instrumental and medical treatment of a well-passable root canal
- temporary filling of the root canal with a drug
- filling the root canal of the tooth with paste, gutta-percha pins
- removal of supragingival and subgingival plaque in the tooth area (manual method)
- ultrasonic removal of supragingival and subgingival dental deposits in the tooth area
- closed curettage for periodontal diseases in the tooth area
- application of a medical dressing for periodontal diseases in the area of one jaw
- prescription of drug therapy for diseases of the oral cavity and teeth
- appointment of dietary therapy for diseases of the oral cavity and teeth

Perform medical interventions, including surgical ones, in children and adults with dental diseases on an outpatient basis (excluding the extraction of impacted and dystopic teeth):

- removal of a tooth
- removal of a temporary tooth
- permanent tooth extraction
- opening and drainage of odontogenic

		<p>abscess</p> <p>Carry out phased sanitation of the oral cavity (excluding sanitation of the oral cavity in children under anesthesia)</p> <p>Perform medical interventions, including orthopedic, in adults with dental diseases on an outpatient basis (excluding prosthetics on dental implants, technologies for automated production of orthopedic structures, complete removable lamellar and clasp dentures):</p> <ul style="list-style-type: none"> - obtaining anatomical and functional impressions - restoration of a tooth with a crown - restoration of the integrity of the dentition with fixed bridges - prosthetics with partial removable lamellar dentures - correction of a removable orthopedic structure - removal of a fixed orthopedic structure <p>Interpret the results of X-ray studies of the maxillofacial region</p> <p>Conduct counseling for children and adults with diseases of the mucous membranes of the mouth and lips, determine indications for referral for a consultation with specialist doctors</p> <p>Prevent or eliminate complications, side effects, adverse reactions, including unforeseen ones, resulting from diagnostic or therapeutic manipulations, the use of drugs and (or) medical devices, non-drug treatment</p> <p>IPC 7.3 Has practical experience:</p> <p>Selection and prescription 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 guidelines, taking into account the standards of medical care</p> <p>Prescribing dietary nutrition, health-improving regimen in 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>Performing medical interventions in children and adults with dental diseases in accordance with the current procedures for the provision of medical care, clinical guidelines, taking into account the standards of medical care</p> <p>Evaluation of the results of medical interventions in children and adults with dental diseases</p> <p>Selection of the type and conduct of local anesthesia (application, infiltration, conduction) in children and adults with dental diseases</p> <p>Evaluation of the efficacy and safety of the</p>			
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			<p>use of drugs, medical devices and non-drug treatment in children and adults with dental diseases</p> <p>Counseling children and adults with diseases of the mucous membranes of the mouth and lips, determining indications for referral for a consultation with specialist doctors</p> <p>Selection and prescription of medicines and medical devices, taking into account the diagnosis, age and clinical picture of a dental disease in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Definitions of routes of administration, regimen and dosage of drugs</p> <p>Selection and prescription of non-drug treatment for children and adults with dental diseases in accordance with the procedures for providing medical care, clinical guidelines, 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 procedures, the use of drugs and (or) medical devices, non-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 life of the patient in an emergency form</p> <p>The use of medicines and medical devices in the provision of medical care in an emergency form</p>			
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4. Sections of the academic discipline and competencies that are formed when mastering them:

№	Competence code	Section name of the discipline	The content of the section in teaching units
1.	UC-1, PC-6,7	<i>Orthopedic treatment of diseases of the TMJ (temporomandibular joint)</i>	Etiology, pathogenesis, clinic and diagnosis of TMJ diseases, preparation of the oral cavity for prosthetics in 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 (AH) in semesters		
	volume in credit units (CU)	volume in academic hours (AH)	semester 10		
Classroom work, including					
Lectures (L)	0,3	10	10		
Laboratory practicum (LP)*					
Practicals (P)					
Clinical Practical (CP)	0,9	34	34		
Seminars (S)					
Student's individual work (SIW)	0,8	28	28		

Student research work					
Mid-term assessment credit/exam (<i>specify the type</i>)					
TOTAL LABOR INTENSITY:	2	72	72		

6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work:

№	Name of the section of the academic discipline	Types of academic work* (in AH)						
		L	LP	P	CP	S	SIW	total
1	Physiological occlusion. Modern theories. Fundamentals of neuromuscular dentistry.	3			11		9	23
2	Differential diagnosis of TMJ diseases.	3			11		9	23
3	Arthritis and osteoarthritis. TMJ diseases caused by malocclusion. Etiology, clinic, pathogenesis and orthopedic treatment.	4			12		10	26
	TOTAL:	10			34		28	72

* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; CP – Clinical Practicals; 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 10
1	Physiological occlusion. Modern theories. Fundamentals of Neuromuscular Dentistry.	3
2	Differential diagnosis of TMJ diseases.	3
3	Arthritis and osteoarthritis. TMJ diseases caused by malocclusion. Etiology, clinic, pathogenesis and orthopedic treatment.	4
	TOTAL (total – 10 AH)	10

6.2.2. The thematic plan of laboratory practicums.

Laboratory workshops on orthopedic dentistry are not provided by the Federal State Educational Standard.

6.2.3. The thematic plan of practicals

Practicals on orthopedic dentistry are not provided by the Federal State Educational Standard.

6.2.4. The thematic plan of clinical practicals:

№	Name of the topics of clinical practicals	Volume in AH
		Semester 10
1	Physiological occlusion. Modern theories. Fundamentals of Neuromuscular Dentistry.	11
2	Differential diagnosis of TMJ diseases.	11
3	Arthritis and osteoarthritis. TMJ diseases caused by malocclusion. Etiology, clinic, pathogenesis and orthopedic treatment.	12
	TOTAL (total – 34 AH)	34

6.2.5. Thematic plan of seminars:

Seminars on orthopedic dentistry are not provided by the Federal State Educational Standard.

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

№	Types and topics of SIW	Volume in AH
		Semester 10
1	Work with lecture material, which includes the development of lecture notes and educational literature, the solution of situational problems. Search and review of literature and electronic sources of information on an individually given problem of the course, writing an abstract on a given problem, preparation for discussion and control work. Writing case histories, working with electronic educational resources posted on the educational portal of the Academy.	9
2	Work with lecture material, which includes the development of lecture notes and educational literature, the solution of situational problems. Search and review of literature and electronic sources of information on an individually given problem of the course, writing an abstract on a given problem, preparation for discussion and control work. Writing case histories, working with electronic educational resources posted on the educational portal of the Academy.	9
3	Work with lecture material, which includes the development of lecture notes and educational literature, the solution of situational problems. Search and review of literature and electronic sources of information on an individually given problem of the course, writing an abstract on a given problem, preparation for discussion and control work. Writing case histories, working with electronic educational resources posted on the educational portal of the Academy.	10
TOTAL (total – 28 AH)		28

6.2.7. Student research work:

Student research work is not provided by the Federal State Educational Standard.

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

For the current control are used: control works; testing; writing abstracts; solving situational problems.

Forms of intermediate certification: credit, exam

№	Seme ster No.	Types of control		Name of section of academic discipline	Competence codes	Assessment formats		
						types	number of test questions	number of test task options
1.	10	Current monitoring / Mid-term assessment	Control mastering of the topic	"Orthopedic treatment of TMJ diseases"	UC-1, PC-6, PC-7	Test tasks	50	Unlimited (during computer testing)
			Monitoring the student's individual work	"Orthopedic treatment of TMJ diseases"	UC-1, PC-6, PC-7	Situational tasks	1	10

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:

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1.	Zhulev E. N. Fixed prostheses: theory, clinic and laboratory equipment, 5th edition Moscow, Medical News Agency. 2010	1	24 + electronic resource
2.	Zhulev E.N. Removable partial dentures (theory, clinic and laboratory equipment): A guide for physicians. 2nd edition. Moscow, Medical Information Agency. 2011	1	73 + electronic resource
3.	Zhulev E.N., Kuryakina N.V., Mitin N.V. Orthopedic dentistry. Phantom course. Moscow, Medical Information Agency, 2011. - 720 p.	1	100

4.	Zhulev E.N. Orthopedic dentistry M. : Medical information agency, 2012 - 824 p.	1	148
5.	Zhulev E.N., Arutyunov S.D., Lebedenko I.Yu. Maxillofacial orthopedic dentistry M.: Medical information agency, 2008 - 156 p.	1	31 + electronic resource

8.2. Further reading:

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1.	Trezubov VN Preliminary treatment of patients before dental prosthetics. Tutorial. Moscow, publishing house MIA, 2009	1	1
2.	Kopeikin VN Orthopedic treatment of periodontal diseases. Key issues in dentistry. M., Triada-H. 1998	1	3
3.	Zhulev E.N. Shcherbakov A.S. Orthopedic dentistry (test tasks). N.Novgorod Publishing house – NSMA, 2004	1	56
4.	Hemmerle K.. Dental ceramics. Actual aspects of clinical application. M. : Publishing house "Azbuka stomatologa", 2011	1	0
5.	Massironi D., Paschetta R., Romeo D. Accuracy and Aesthetics. Clinical and dental stages of prosthetics M. : Publishing house "Azbuka stomatologa", 2008	1	0
6.	Schillenburg G., Jacobi R., Brackett S. Fundamentals of tooth preparation for the manufacture of cast metal, metal-ceramic and ceramic restorations. M.: Publishing house "Azbuka stomatologa", 2011	1	0
7.	Periodical literature - journals on dentistry. "Dentistry", "New in Dentistry", "Quintessence", "Dentart", "STM", "Panorama of Orthopedic Dentistry", "Clinical Dentistry", "Dent-art". Various publishing houses of the cities: Moscow, St. Petersburg and N. Novgorod.	0	One copy for each release period
8.	Zhulev EN Clinic, diagnosis and orthopedic treatment of periodontal diseases. N.Novgorod, NSMA publishing house, 2003	1	53
9.	Zhulev EN Metal-ceramic prostheses. Tutorial. N. Novgorod, publishing house of NSMA. 2004	1	57

8.3. List of guidelines for classroom and independent work of students:

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1.	Zhulev E.N., A.L. Manakov "Designing a removable prosthesis with a metal base" N. Novgorod, NSMA 1998, - 36 p.	5	53
2.	Sahakyan M.Yu. "Orthopedic treatment of generalized periodontal diseases complicated by partial loss of teeth" N. Novgorod: NSMA Publishing House, 2001, 23 p.	5	23
3.	Sahakyan M.Yu. "Special preparation of the oral cavity for prosthetics in the orthopedic treatment of periodontal diseases" N. Novgorod: NSMA Publishing House, 2001, 29 p.	4	5
4.	Zhulev E.N., Arutyunov S.D., Lebedenko I.Yu. "Preparation of teeth for inlays" N. Novgorod: NSMA Publishing House 2006, 96 p.	5	55
5.	Zhulev E.N. "Materials Science in Orthopedic Dentistry" N. Novgorod: NSMA Publishing House, 1997, 136 p.	3	98
6.	Zhulev E.N. "Method of grinding teeth in the treatment of functional overload of the periodontium" N. Novgorod: Publishing house of NSMA, 1990, 10 p.	3	1
7.	Zhulev E.N. "Methodological recommendations for a student for compiling a medical history" N. Novgorod: Publishing house of NSMA, 1990, 8 p.	4	2
8.	Zhulev E.N., Ershov P.E., Bragina O.M. "Assistant to the orthopedic dentist" (educational manual): N. Novgorod: NSMA Publishing House, 2016. - 52 p.	100	20
9.	Zhulev E.N., Ershov P.E., Kochubeynik A.V. "Examination of a patient in the clinic of orthopedic dentistry" (manual): N. Novgorod: Publishing house of NSMA, 2015. - 60 p.	100	20
10.	Zhulev E.N., Ershov P.E. "Organization of the work of the department of orthopedic dentistry and dental laboratory" (educational manual). Nizhny Novgorod: NSMA Publishing House, 2016. - 64 p.	100	20

8.3. Electronic educational resources for teaching academic subjects

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

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
1	Internal electronic library system (IELS)	Proceedings of the teaching staff of the Academy: textbooks and teaching aids, monographs, collections of scientific papers, scientific articles, dissertations, abstracts of dissertations, patents.	from any computer 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>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>	<i>Number of users</i>
1	Electronic database "Student Advisor"	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 subscription of PRMU
2	Electronic library system "Bukap"	Educational and scientific medical literature of Russian publishing houses, incl. translations of foreign publications.	from any computer located on the Internet by login and password, from the computers of the academy. Subscribed editions are available for reading. [Electronic resource] - Access mode: http://www.books-up.ru/	General subscription of PRMU
3	"Bibliopoisk"	Integrated search service "single window" for electronic catalogs, ELS 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.	For PRMU, access to the demo version of the Bibliopoisk search engine is open: http://bibliosearch.ru/pimu .	General subscription of PRMU
4	Russian electronic periodicals	Periodicals on medical topics and higher education	- from the computers of the PRMU on the platform of the electronic library eLIBRARY.RU -magazines publishing house "Mediasphere" - from the computers of the library or provided library at the request of the user [Electronic resource] - Access mode: https://elibrary.ru/	Not limited
5	International Scientometric Database «Web of Science Core Collection»	Web of Science covers materials on natural, technical, social, humanitarian sciences; takes into account the mutual citation of publications developed and provided by «Thomson Reuters»; has built-in search, analysis and management of bibliographic information.	Free access from PRMU computers [Electronic resource] - Access to the resource at: http://apps.webofknowledge.com	Free access from PRMU computers

8.3.3 Open access resources

<i>№</i>	<i>Name of the electronic resource</i>	<i>Brief description (content)</i>	<i>Access conditions</i>
1	Federal Electronic Medical Library (FEMB)	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://neb.rf/	from any computer located on the Internet

2	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
3	Scientific electronic library of open access CyberLeninka	Full texts of scientific articles with annotations published in scientific journals in Russia and neighboring countries. [Electronic resource] - Access mode: https://cyberleninka.ru/	from any computer located on the Internet
4	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
5	Reference and legal system "Consultant Plus"	Federal and regional legislation, judicial practice, financial advice, legislative comments, etc. [Electronic resource] - Access mode: http://www.consultant.ru/	from any computer located on the Internet
6	Official website of the Ministry of Health of the Russian Federation	National Clinical Guidelines [Electronic resource] - Access mode: cr.rosminzdrav.ru - Clinical guidelines	from any computer located on the Internet
7	Official website of the Russian Respiratory Society	Modern materials and clinical guidelines for the diagnosis and treatment of respiratory diseases [Electronic resource] - Access mode: www.spulmo.ru – Russian Respiratory Society	from any computer located on the Internet
8	Official website of the Russian Scientific Society of Therapists	Modern materials and clinical guidelines for the diagnosis and treatment of diseases of internal organs [Electronic resource] - Access mode: www.rnmot.ru – Russian Scientific Society of Therapists	from any computer located on the Internet

1. Programs for reading X-ray images – Ez3D 2010, O-line, 3Dlab
2. Program for creating and viewing presentations – Power Point 97-2003
3. Program for viewing educational films – Windows media, Quick Time
4. Program for viewing educational material in the format PDF – Acrobat Reader
5. Program for word processing, spreadsheets, presentations, graphics, databases – OpenOffice.org 3
6. Program for recording electronic media – Nero Ahead Burning Room
7. Electronic catalog of dissertations – «Dissercat»
8. Search engines: Yandex, Google, Rambler, Yahoo.
9. Information received when communicating on dental forums, websites of dental journals, for example: <http://100mat.ru>, <http://instom.ru>, <http://dental-revue.com>, <http://forum.stom.ru>.

9. Material and technical support for mastering an academic discipline.

9.1. List of premises for classroom activities for the discipline.

1. Lecture hall equipped with multimedia equipment and a microphone.
2. Clinical practice rooms
3. Multidisciplinary accreditation and simulation center
4. Equipment necessary for conducting classroom lessons in the discipline.

9.2. List of equipment for classroom activities for the discipline

Lecture classes:

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

Clinical practicals:

Classes at the department are held in two shifts, about 25-30 students study at the same time. The classrooms are equipped with modern equipment, including dental units: Azimut-100 - 6 pcs., Azimut-200 - 3 pcs., Gallant - 2 pcs., Dabi Atlante - 3 pcs. and Performer - 1 pc., as well as the whole range of equipment, tools and materials necessary for conducting the educational process, ensuring the reception of patients and the manufacture of prostheses and orthodontic appliances.

The department has created a large fund of 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: 5 personal computers, 3 inkjet printers, 2 laser printers, a copier, a scanner, 6 TVs, 4 video recorders; the educational and laboratory equipment necessary to ensure the educational process is regularly updated: a slide projector, a collection of slides; in the use of the department there is a video camera, a digital camera. Classrooms are equipped with posters, stands and showcases that correspond to the topics of the classes, as well as boards for writing with chalk. The department has stands that provide information for students of all courses, separate stands are devoted to the history of the development of the department, scientific achievements in the field of orthopedic dentistry, patents and inventions of employees, there is an information stand for patients.

The department has created cable television to demonstrate various clinical techniques to students using a video camera. Internet resources are a significant support in providing educational and methodological materials..

In order to ensure the high quality of the educational process and develop clinical and practical skills in orthopedic treatment of various nosological forms of diseases, students master practical skills on 12 phantom devices.

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

- 1) apparatus for studying microcirculation (2003), which provides research at a high scientific level;
- 2) diagnostic complex "Neuromiostom" for electromyography (2009),
- 3) parallometer (2010).

Educational technologies in an interactive form used in the process of teaching the discipline:

1. Problem lecture,
 2. Practical lesson in the form of a workshop,
 3. Lecture-visualization,
 4. Practical lesson in the form of a presentation.
- Totally 51% of interactive classes from the volume of classroom work.

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/HN10030 LLC "Softline Trade" from 04.12.2020

