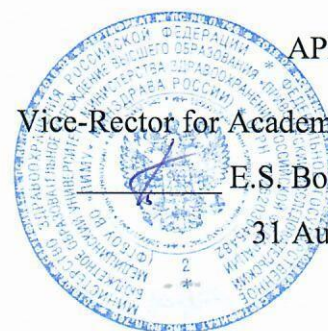


Federal State Budgetary Educational Institution of Higher Education  
"Privolzhsky Research Medical University"  
Ministry of Health of the Russian Federation



APPROVED

Vice-Rector for Academic Affairs

E. S. Bogomolova

31 August 2021

**WORKING PROGRAMM**  
**Elective discipline**

Name of the discipline (according to the working curriculum): **THERAPEUTIC DENTISTRY**

Specialty: **31.05.03 DENTISTRY**

Qualification: **DENTIST**

Department: **THERAPEUTIC DENTISTRY**

Mode of study: **FULL-TIME**

Labor intensity of the academic discipline: **792 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 No. 984 of August 12, 2020.

**Developers of the working program:**

1. Uspenskaya O.A., Doctor of Medical Sciences, Associate Professor, Head. Department of Therapeutic Dentistry;
2. Spiridonova S.A., Candidate of Medical Sciences, Associate Professor of the Department of Therapeutic Dentistry.

**Reviewers:**

1. Belenova I.A., Doctor of Medical Sciences, Professor, Head of the Department "Training highly qualified personnel in dentistry", FSBEI HE "Voronezh State Medical Institute named after N.N. Burdenko" of the Ministry of Health of the Russian Federation, Deputy Head of the European Department of Preventive, Personalized, Preventive Dentistry at the European Association for Preventive, Personalized, Preventive Medicine (EPMA - DPPP).
2. Sahakyan M.Yu., Doctor of Medical Sciences, Associate Professor, Head. Department of Orthopedic Dentistry and Orthodontics FGBOU VO "PIMU" of the Ministry of Health of the Russian Federation.;

The program was reviewed and approved at the department meeting (protocol No. 9 of April 12, 2021)

Head of the Department,  
academic degree, academic title \_\_\_\_\_  O.A. Uspenskaya  
(signature)

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AGREED

Head of the EMA \_\_\_\_\_  O. M. Moskovtseva  
(signature)

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## **1. Goals and objectives of mastering the discipline**

Therapeutic dentistry is the leading among dental disciplines, since the main place in it is occupied by the problems of not only treatment, but also the prevention of dental caries, periodontal diseases and oral mucosa. There is a close relationship between restorative dentistry and other clinical disciplines, restorative dentistry is the most important preventive section among all other profiles of dentistry - surgical and orthopedic.

The therapeutic section of dentistry combines a number of diseases of the oral cavity (diseases of the teeth and periodontal tissues, pathology of the oral mucosa and tongue), which are subject to mainly conservative, and often complex etiopathogenetic treatment with the participation of dental surgeons, orthopedists, endocrinologists, gastroenterologists and other specialists. Practical skills acquired at the Department of Therapeutic Dentistry are the basis for all subsequent creative activities of a dentist.

### **I.I. The purpose of teaching discipline**

The purpose of teaching therapeutic dentistry is to study the occurrence, development mechanisms, methods for diagnosing and treating diseases of the teeth, periodontium and oral mucosa.

The process of studying the discipline is aimed at developing the following universal competencies (MC) in the graduate:

Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy (UK-1);

The process of studying the discipline is aimed at developing the following professional competencies (PC) in the graduate:

The ability and readiness to conduct preventive medical examinations, medical examinations of various categories of citizens and the implementation of dispensary observation of patients with dental pathology (PC-2);

Willingness to participate in scientific research, analysis and public presentation of medical information based on evidence-based medicine and to participate in the implementation of new methods and techniques aimed at protecting public health and reducing dental morbidity (PC-12);

The ability to determine the tactics of managing patients with various dental diseases in accordance with the Clinical recommendations 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 (PC-7);

Willingness to collect and analyze complaints and other information from the patient (relatives / legal representatives), his medical history, interpretation of examination results, laboratory, instrumental, pathoanatomical and other studies in order to recognize the condition 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.) (PC -6).

The study of the course of therapeutic dentistry begins with the development of the basic elements - asepsis, antisepsis, anesthesia in the practice of therapeutic dentistry, principles and techniques for the preparation of hard tissues of teeth in caries, oral hygiene, the basics of caries prevention, what a student needs to know for successful treatment of a patient and further mastering the course of dentistry.

Manual and theoretical knowledge acquired in the preclinical course allows one to more deeply and fully master the diagnosis and treatment of caries complications, the pathology of hard dental tissues of non-carious origin, periodontal diseases and oral mucosa.

For better assimilation of the material, the educational process is as close as possible to the real work environment in the clinic, which enables students to better master the practical side of the

matter. Most of the topics studied are worked out in two stages: theoretically, then practically in the dental office, which helps to reflect the essence of the topic being studied from different positions. This tactic makes it possible to better meet the requirements of bringing teaching closer to practical medicine, to ensure the specific nature of the pedagogical process. Most topics are studied practically in the conditions of a dental clinic, in a physiotherapy room, in a laser therapy room. These topics include: "Caries and its complications", "Pathology of hard tissues of the tooth of non-cariogenic origin", "Periodontium diseases", "Diseases of the oral mucosa", "Prevention of dental diseases".

The thematic plan of practical classes and lectures is drawn up in such a way that the lecture material focuses on general issues of the topic, the relationship of individual sections, as well as issues that are not worked out subsequently in practical classes: "Epidemiology", "Recording of morbidity", "Structure, physiology and functions of organic membranes of enamel and hard tissues of the tooth", "Etiology and pathogenesis of caries and its complications", "Pathological anatomy of caries, pulpitis, periodontitis", "Periodontium, structure, functions", "Structure, functions of the oral mucosa", "Organization of dental care in Russia, the main prospects for improvement.

Practical classes are held in direct work with patients, which is important in acquiring manual skills and of great educational value - ethics, aesthetics, deontology.

The use of test control, situational tasks of different levels of complexity, viewing slides reduces the theoretical part of the lesson to a minimum, allows you to avoid "micro-lectures" and drag out the theoretical part of the lesson.

## 1.2. The tasks of studying the discipline

As a result of studying the discipline

STUDENT SHOULD KNOW:

- stages of development of therapeutic dentistry, the role of leading scientists in the development of the discipline, the foundations of the organization of dental care in the Russian Federation. Principles of dental office equipment;
- definition, classification, etiology and pathogenesis of dental caries;
- pathological anatomy, clinic, differential diagnostics, methods of treatment and prevention of caries;
- classification, etiology, pathogenesis, pathological anatomy of pulpitis;
- clinic, differential diagnostics, methods of treatment of inflammation of the pulp;
- classification, etiology, pathogenesis, pathological anatomy of periodontitis;
- clinic, differential diagnostics, methods of treatment of periodontal inflammation;
- classification, etiology, pathogenesis, pathological anatomy of lesions of teeth of non-cariogenic origin. Clinic, differential diagnosis, methods of prevention and treatment of lesions of hard tissues of the tooth of non-cariogenic origin;
- classification, etiology, pathogenesis, pathological anatomy of diseases of the oral mucosa. Clinic, differential diagnosis, methods of prevention and treatment of diseases of the oral mucosa;
- possible errors and complications arising in the treatment of caries, its complications, dental diseases of non-cariogenic origin, their elimination and treatment;
- carrying out capillaroscopy and capillarography;
- carrying out reoparodontography;
- radical gingivectomy;
- radical plastic surgery according to Tseshinsky - Widman - Neumann;
- amputation of exposed molar roots, hemisection of roots in case of periodontal diseases;
- study of the quantitative and qualitative composition of the gingival fluid;
- determination of leukocyte migration (M.Ya. Yasinovsky's test);
- detection of tissue saturation with ascorbic acid (Rotter's test);
- testing with bacterial allergens;
- stomatoscopy;

- luminescent diagnostics;
- determination of the potential difference in the oral cavity;
- cryotherapy for diseases of the mucous membrane;
- biopsy;
- physiotherapy for diseases of the mucous membrane;
- treatment of diseases of the mucous membrane with the use of a helium-neon laser;
- diagnosis of emergency conditions of patients;
- to form in patients and their family members motivation aimed at maintaining and strengthening their health and the health of others.

#### STUDENT SHOULD BE ABLE TO:

- to conduct a survey of patients in order to diagnose caries, pulpitis, periodontitis, periodontal disease and oral mucosa, non-carious lesions of the teeth;
- determine the index of oral hygiene according to Fedorov - Volodkina, according to Green-Vermillion;
- describe radiographs;
- determine the degree of tooth mobility (I, II, III);
- determine the type of plaque on the teeth, tartar, its color, consistency;
- determine the state of the anatomical areas of the gums (free and attached gums);
- determine the nature of gingivitis (acute, chronic, catarrhal, hypertrophic, atrophic, ulcerative);
- determine the depth of the pockets with a graduated probe;
- to determine the presence of subgingival tartar, discharge from pockets;
- determine the severity of gingival inflammation (mild, moderate, severe);
- conduct a Schiller-Pisarev test to clarify the boundaries of inflammation;
- determine the papillary-marginal-alveolar index (PMA);
- determine the periodontal index (PI);
- to determine the CPITN index - the index of the need for the treatment of periodontal diseases;
- take a smear for cytological, bacterioscopic, bacteriological examination of the contents of the pocket;
- perform palpation of regional lymph nodes of the facial skeleton, soft tissues of the face;
- perform palpation of Valle's points;
- perform palpation of the oral mucosa;
- to determine the morphological elements of the lesion;
- probe deep ulcers, fistulas;
- take material for cytological examination (scrapings, prints);
- take material for direct microscopy for fungi, fusospirochetes;
- carry out drying and vital staining of enamel in order to identify carious spots;
- prescribe and conduct training in rational oral hygiene;
- to carry out therapeutic measures for enamel remineralization in order to prevent and treat caries and non-carious lesions of the teeth;
- to carry out comprehensive measures for the prevention of caries;
- to carry out application, infiltration and conduction anesthesia for the purpose of painless treatment of affected hard tissues of the tooth and pulp;
- to choose and carry out a rational method of treating caries, pulpitis, periodontitis, non-carious lesions of the teeth, depending on the clinical manifestations and the state of the body as a whole;
- dissect carious cavities of I-VI classes of Black, atypically located cavities;
- carry out antiseptic treatment and drying of cavities in the hard tissues of the tooth;
- mixing materials for temporary and permanent fillings, root canal filling, therapeutic and insulating pads;
- apply therapeutic and insulating pads, temporary fillings and dressings, fillings from cements, amalgam, compomers and composite filling materials;

- seal intact fissures of teeth with sealants;
- grinding and polishing fillings;
- apply a paste for pulp devitalization;
- remove temporary and permanent fillings;
- open the cavities of all anatomical groups of teeth, prepare the crowns of intact teeth;
- remove the pulp after devitalization from the root canal;
- to carry out instrumental, drug treatment of the root canal, its drying, determining the degree of its patency;
- seal root canals with pastes and sealants without using and using pins;
- remove fragments of instruments from the root canal;
- to carry out therapeutic measures in case of damage to the oral mucosa with arsenic salts;
- to carry out therapeutic manipulations in case of perforation of the bottom and walls of the carious cavity, pulp chamber, bi- and trifurcation;
- to carry out therapeutic manipulations to eliminate complications associated with the treatment of caries and its complications;
- remove dental deposits: plaque, above - and subgingival tartar;
- polish teeth after removing dental deposits;
- to carry out applications of drugs on the marginal gum;
- wash pockets with a syringe, spray gun;
- introduce turundas with medicinal substances into pockets;
- dissect the periodontal pocket in the presence of an abscess;
- carry out curettage of pockets;
- prepare and apply medical dressings;
- inject medicinal substances into the hypertrophied gingival papilla for the purpose of sclerosis;
- perform a gingivectomy;
- splinting teeth in case of periodontal diseases (ligature binding, splints made of quick-hardening plastic and composites);
- inject medicinal substances into the transitional fold;
- eliminate local traumatic factors;
- inject drugs under the elements of the lesion;
- local treatment of lesions of the mucous membrane - removal of raids, necrotic tissues, washing, irrigation, applications;
- correctly draw up the ICSB and other medical documentation (referrals to other departments, etc.);
- Write prescriptions for medicines.

#### STUDENT SHOULD OWN:

- methods of preparation, mechanical and drug treatment and filling of carious cavities;
- methods of remotherapy;
- methods of mechanical and drug treatment of root canals;
- methods of filling root canals;
- methods of treatment of periodontal diseases;
- methods of treatment of diseases of the mucous membrane of the oral cavity and lips;
- methods of treatment of non-carious lesions of hard dental tissues;
- methods of injection and non-injection local anesthesia;
- methods of treatment of pulpitis, apical periodontitis and caries;
- methods of professional oral hygiene;
- fissure sealing techniques;
- Methods of resuscitation and emergency care.

To fulfill this provision

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 the patient, to the maximum extent possible to show the symptoms of a particular disease.

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. Analyzing the data obtained during the collection of anamnesis and objective data, give an example of clinical thinking at the patient's chair.

5. To involve students in primary preventive measures to reduce dental diseases, as well as in dental educational work (issuing health bulletins, brochures, writing lectures and talks on topical dental topics for patients).

6. The study of the disease of hard tissues of the tooth, pulp, periodontal, 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.

2. The place of discipline in the structure of the PEP HE Academy

2.1. Discipline Therapeutic dentistry and physiotherapy of dental diseases refers to the basic part B1.B.40.

2.2. To study the discipline, knowledge, skills and abilities are necessary, formed by the previous disciplines:

2.2.1. pathological physiology.

Knowledge - Inflammation. Pathology of thermoregulation. Fever. Tumors. Allergy.

Skills - to identify the presence of inflammation, an allergic reaction, a tumor.

Skills - to determine the severity and severity of the inflammatory process

2.2.2. Pathological anatomy.

Knowledge - Inflammation. Necrosis. Regeneration. Tumors. Injuries.

Skills - to take material for cytological examination (scrapings, prints) from the area under study;

Skills - to distinguish various pathological processes from each other.

2.2.3. Pharmacology.

Knowledge - Antiseptics in the clinic of therapeutic dentistry.

Enzymes. Antibiotics. Antimicrobial and antiparasitic agents. Means that affect tissue metabolism. Antidotes and complexones.

Tranquilizers and sedatives. Narcotic and non-narcotic analgesics. Local anesthetic drugs.

Skills - the choice of the necessary drug depending on the pathology

Skills - write prescriptions for drugs.

2.3. The study of the discipline is necessary for the knowledge, skills and abilities formed by subsequent disciplines/practices:

Department of Therapeutic Dentistry - graduating department.

3. The results of mastering the discipline and indicators of the achievement of competencies.

**The study of the discipline is aimed at developing the following universal (UK), general professional (OPK) and professional (PC) competencies among students:**

№	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 problem situations based on a systematic approach, develop an action strategy	IUC 1.1 Knows: methods of critical analysis and evaluation of modern scientific achievements; basic principles of critical analysis 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 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	Principles and methods of search, analysis and synthesis of information.	Apply the principles and methods of searching, analyzing and synthesizing information; Competently, logically, reasonably form their own judgments and assessments.	Practical skills of searching, analyzing and synthesizing information.
2.	PC-2	Able to assess the condition of a patient requiring medical treatment in the emergency form	IPC 2.1 Knows: Normative legal acts regulating the procedures for conducting preventive medical examinations and medical examinations The main criteria for a healthy lifestyle and methods for its formation Socio-hygienic and medical aspects of alcoholism, drug addiction, substance abuse, the basic principles of their prevention	pathological anatomy, clinic, differential diagnosis, methods of treatment and prevention of caries; pulpitis, periodontitis, periodontal diseases and oral	prescribe and conduct training in rational oral hygiene; carry out therapeutic measures for enamel remineralization in order to prevent and treat caries and	methods of preparation, mechanical and drug treatment and filling of carious cavities; remotherapy techniques; methods of mechanical and drug treatment of root canals; root canal filling



			<p>Forms and methods of sanitary and hygienic education among patients (their legal representatives), medical workers</p> <p>Features of specific and non-specific prevention of dental diseases</p> <p>The main hygienic measures of a health-improving nature that promote health and prevent the occurrence of dental diseases</p> <p>Etiology, pathogenesis, prevention of dental diseases</p> <p>Fundamentals of Preventive Medicine</p> <p>Stages of planning and implementation of community programs for the prevention of dental diseases</p> <p>IPC 2.2 Able to:</p> <p>Conduct health and hygiene education among children and adults (their legal representatives) and medical workers in order to form a healthy lifestyle and prevent dental diseases</p> <p>Carry out health education among children and adults with dental diseases in order to form a healthy lifestyle and prevent dental diseases</p> <p>To form in children and adults (their legal representatives) behavior aimed at maintaining and improving the level of somatic and dental health</p> <p>Develop and</p>	<p>mucosa; methods and means used in the medical examination, dispensary groups depending on the dental disease</p>	<p>non-carious lesions of the teeth; carry out comprehensive measures for the prevention of caries; determine the index of oral hygiene according to Fedorov - Volodkina, according to Green-Vermillion ; determine the type of plaque on the teeth, tartar, its color, consistency; carry out therapeutic manipulations to eliminate complications associated with the treatment of caries and its complications; remove dental deposits: plaque, supra- and subgingival tartar; polish</p>	<p>techniques; methods of treatment of periodontal diseases; methods of treatment of diseases of the oral mucosa; methods of treatment of non-carious lesions of hard dental tissues; methods of injection and non-injection local anesthesia; methods of treatment of pulpitis, apical periodontitis and caries; methods of professional oral hygiene; fissure sealing techniques.</p>
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			<p>implement healthy lifestyle programs, including programs to reduce alcohol and tobacco consumption, prevent and combat the non-medical use of narcotic drugs and psychotropic substances</p> <p>Develop a plan of preventive measures and implement methods of group and individual prevention of major dental diseases</p> <p>Conduct preventive medical dental examinations of the population</p> <p>Assign preventive measures to patients, taking into account risk factors for the prevention and early detection of diseases, including cancer</p> <p>Conduct the selection and prescription of drugs and non-drug methods for the prevention of dental diseases in children and adults</p> <p>Carry out dispensary supervision of children and adults with dental diseases</p> <p>IPC 2.3 Has practical experience:</p> <p>Promotion of a healthy lifestyle and prevention of dental diseases</p> <p>Carrying out health education among children and adults with dental diseases</p> <p>Formation in children and adults (their legal representatives) of behavior aimed at maintaining and improving the level of somatic health</p> <p>Formation of healthy</p>		teeth after tartar removal	
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			<p>lifestyle programs, including programs to reduce alcohol and tobacco consumption, prevent and combat the non-medical use of narcotic drugs and psychotropic substances</p> <p>Development of a plan of preventive measures and the implementation of methods for group and individual prevention of dental diseases</p> <p>Carrying out preventive medical dental examinations of the population, taking into account age</p> <p>Prescribing preventive measures for children and adults with dental diseases, taking into account risk factors, oncological and hygienic prevention in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p>Selection and prescription of drugs and non-drug methods for the prevention of dental diseases in children and adults</p> <p>Conducting a dispensary examination of children and adults with dental diseases</p> <p>Monitoring compliance with dental preventive measures</p>			
3.	PC-6	Able to send a patient to	IPC 6.1 Knows: The methodology for	pathologic al	conduct examinatio	methods of treatment of

		<p>laboratory, instrumental examination, to a consultation with specialist doctors if there are medical indications in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on providing medical care taking into account the standards of medical care, and also refer the patient for providing specialized medical care in an inpatient setting or in a day hospital if there are medical indications in accordance with the current procedures for the medical care delivery, clinical recommendations (treatment protocols) on the medical care delivery taking into account the standards of medical care</p>	<p>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 the adult population with dental diseases The procedure for providing medical care to children with dental diseases Clinical guidelines on the provision of medical care to patients with dental diseases Standards of Care IPK 6.2. Able to: 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,</p>	<p>anatomy, clinic, differential diagnosis, methods of treatment and prevention of caries; classification, etiology, pathogenesis, pathological anatomy of pulpitis; clinic, differential diagnostics, methods of treatment of inflammation of the pulp; classification, etiology, pathogenesis, pathological anatomy of periodontitis; classification, etiology, pathogenesis, pathological anatomy of dental lesions of non-cariogenic origin. Clinic, differential diagnosis,</p>	<p>n of patients in order to diagnose caries, pulpitis, periodontitis, non-cariogenic lesions of the teeth, periodontal diseases and oral mucosa, take a smear for cytological, bacterioscopic, bacteriological examination of the contents of the pocket; perform palpation of regional lymph nodes of the facial skeleton, soft tissues of the face; palpation of the oral mucosa; determine the morphological elements of the lesion; probe deep ulcers, fistulas; take material for</p>	<p>periodontal diseases; methods of treatment of diseases of the oral mucosa; methods of treatment of non-cariogenic lesions of hard dental tissues; methods of treatment of pulpitis, apical periodontitis and caries</p>
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			<p>Standard of medical care, Clinical recommendations on the provision of medical care, etc.)          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.          IPC 6.3 Has practical experience: 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 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>methods of prevention and treatment of lesions of hard tissues of the tooth of non-carious origin; clinic, differential diagnostics, methods of treatment of periodontal inflammation; classification, etiology, pathogenesis, pathological anatomy of diseases of the oral mucosa.          Clinic, differential diagnosis, methods of prevention and treatment of diseases of the oral mucosa</p>	<p>cytological examination (scrapings, prints); take material for direct microscopy for fungi, fusospirochetes; to carry out therapeutic measures in case of damage to the oral mucosa with arsenic salts; local treatment of lesions of the mucous membrane - removal of plaque, necrotic tissues, washing, irrigation, applications; inject drugs under the elements of the lesion; eliminate local traumatic factors determine the index of oral hygiene according</p>	
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			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		to Fedorov - Volodkina, according to Green-Vermillion ; describe radiographs; determine the degree of tooth mobility (I, II, III);	
4.	PC-7	Able to: make a differential diagnosis with other diseases/conditions including emergencies, establish a diagnosis taking into account the current international statistical classification of diseases and related health problems (ICD)	IPC 7.1 Knows: Methods of drug and non-drug treatment, medical indications for the use of medical devices for dental diseases 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 Principles, techniques and methods of anesthesia, selection of the type of local anesthesia in the treatment of dental diseases 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	clinic, differential diagnostics , methods of treatment of inflammation of the pulp; periodontal, periodontal and diseases of the oral mucosa, classification, etiology, pathogenesis, pathological anatomy. Methods of treatment, indications , contraindications to methods of treatment.	choose and carry out a rational method of treating caries, pulpitis, periodontitis, periodontal diseases, oral mucosa, depending on the clinical manifestations and the state of the body as a whole; apply paste for pulp devitalization; open the cavities of all anatomical groups of teeth, prepare the crowns of intact teeth; remove the pulp after	methods of treatment of non-carious lesions of hard dental tissues; methods of preparation, mechanical and drug treatment and filling of carious cavities; methods of treatment of pulpitis, apical periodontitis and caries, methods of professional hygiene, removal of dental deposits, methods of treatment of diseases of the oral mucosa

		<p>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>IPK 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 recommendations, taking into account the standards of medical care</p> <p>Determine medical indications and contraindications for local anesthesia techniques in the maxillofacial region</p>		<p>devitalization from the root canal;</p> <p>to carry out instrumental, drug treatment of the root canal, its drying, determining the degree of its patency;</p> <p>seal root canals with pastes and sealants without using and using pins;</p> <p>remove fragments of instruments from the root canal;</p> <p>carry out the removal of supra- and subgingival dental deposits, applications on the oral mucosa, blockade under the elements of the lesion</p> <p>take a smear for cytological, bacterioscopic,</p>	
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			<p>Perform local anesthesia (application, infiltration, conduction) in children and adults with dental diseases</p> <p>Perform medical interventions, including therapeutic ones, in children and adults with dental diseases on an outpatient basis (excluding repeated endodontic treatment):</p> <ul style="list-style-type: none"> <li>- individual training in oral and dental hygiene, selection of means and items for oral hygiene</li> <li>- controlled brushing of teeth</li> <li>- professional oral and dental hygiene</li> <li>- injection of drugs in the maxillofacial area</li> <li>- local application of remineralizing preparations in the area of the tooth</li> <li>- deep fluoridation of tooth enamel</li> <li>- sealing the fissure of the tooth with a sealant</li> <li>- professional teeth whitening</li> <li>- grinding of hard tissues of the tooth</li> <li>- restoration of a tooth with a filling using dental cements, chemical curing materials, photopolymers</li> <li>- restoration of teeth with a violation of the contact point</li> <li>- tooth restoration with filling material using anchor pins</li> <li>- application of devitalizing paste</li> <li>- pulpotomy (amputation of the</li> </ul>		<p>bacteriological examination of the contents of the pocket; perform palpation of regional lymph nodes of the facial skeleton, soft tissues of the face; palpation of the oral mucosa; determine the morphological elements of the lesion; probe deep ulcers, fistulas; take material for cytological examination (scrapings, prints); take material for direct microscopy for fungi, fusospirochetes; to carry out therapeutic measures in case of damage to the oral mucosa with</p>	
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			<p>coronal pulp)</p> <ul style="list-style-type: none"> <li>- pulp extirpation</li> <li>- instrumental and medical treatment of a well-passable root canal</li> <li>- temporary filling of the root canal with a drug</li> <li>- filling the root canal of the tooth with paste, gutta-percha pins</li> <li>- removal of supragingival and subgingival plaque in the tooth area (manual method)</li> <li>- ultrasonic removal of supragingival and subgingival dental deposits in the tooth area</li> <li>- closed curettage for periodontal diseases in the tooth area</li> <li>- application of a medical dressing for periodontal diseases in the area of one jaw</li> <li>- prescription of drug therapy for diseases of the oral cavity and teeth</li> <li>- appointment of dietary therapy for diseases of the oral cavity and teeth</li> </ul> <p>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):</p> <ul style="list-style-type: none"> <li>- removal of a tooth</li> <li>- removal of a temporary tooth</li> <li>- permanent tooth extraction</li> <li>- opening and drainage of odontogenic abscess</li> </ul>		<p>arsenic salts; local treatment of lesions of the mucous membrane</p> <ul style="list-style-type: none"> <li>- removal of plaque, necrotic tissues, washing, irrigation, applications;</li> <li>inject drugs under the elements of the lesion;</li> <li>eliminate local traumatic factors</li> </ul>	
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			<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"> <li>- obtaining anatomical and functional impressions</li> <li>- restoration of a tooth with a crown</li> <li>- restoration of the integrity of the dentition with fixed bridges</li> <li>- prosthetics with partial removable lamellar dentures</li> <li>- correction of a removable orthopedic structure</li> <li>- removal of a fixed orthopedic structure</li> </ul> <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 donkey</p>			
5.	PC-12	Able to prepare the necessary medical documentation for the implementation of	IPC 12.1 Knows: Fundamentals of evidence-based medicine; the main	Scientific literature, educational and	Analyze scientific literature and	Methods of medical statistics, determination

		<p>medical and social expertise in federal state institutions of medical and social expertise and refer a patient with a persistent impairment of body functions caused by diseases, the consequences of injuries or defects to medical and social expertise</p>	<p>sources of medical information based on evidence-based medicine; methods and forms of public presentation of medical information; basic principles of medical research  IPC 12.2 Can:  Search for medical information based on evidence-based medicine;  interpret the data of scientific publications;  critically evaluate modern methods of diagnosis, prevention and treatment of diseases from the perspective of evidence-based medicine;  justify your choice of methods for diagnosing, preventing and treating dental diseases;  prepare a presentation for the public presentation of medical information, the results of scientific research  IPC 12.3 Has practical experience:  Development of algorithms for examination and treatment of adults and children with dental diseases in accordance with the principles of evidence-based medicine;  search and interpretation of medical information based on evidence-based medicine;  public presentation of medical</p>	<p>methodical publications, scientific journals and collections of works.  Methods of medical statistics.</p>	<p>statistical reviews, conduct statistical analysis, present the resulting statistics, and interpret them.</p>	<p>n of the Student's criterion, non-parametric methods, comparison of independent and dependent groups, methods for describing qualitative features.</p>
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Practicals (P)			42	52	42	48	54	84	62
Seminars (S)									
Student's individual work (SIW)			28	48	30	41	53	72	58
Mid-term assessment									
credit/exam ( <i>specify the type</i> )					exam		exam		SFC
TOTAL LABOR INTENSITY	22	792	72	108	72	99	117	180	144

## 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	S	SIW	total
	Cariesology	2		42		28	72
	Cariesology	8		52		48	108
	Pulpitis			42		30	72
	Periodontitis	10		48		41	99
	Periodontal diseases. Non-carious lesions	10		54		53	117
	Diseases of oral mucous membranes and lips, physiotherapy of dental diseases	24		84		72	180
	Diseases of the mucous membranes and lips	24		62		58	144
	TOTAL	78		384		330	792

\* - 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
4 SEMESTER		
1	The history of the development of therapeutic dentistry. Therapeutic dentistry as the main dental discipline. Achievements in therapeutic dentistry. Relationship with other medical disciplines. Tasks of therapeutic dentistry in the treatment and prevention of dental diseases. The contribution of domestic scientists to the development and progress of therapeutic dentistry.	2
2	Organization of dental care in Russia. Organizational structure of dental clinics and dental therapeutic department. Accounting and reporting documentation of a dentist. Medical record of a dental patient as the main legal document. Mistakes in the execution of a medical card of a dental patient (No. 043 / y).	
3	Issues of ergonomics and scientific organization of labor. Ethics and deontology in	

	therapeutic dentistry.	
4	Cariogenic situation in the oral cavity. Dental plaque, its role in the occurrence of dental caries and periodontal disease. General and individual principles for eliminating a cariogenic situation. Ways to increase the resistance of enamel. Individual prevention of dental caries and periodontal diseases.	
5	A comprehensive program for the prevention of dental caries and periodontal disease. Endogenous and exogenous, drug and non-drug prevention of dental caries and periodontal disease. Oral hygiene is a method of preventing dental caries and periodontal disease. Individual, rational, controlled oral hygiene. Hygienic dental education of the population. Motivation of the population for oral hygiene. Technique of detection and removal of dental deposits. Plaque indicators. Professional oral hygiene. Place and role of professional oral hygiene. Motivation of the population to professional oral hygiene. Medications that contribute to the optimization and intensification of professional oral hygiene.	
	TOTAL (total - AH)	2
<b>5 SEMESTER</b>		
1	Caries. Epidemiology, prevalence, intensity of dental caries. The etiology of caries, the modern concept of dental caries and the modern understanding of the causes and mechanism of development of caries. The role of general and local factors in the development of dental caries. Morphological changes in the hard tissues of the tooth at various stages of the development of the carious process. Cariogenic situation in the oral cavity, clinic. Methods for its detection and elimination. Theoretical substantiation and etiopathogenetic ways of prevention of dental caries. Integrated system of prevention, development, implementation and evaluation of the effectiveness of the prevention program. initial caries. Caries in the white spot stage. Caries in the stage of a pigmented spot. Pathological anatomy. Clinic, diagnostics, differential diagnostics, modern methods of treatment. Modern methods of treatment and prevention of caries in the white spot stage. Endogenous and exogenous, drug and non-drug therapy and prevention of caries in the white spot stage.	2
2	Morphological changes in hard tissues of the tooth at various stages of development of the carious process, according to light, electron, polarization microscopy of enamel. Clinic, diagnosis, differential diagnosis of caries in the stage of white spots and pigmented spots. Treatment of caries in the stage of white spot and pigmented, general and local. Indications for oral administration of drugs that increase the resistance of hard tissues of the tooth. Preparations for remineralizing therapy. Methodology. Prevention of dental caries in the antenatal period of child development. Prevention in the neonatal and thoracic period. Theoretical substantiation and etiopathogenetic ways of prevention of dental caries. Integrated system of prevention, development, implementation and evaluation of the effectiveness of the prevention program.	2
3	Enamel caries (Superficial caries). Pathological anatomy. Clinic, diagnostics, differential diagnostics, modern methods of treatment. Features of preparation and filling of cavities 1, 2, 3, 4, 5,6 Black classes. Dentin caries (Medium caries. Deep caries). Pathological anatomy. Clinic, diagnostics, differential diagnostics, modern methods of treatment. Indications and contraindications for the choice of treatment method. Medicines used in the clinic of therapeutic dentistry for antiseptic treatment, degreasing and dehydration of the carious cavity.	2
4	Features of filling teeth with deep carious cavities. Therapeutic pads used in the treatment of caries located within the peripulpal dentin. Composition, properties, method and technique of application and application. Physico-chemical properties of pastes, their effect on the dental pulp. Clinic, diagnostics, differential diagnostics of caries. Pathological anatomy. Premedication and local anesthesia in the preparation of carious cavities. Treatment, modern aspects. Features of preparation and filling of cavities of 1, 2, 3, 4, 5, 6 Black classes. Mistakes and complications arising in the treatment of dental caries. Methods for their prevention and elimination. Analysis of the effectiveness of treatment.	2
	TOTAL (total - AH)	8

6 SEMESTER		
1	<p>The structure of the dental pulp. Physiological data on the dental pulp. Changes in the pulp during aging and pathological conditions. Pulpitis (K04.0). Etiology. Pathogenesis. Classification of pulpitis. Pathological anatomy of pulpitis.</p>	
2	<p>Initial pulpitis K04.00 (Pulp hyperemia) - K04.00. Clinic, diagnostics, differential diagnostics. Pathological anatomy of initial pulpitis. Modern methods of treatment of initial pulpitis. Acute pulpitis (K04.01). Clinic, diagnostics, differential diagnostics. Pathological anatomy of pulpitis. Providing emergency care. Modern methods of treatment of acute pulpitis. Purulent pulpitis (Pulp abscess) - K04.02. Clinic, diagnostics, differential diagnostics. Pathological anatomy of pulpitis. Providing emergency care. Modern methods of treatment of purulent pulpitis.</p>	
3	<p>Chronic pulpitis (K04.03). Clinic, diagnostics, differential diagnostics. Pathological anatomy of pulpitis. Modern methods of treatment. Chronic ulcerative pulpitis (K04.04). Clinic, diagnostics, differential diagnostics. Pathological anatomy of pulpitis. Modern methods of treatment.</p>	
4	<p>Chronic hyperplastic pulpitis (Pulp polyp) - K04.05. Clinic, diagnostics, differential diagnostics. Pathological anatomy of pulpitis. Modern methods of treatment. Pulp necrosis (pulp gangrene) - K04.1. Clinic, diagnostics, differential diagnostics. Pathological anatomy of pulpitis. Modern methods of treatment.</p>	
5	<p>Mistakes and complications arising in the treatment of pulpitis by the biological method. Their prevention and elimination. Forecast. Mistakes and complications arising in the treatment of pulpitis with the use of arsenic paste. Their prevention and elimination. Arsenic antidotes, application in the practice of therapeutic dentistry. Forecast.</p>	
	TOTAL (total - AH)	
7 SEMESTER		
1	<p>Anatomical and physiological data on periodontium. Histology and physiology of the periodontium. Functions of periodontitis. Anatomical and physiological features of the periodontal structure in normal conditions and in various pathological conditions. Classification. Etiology of apical periodontitis. The pathogenesis of periodontitis. Pathological anatomy and pathological histology. Classification of apical periodontitis. Acute apical periodontitis. Clinic, diagnostics, differential diagnostics. Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Outcome, forecast. Sharp pain. Providing emergency care for acute periodontitis. Treatment planning. Modern methods of treatment of acute apical periodontitis. Exodus. Forecast. Choice of method of treatment of acute forms of apical periodontitis. Modern methods of treatment of acute apical periodontitis. Principles and stages of treatment of acute apical periodontitis, modern aspects.</p>	2
2	<p>Chronic apical periodontitis. Modern methods of treatment. Clinic, diagnostics, differential diagnostics. Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Outcome, forecast. Root cyst (periapical, apical, lateral). Clinic, diagnostics, differential diagnostics. Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Outcome, forecast. Periapical abscess without fistula. Clinic, diagnostics, differential diagnostics. Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Outcome, forecast. General condition of a patient with periodontitis. Acute pain, emergency care.</p>	2

	Periapical abscess with fistula. Clinic, diagnostics, differential diagnostics. Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Outcome, forecast.	
3	Physical methods of treatment of periodontitis. Radiography in the practice of therapeutic dentistry. Physical methods of treatment: diathermocoagulation, electrophoresis, depophoresis, anodal galvanization, IGNLaser, UHF-therapy, fluctuorization. Indications, method of carrying out, course of treatment. Radiography in the practice of therapeutic dentistry. X-ray examination of the patient. Indications. Contraindications. X-ray control of endodontic manipulations in the treatment of apical periodontitis. Quality control of endodontic treatment. Reading and description of radiographs of teeth and jaws in different age periods in normal and apical periodontitis.	2
4	Odontogenic chroniointoxication. Chroniointoxication, etiology, clinic, diagnostics, differential diagnostics. Indications and contraindications for the use of various methods of treatment, depending on the general condition of the patient. Chronic odontogenic focus. Chronic stomatogenic focus. Elimination of a chronic focus of infection. Modern methods of treatment. Indications and contraindications for the preservation of the tooth as an organ. Methods for their prevention and elimination. Complications in the treatment of periodontitis and ways to eliminate them. Forecast. Legal aspects. Tooth-preserving operations. Absolute and relative indications and contraindications for tooth-preserving operations and preservation of a part of the tooth as a fully functioning organ. Preparing a patient for a tooth-preserving operation in a therapeutic dentistry clinic. Outcome, forecast. Legal aspects.	2
5	Dental lesions of non-carious origin that occur before teething. Hypoplasia, enamel hyperplasia, fluorosis. Etiology, classification, clinic, diagnosis, differential diagnosis, treatment, prevention. Hereditary malformations of teeth. Etiology, classification, clinic, diagnosis, differential diagnosis, treatment, prevention. Damage to the teeth of non-carious origin that occurs after teething. Pathology that occurs after teething. Enamel hyperesthesia. pathological erasure. wedge defect. Erosion of hard tissues. Etiology, classification, clinic, diagnosis, differential diagnosis, treatment, prevention. Forecast.	2
	TOTAL (total - AH)	10
<b>8 SEMESTER</b>		
1	Periodontium. Structure, functions. Definition. Anatomical and physiological features. Methods of examination of patients with periodontal diseases. Criteria for assessing the condition of the periodontium - hygienic and periodontal indices, basic and additional research methods. Classification of periodontal diseases. Gingival fluid, quantitative and qualitative changes in its composition in periodontal pathology. Etiology and pathogenesis of periodontal diseases. Epidemiology of periodontal disease. Features of the course depending on the accompanying pathology.	2
2	Gingivitis is catarrhal. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: local and general. Forecast. Gingivitis hypertrophic. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: local and general. Forecast. Gingivitis is ulcerative. Ulcerative necrotic gingivostomatitis Vincent. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: local and general. Forecast.	2
3	Periodontitis: acute, chronic, exacerbation of chronic, remission stage, localized, generalized. Etiology, pathogenesis, pathomorphology, pathological anatomy, pathological histology. Clinic of periodontitis, diagnostics, differential diagnostics. Principles of complex individualized, etiopathogenetic treatment. Modern methods of treatment of periodontitis: local and general. Therapeutic, surgical and orthopedic etiopathogenetic methods of treatment. Modern methods of treatment aimed at preserving the dentoalveolar system and the tooth as a fully functioning system and each organ separately. Forecast.	2
4	Periodontitis. Clinic, diagnosis, differential diagnosis of periodontal disease, modern methods of treatment: local and general, depending on the severity and stage of periodontal	2



	disease. Forecast. Idiopathic periodontal disease. Clinic, diagnostics, differential diagnostics, modern methods of treatment: local and general, depending on the severity of periodontal disease.	
5	Mistakes and complications arising in the treatment of periodontal diseases. Methods for their prevention and elimination. Forecast. Prevention of periodontal diseases. Motivation of patients for the treatment and prevention of periodontal diseases. Methods and means. The value of oral hygiene in the prevention and treatment of periodontal diseases. Organization of medical and preventive care for patients with periodontal pathology. Clinical examination of patients with periodontal diseases. Forecast.	2
	TOTAL (total - AH)	10
<b>9 SEMESTER</b>		
1	The mucous membrane of the oral cavity. Examination of a patient with diseases of the oral mucosa. Anatomical, histological and physiological data on the oral mucosa and the red border of the lips. The structure of the mucosa. Mucosal functions. Pathological processes of the mucous membrane. Morphological elements of the lesion. Basic and additional methods of examination of patients with diseases of the oral mucosa, features of the examination. The value of saliva for the oral mucosa.	2
2	Traumatic damage to the oral mucosa. Classification of diseases of the oral mucosa (MGMSU). Traumatic lesions due to mechanical, chemical, physical effects. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention. Leukoplakia. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	2
3	Infectious diseases of the oral mucosa. Simple vesicular versicolor. Shingles. Flu. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Prevention. Treatment of lichen simplex, herpes zoster, influenza.	2
4	Candidiasis. Classification. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	2
5	Syphilis. Tuberculosis. Gonorrhea. HIV infection. AIDS. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, manifestations on the mucous membrane of the oral cavity and the red border of the lips. Modern methods of general and local treatment. Manifestations of the disease on the oral mucosa. Clinic, diagnostics, differential diagnostics. The role of a dentist in diagnosis, modern methods of treatment.	2
6	Allergic diseases: MEE. Multiform exudative erythema. Etiology. Clinic, diagnostics, differential diagnostics. Treatment. Prevention. Pemphigus. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	2
7	Allergic diseases: HRAS. Chronic recurrent aphthous stomatitis. Etiology, clinic, diagnostics, differential diagnostics. Treatment. Prevention. Catarrhal, hemorrhagic, erosive, ulcerative necrotic stomatitis, glossitis of an allergic nature. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	2
8	Anomalies and diseases of the tongue: Desquamative glossitis. Folded tongue. Classification of diseases of the tongue, etiology, pathogenesis, clinic, diagnosis, differential diagnosis, modern methods of treatment of language anomalies and diseases. Black "hairy" tongue. Rhomboid glossitis. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment of language anomalies and diseases. Glossalgia, stomalgia. Etiology, pathogenesis. Clinic, diagnostics, differential diagnostics, modern methods of treatment and prevention.	2
9	HEILIT: Exfoliative. Glandular. Allergic. Meteorological. Actinic. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis of cheilitis. Modern methods of local and general	2

	treatment. Prevention of lip diseases. Atopic. Plasma cell. Eczematous. Chronic fissure of the lip. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis of cheilitis. Modern methods of local and general treatment. Prevention of lip diseases.	
10	Lichen planus. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention. Pemphigus. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	2
11	Changes in the oral cavity in some systemic diseases. Catarrhal, hemorrhagic, erosive, ulcerative necrotic stomatitis, glossitis with hypo- and beriberi, diseases of the gastrointestinal tract, diseases of the cardiovascular system, diseases of the endocrine system, diseases of the blood and hematopoietic organs. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	2
12	Physiotherapy of dental diseases. Galvanization. Medicinal electrophoresis. The use of drug electrophoresis. Physical methods for the prevention, diagnosis and treatment of caries and non-carious lesions of hard dental tissues. impulse current. Diadynamic, sinusoidal modulated and fluctuating currents. Electroodontodiagnostics. Alternating currents of high frequency. Variable electromagnetic fields of high and ultrahigh frequency. ultrasound therapy. Physiotherapy of periodontal diseases and oral mucosa, caries and its complications.	2
	TOTAL (total - AH)	24
<b>10 SEMESTER</b>		
1	Dental caries. Cariogenic situation in the oral cavity, methods for its detection and elimination. classification of caries. Etiopathogenetic rationale for the treatment and prevention of dental caries. Exogenous and endogenous prevention. Modern methods of treatment and prevention of caries. Modern etiopathogenetic methods and methods of restoration of permanent teeth with modern filling materials.	2
2	Pulpitis. Classification, clinic, diagnostics, differential diagnostics. Modern methods of treatment. Modern etiopathogenetic methods and methods of restoration of permanent teeth subjected to primary and repeated endodontic treatment using modern filling materials.	2
3	Periodontitis. Classification, clinic, diagnostics, differential diagnostics. Modern methods of treatment. Modern etiopathogenetic methods and methods of restoration of permanent teeth subjected to primary and repeated endodontic treatment using modern filling materials. Irrigation of the root canal system. Modern methods of root canal irrigation. Obturation of root canals. Choice of root canal obturation technique. Materials for obturation of root canals.	2
4	Periodontal diseases: Gingivitis (catarrhal, hypertrophic, erosive). Classification, clinic, diagnostics, differential diagnostics. Modern methods of treatment. Modern etiopathogenetic methods and methods of prevention. Periodontal diseases: Periodontitis. Idiopathic periodontal disease. Classification, clinic, diagnostics, differential diagnostics. Modern methods of treatment. Modern etiopathogenetic methods and methods of prevention. Periodontitis. Classification, clinic, diagnostics, differential diagnostics. Modern methods of treatment. Modern etiopathogenetic methods and methods of prevention.	2
5	HIV. Syphilis. Etiology, pathogenesis, clinic in the oral cavity, modern methods of treatment. Exodus. Specific diseases: tuberculosis, actinomycosis, gonorrhoea. Etiology, pathogenesis, manifestations in the oral cavity. Modern methods of treatment. Management tactics at the dentist's appointment.	2
6	Dentistry for pregnant women. Indications and contraindications for anesthesia. Tactics of management of this group of patients with various pathologies of oral mucosa.	2
7	Whitening. Types of bleaching Conducting methods. Indications and contraindications for whitening.	2
8	Tactics of the behavior of a dentist in case of sensitivity of the teeth after the procedure. Mistakes and complications in teeth whitening.	2
9	Colorimetry. Color in the practice of a dentist. The choice of filling material according to	2

	color scales.	
10	Tactics of a doctor in diseases of the oral mucosa. Modern methods of treatment and diagnosis of all types of diseases of the oral mucosa. Clinical cases in the disease of oral mucosa. Xerostomia. Causes and manifestations in the oral cavity. Modern methods of dealing with it. Prevention of xerostomia.	2
11	Innovative systems in dentistry. Modern methods of X-ray examination.	2
12	CT scan. Indications and contraindications for radiography. Reading radiographs.	2
	TOTAL (total - AH)	24

6.2.2. The thematic plan of laboratory practicums (*if this type of classes is stipulated in the curriculum*)

In accordance with the Federal State Educational Standards, they are not provided.

#### 6.2.3. Thematic plan of practicals

№	Name of the topics of practicals	Volume in AH
<b>4 SEMESTER</b>		
1	The history of the development of therapeutic dentistry. Therapeutic dentistry, as the main dental discipline. Achievements in therapeutic dentistry. Relationship between restorative dentistry and other medical disciplines. Tasks of therapeutic dentistry in the treatment and prevention of dental diseases. The contribution of domestic scientists to the development and progress of therapeutic dentistry.	6
2	Organization of dental care in Russia. Organizational structure of dental clinics and dental therapeutic department. Dental office, its equipment. Dental instrumentation. Issues of ergonomics and scientific organization of labor. Safety engineering.	6
3	Methods of examination of a dental patient in the clinic of therapeutic dentistry. Inspection. Detection of caries in the white spot stage (Aksamit method). Interview. Filling out a medical card of a dental patient. Accounting and reporting documentation of a dentist. Ethics and deontology in therapeutic dentistry.	6
4	Sterilization of dental instruments. Ways and methods.	6
5	Cariogenic situation in the oral cavity. Dental plaque, its role in the occurrence of dental caries and periodontal disease. General principles for eliminating a cariogenic situation. Ways to increase the resistance of enamel. A comprehensive program for the prevention of dental caries and periodontal disease. Endogenous and exogenous, drug and non-drug prevention of dental caries and periodontal disease.	6
6	Oral hygiene is a method of preventing dental caries and periodontal disease. Individual, rational, controlled oral hygiene. Determination of the index of oral hygiene. Technique of detection and removal of dental deposits. Professional oral hygiene.	6
7	Final lesson. Solving clinical situational problems of 3 and 4 levels of complexity.	6
	TOTAL (total - AH)	42
<b>5 SEMESTER</b>		
1	Examination of a dental patient. Tooth deposits. Kinds. Influence on surrounding tissues. Patient's complaints. History of the development of the disease. Transferred and concomitant diseases. Tolerance of drugs. Examination of the patient: external, condition of the lymph nodes. Examination of the oral cavity; condition of the mucous membrane, teeth, palpation, probing, percussion, X-ray diagnostics, etc. Medical record of a dental patient (form No. 043 / y), filling rules. A sheet of daily records of the work of a dentist (form No. 037 / y). Consolidated record of the work of a dentist (form No. 039/2u-88). Rules for filling out documentation. Localization of carious cavities, the frequency of lesions of individual groups of teeth. KPU index, kp, KPU + kp. Caries intensity and prevalence. Determination of indicators of oral hygiene.	6,5

	Dental deposits. Classification: non-mineralized dental and mineralized dental deposits. Theories of dental plaque formation. Influence on surrounding tissues. Instruments for removing dental deposits (Zags set, Gracie hooks). Ultrastomy, its purpose, removal of dental plaque using an ultrastomy. Rules for the removal of dental deposits. Medications for removing plaque, the properties of these drugs. Professional oral hygiene.	
2	Caries. Etiology, pathogenesis. Classification. Definition of dental caries. Classification of dental caries. ICD-10 (ICB-S). Caries susceptibility, caries resistance, definition, cariogenic situation in the oral cavity. enamel permeability. The role of microorganisms and carbohydrates in the occurrence of a carious process (dental plaque, its significance for the development of caries). Modern ideas about the causes and mechanism of development of caries. The role of general and local factors. Cariogenic situation in the oral cavity. Methods for its detection and prevention.	6,5
3	Caries in the spot stage: caries in the white spot stage, caries in the pigmented spot stage. Treatment and prevention of caries in the stain stage. Methods for detecting caries in the stain stage. Morphological changes in tooth tissues at various stages of development of the carious process according to light, electron, polarization microscopy. Clinic, diagnosis, differential diagnosis of caries in the stain stage. Treatment of caries in the stain stage is complex: general and local. Indications for oral administration of drugs. Preparations for enamel remineralization in case of caries in the stain stage, methodology. Measures aimed at eliminating the cariogenic situation, causing an increase in the resistance of tooth tissues. Prevention of caries (endogenous, exogenous).	6,5
4	Superficial caries (Enamel caries). ICD-10 (ICB-S). Clinic, diagnostics, differential diagnostics, treatment of superficial caries.	6,5
5	Medium caries (dentine caries). Clinic, diagnostics, differential diagnostics, treatment of secondary caries. Premedication and local anesthesia in the preparation of carious cavities.	6,5
6	Deep caries. (pulp hyperemia). ICD-10 (ICB-S). Clinic, diagnosis, differential diagnosis, treatment and prevention of deep caries.	6,5
7	Mistakes and complications arising in the treatment of caries. Mistakes and complications arising from the diagnosis, preparation of a carious cavity, drug treatment of a carious cavity, the placement of an insulating pad and a permanent filling. Ways to eliminate and prevent errors and complications arising in the treatment of caries.	6,5
8	Final lesson. Solving clinical situational problems of 3 and 4 levels of complexity. Manual and theoretical knowledge on the topic "Caries".	6,5
	TOTAL (total - AH)	52
<b>6 SEMESTER</b>		
1	Anatomical and topographic features, histology and physiology of the dental pulp. Pulpitis. Age-related changes in the dental pulp. Dystrophic changes associated with local and general factors. Changes in the dental pulp during aging and pathological conditions. Etiology, pathogenesis of pulpitis. Pathological histology of various forms of pulpitis. Pathological anatomy. Classification. ICD-10 (ICB-S).	6
2	Pulpitis. Acute forms of pulpitis. ICD-10 (ICB-S). Pulpitis. Purulent pulpitis (Pulp abscess). Clinic, diagnosis, differential diagnosis of acute pulpitis. Modern Aspects. Initial pulpitis - K04.00 (Pulp hyperemia - K04.00). Clinic, diagnostics, differential diagnostics. Acute pulpitis - K04.01. Clinic, diagnostics, differential diagnostics. Purulent pulpitis (Pulp abscess) - K04.02. Clinic, diagnosis, differential diagnosis of purulent pulpitis - K04.02.	6
3	Pulpitis. Chronic forms of pulpitis. ICD-10(C). Chronic pulpitis. Chronic ulcerative pulpitis. Chronic pulpitis - K04.03. Chronic ulcerative pulpitis - K04.04. Clinic, diagnostics, differential diagnostics. Modern aspects of diagnosis and treatment.	6

4	Chronic hyperplastic pulpitis (Pulp polyp) - K04.05. Pulp necrosis (pulp gangrene) - K04.1. Clinic, diagnostics, differential diagnostics.	6
5	Pulpitis. Treatment. Modern successful endodontics. Apexlocation. Apex locator in the practice of therapeutic dentistry. Biological method of treatment of pulpitis: complete preservation, partial preservation of the pulp. Indications, methods, drugs. Surgical methods of treatment of pulpitis: 1. Devital extirpation of the pulp. 2. Devital amputation. Indications, methodology. Rules for applying arsenic paste. Arsenic antidotes.	6
6	Pulpitis. Treatment. Endodontic instruments. Modern successful endodontics. Absolute and relative indications and contraindications for this or that method of treatment. The choice of treatment method. Comparative evaluation of all methods of treatment of pulpitis. Modern endodontics, methods, means, equipment. The method of vital pulp extirpation - indications, technique, drugs. Possible complications in the treatment of pulpitis under anesthesia, their prevention and elimination. Treatment of teeth with difficult root canals.	6
7	Mistakes and complications arising in the treatment of pulpitis. Their prevention and elimination. Forecast. Final lesson. Solution of situational clinical problems, thematic tests. Reading radiographs. Reception of thematic patients.	6
TOTAL (total - AH)		42
<b>7 SEMESTER</b>		
1	Periodontium. Anatomy. Physiology. The structure and function of the periodontium. Anatomical and physiological data on periodontitis, pathological anatomy, pathological physiology, pathological pathomorphology. Clinical and radiological characteristics of healthy periodontium. Anatomical and physiological features of the periodontal structure in normal conditions and in various pathological conditions. Etiology, pathogenesis of periodontitis, classification. ICD-10 (ICD-S). Pathological histology of various forms of periodontitis. Periodontitis, definition.	4
2	Acute apical periodontitis ICD-10 (ICD-S). Acute apical periodontitis, intoxication phase and exudation phase, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment of acute apical periodontitis. Sharp pain. Providing emergency care for acute periodontitis. Treatment planning.	5
3	Periapical abscess without fistula. ICD-10 (ICB-S). Clinic, diagnostics, differential diagnostics. Modern methods of treatment of periapical abscess without fistula. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Exodus. Forecast. Providing emergency care for acute periodontitis.	5
4	Chronic apical periodontitis. ICD-10 (ICB-S). Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Exodus. Forecast. X-ray method of research in the diagnosis of apical periodontitis. The use of X-ray examination to monitor the performance of endodontic manipulations and the effectiveness of the treatment. Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	5
5	Periapical abscess with fistula. ICD-10 (ICB-S). Clinic, diagnostics, differential diagnostics. Modern methods of treatment of periapical abscess with fistula. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Exodus. Forecast. X-ray examination. Electroodontometry (EOD).	5
6	Root cyst (periapical, apical, lateral). Modern methods of treatment of apical periodontitis. ICD-10 (ICB-S). Etiology, pathogenesis, clinic, diagnostics, differential diagnostics.	5

	Modern methods of treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Exodus. Forecast. Treatment of acute and chronic forms of apical periodontitis. Medical and physical treatments. Indications and contraindications for conservative treatment. Modern filling materials for temporary and permanent filling of root canals.	
7	Tooth-preserving operations. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. The technique of tooth-preserving operations in the treatment of apical periodontitis of permanent teeth: corono-radicular separation, hemireplantation, resection of the root apex, granulotomy, root amputation, hemisection. Exodus. Forecast. Replantation, transradicular hemisection as a method of periodontitis treatment. Preparation for treatment, indications, contraindications. Mistakes and complications arising from replantation and hemisection. Physical methods of treatment. Legal aspects.	5
8	Mistakes and complications arising in the diagnosis and differential diagnosis of apical periodontitis. Ways to prevent and eliminate. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Exodus. Forecast.	5
9	Odontogenic choroointoxication. Odontogenic chronic focus. Dental chronic focus. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment. Absolute and relative indications and contraindications for the preservation of the tooth as an organ. Prevention. Exodus. Forecast.	5
10	Final lesson On the topic "Apical periodontitis". Solution of situational problems, tests. Reception of thematic patients.	4
	TOTAL (total - AH)	48
<b>8 SEMESTER</b>		
1	The structure of the periodontium. Anatomical structures, histological structure of the periodontium, functions of the periodontium. Gingival fluid, quantitative and qualitative changes in its composition in periodontal pathology. Physiological data on the periodontium. The prevalence of periodontal disease in different population groups. Examination of a patient with periodontal pathology. Criteria for assessing the condition of the periodontium. Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	4
2	Classification of periodontal diseases. Definition, etiology, pathogenesis, classification of periodontal diseases. Gingivitis is catarrhal. The role of general and local factors in the etiology of gingivitis. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: local and general. Prevention of gingivitis.	4
3	Gingivitis hypertrophic. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: local and general. Prevention of gingivitis.	4
4	Gingivitis is ulcerative. Ulcerative-necrotic gingivostomatitis Vincent. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: local and general. Prevention of gingivitis.	4
5-6	Periodontitis. Definition, etiology, pathogenesis, clinic, diagnostics, differential diagnostics. The principle of complex treatment (medication, surgery, orthopedic). Prevention, methods and means. Medical examination. Modern aspects in the choice of complex, individualized, etiopathogenetic treatment. Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	4
7-8	Idiopathic periodontal disease with progressive periodontal lysis. Rapidly progressive periodontitis. Features of clinical manifestations, modern methods of treatment. Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	4
9	Periodontitis. Definition, etiology, pathogenesis, clinic, diagnostics, differential diagnostics, methods of general and local treatment. Prevention, methods and means.	4

	Modern aspects in the choice of complex, individualized, etiopathogenetic treatment. Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	
10	Prevention of periodontal diseases. Methods and means. The value of oral hygiene in the prevention and treatment of periodontal diseases. Organization of medical and preventive care for patients with periodontal pathology. Clinical examination of patients with periodontal diseases.	4
11	Non-cariou lesions of the hard tissues of the teeth that arose before teething: hereditary and congenital. Hypoplasia, hyperplasia, fluorosis, hereditary malformations of teeth. Etiology, classification, clinic, diagnosis, differential diagnosis, prevention, treatment.	4,6
12	Acquired non-cariou lesions of hard dental tissues. Hyperesthesia, pathological erasure, wedge-shaped defect, erosion of hard tissues. Etiology, clinic, diagnostics, differential diagnostics, prevention, treatment. Exodus. Forecast.	4,6
13	Final lesson. Solution of clinical situational problems, tests. Computer testing.	4,6
	TOTAL (total - AH)	54
<b>9 SEMESTER</b>		
1	The structure of the oral mucosa. Anatomical, histological and physiological data on the oral mucosa and the red border of the lips. Functions of the oral mucosa. Methods of examination of a patient with diseases of the mucous membrane of the mouth and lips. Pathological processes that occur in the oral mucosa. Morphological elements.	4,9
2	Mechanical injury to the mucous membrane. Chemical injury of the mucous membrane. Physical trauma to the mucous membrane. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment.	4,9
3	Leukoplakia. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment.	4,9
4	Viral diseases. Simple herpes. Etiology, pathogenesis, classification, clinic, diagnostics, differential diagnostics; treatment. Prevention.	4,9
5	Candidiasis. Etiology, pathogenesis, classification, clinic, diagnostics, differential diagnostics, treatment. Prevention.	4,9
6	The manifestation of allergies in the oral cavity. Chronic recurrent aphthous stomatitis. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment. Prevention.	4,9
7	Erythema multiforme exudative. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment. Prevention.	4,9
8	Pemphigus. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment. Prevention.	4,9
9	Lichen planus. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment.	4,9
10	Cheilite. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: a) exfoliative cheilitis, b) glandular cheilitis, c) contact allergic cheilitis, d) meteorological cheilitis.	4,9
11	Cheilite. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: a) actinic cheilitis b) atopic cheilitis, c) eczematous cheilitis, d) plasma cell cheilitis, e) cracked lips	4,9
12	Glossitis. Etiology, pathogenesis, clinic, differential diagnostics, modern methods of diagnostics and treatment. Prevention. Glossalgia. Etiology, pathogenesis, clinic, differential diagnostics, modern methods of diagnostics and treatment. Prevention. Changes in the oral cavity in some systemic diseases.	4,9

13	Catarrhal, hemorrhagic, erosive, ulcerative necrotic stomatitis, glossitis with hypo- and beriberi, diseases of the gastrointestinal tract, diseases of the cardiovascular system, diseases of the endocrine system. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	4,9
14	Etiology, pathogenesis, clinic, diagnostics, differential diagnostics. Treatment. Prevention.	4,9
15	Physiotherapy of dental diseases. Galvanization. Medicinal electrophoresis. The use of drug electrophoresis. Physical methods for the prevention, diagnosis and treatment of caries and non-carious lesions of hard dental tissues.	4,9
16	impulse current. Diadynamic, sinusoidal modulated and fluctuating currents. Electroodontodiagnostics. Alternating currents of high frequency. Variable electromagnetic fields of high and ultrahigh frequency. ultrasound therapy. Physiotherapy of periodontal diseases and oral mucosa, caries and its complications.	4,9
17	Final lesson. Solution of clinical situational problems, tests. Reception of thematic patients.	4,9
	TOTAL (total - AH)	84
<b>10 SEMESTER</b>		
	Caries. Caries. Classification. Clinic, diagnostics, differential diagnostics, modern methods of treatment, prevention. Pulpitis. Classification. Clinic, diagnostics, differential diagnostics, modern principles and methods of treatment, prevention. Periodontitis. Classification. Clinic, diagnostics, differential diagnostics, modern methods of treatment, prevention.	5,2
	Periodontitis. Classification. Clinic, diagnostics, differential diagnostics, modern methods of treatment, prevention.	5,2
	Periodontal disease. Classification. Gingivitis. Catarrhal gingivitis. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment, prevention. Hypertrophic gingivitis. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment. Prevention. Ulcerative necrotizing gingivitis. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment. Prevention.	5,2
	Periodontal disease. Periodontitis. Idiopathic periodontal disease. Periodontitis. Classification. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment, prevention. Medical examination.	5,2
	Idiopathic periodontal disease. Classification. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment, prevention.	5,2
	Periodontitis. Classification. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment, prevention. Medical examination.	5,2
	Infectious and venereal diseases of the oral mucosa: 1. Viral. 2. Venereal. 3. Mycoses. 4. Ulcerative-necrotic gingivo-stomatitis of Vincent. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment, prevention. 5. HIV infection. AIDS. Etiology, pathogenesis, clinic, manifestations in the oral cavity, diagnosis, differential diagnosis, treatment, prevention. 6. Tuberculosis. Etiology, pathogenesis, clinic, manifestations in the oral cavity, diagnosis, differential diagnosis, treatment, prevention. 7. Simple vesicular deprive. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, treatment, prevention. 8. Syphilis. 9. Gonorrhoea. Etiology, pathogenesis, clinic, manifestations in the oral cavity, diagnosis, differential diagnosis, treatment, prevention. 10. Candidiasis. Etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis, treatment, prevention.	5,2
	Chronic recurrent aphthous stomatitis.	5,2



	Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment. Prevention.	
	Multiform exudative erythema. Pemphigus. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment. Prevention.	5,2
	Lichen planus. Etiology, pathogenesis, clinic, diagnostics, differential diagnostics, modern methods of treatment.	5,2
	Glossitis. Glossalgia. * Desquamative glossitis. * Folded tongue. * Black hairy tongue. * Rhomboid tongue. *Microglossia. *Macroglossia. Etiology, pathogenesis, clinic, diagnosis of glossitis, differential diagnosis, treatment, prevention.	5,2
	Cheilite. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment: a) exfoliative cheilitis, b) glandular cheilitis, c) contact allergic cheilitis, d) meteorological cheilitis, e) actinic cheilitis, e) atopic cheilitis, g) eczematous cheilitis, h) plasma cell cheilitis, i) cracked lips. Modern complex individualized, etiopathogenetic methods of treatment and prevention.	5,2
	Changes in the oral mucosa in some systemic diseases of internal organs and systems. 1. Endocrine diseases. 2. Diseases of the gastrointestinal tract. 3. Diseases of the cardiovascular system. 4. Diseases of the blood system and hematopoietic organs. 5. Diseases of the nervous system. Manifestations in the oral cavity, clinic, diagnosis, differential diagnosis, treatment.	
	Final lesson. Testing. Individual control of knowledge and practical skills for each student.	5,2
	TOTAL (total - AH)	62

#### 6.2.4. Thematic plan of seminars (if this type of classes is stipulated in the curriculum)

№	Name of seminar topics	Volume in AH	
		semester	AH
1	Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational resources posted on the educational portal of the University; - search (selection) and review of literature and electronic sources of information on the problem, writing an abstract (essay, report, scientific article) on a given problem; -doing homework for the lesson; – performing home control work (solving problems, doing exercises); – study of the material submitted for independent study (separate topics, paragraphs);	4	28

	<ul style="list-style-type: none"> <li>–practicum on academic discipline using software;</li> <li>– preparation for practical exercises;</li> <li>– preparation for the control work;</li> <li>- preparation for the test on the topics:</li> </ul> <p>The history of the development of therapeutic dentistry. Organizational structure of dental care Prevention of dental diseases Methods of examination of the patient. Dental and medical documentation. Sterilization of dental instruments. Prevention of dental caries. Oral hygiene.</p>		
2	<p>Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational resources posted on the educational portal of the University;</p> <ul style="list-style-type: none"> <li>- search (selection) and review of literature and electronic sources of information on the problem, writing an abstract (essay, report, scientific article) on a given problem;</li> <li>-doing homework for the lesson;</li> <li>– performing home control work (solving problems, doing exercises);</li> <li>– study of the material submitted for independent study (separate topics, paragraphs);</li> <li>–practicum on academic discipline using software;</li> <li>– preparation for practical exercises;</li> <li>– preparation for the control work;</li> <li>- preparation for the test on the topic “Dental caries.</li> </ul> <p>Treatment of dental caries.</p>	5	48
3	<p>Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational resources posted on the educational portal of the University;</p> <ul style="list-style-type: none"> <li>- search (selection) and review of literature and electronic sources of information on the problem, writing an abstract (essay, report, scientific article) on a given problem;</li> <li>-doing homework for the lesson;</li> <li>– performing home control work (solving problems, doing exercises);</li> <li>– study of the material submitted for independent study (separate topics, paragraphs);</li> <li>–practicum on academic discipline using software;</li> <li>– preparation for practical exercises;</li> <li>– preparation for the control work;</li> <li>- preparation for the test on the topic "Pulpitis".</li> </ul>	6	30
4	<p>Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational resources posted on the educational portal of the University;</p> <ul style="list-style-type: none"> <li>- search (selection) and review of literature and electronic sources of information on the problem,</li> </ul>	7	41

	<p>writing an abstract (essay, report, scientific article) on a given problem;</p> <ul style="list-style-type: none"> <li>-doing homework for the lesson;</li> <li>– performing home control work (solving problems, doing exercises);</li> <li>– study of the material submitted for independent study (separate topics, paragraphs);</li> <li>–practicum on academic discipline using software;</li> <li>– preparation for practical exercises;</li> <li>– preparation for the control work;</li> <li>- preparation for the test on the topic "Periodontitis".</li> </ul>		
5	<p>Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational resources posted on the educational portal of the University;</p> <ul style="list-style-type: none"> <li>- search (selection) and review of literature and electronic sources of information on the problem, writing an abstract (essay, report, scientific article) on a given problem;</li> <li>-doing homework for the lesson;</li> <li>– performing home control work (solving problems, doing exercises);</li> <li>– study of the material submitted for independent study (separate topics, paragraphs);</li> <li>–practicum on academic discipline using software;</li> <li>– preparation for practical exercises;</li> <li>– preparation for the control work;</li> <li>- preparation for the test</li> <li>- writing a case history on the topic “Periodontal disease. Gingivitis. Periodontitis. Periodontitis. Idiopathic diseases. Pathology of hard tissues of the tooth of non-carious origin.</li> </ul>	8	53
6	<p>Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational resources posted on the educational portal of the University;</p> <ul style="list-style-type: none"> <li>- search (selection) and review of literature and electronic sources of information on the problem, writing an abstract (essay, report, scientific article) on a given problem;</li> <li>-doing homework for the lesson;</li> <li>– performing home control work (solving problems, doing exercises);</li> <li>– study of the material submitted for independent study (separate topics, paragraphs);</li> <li>–practicum on academic discipline using software;</li> <li>– preparation for practical exercises;</li> <li>– preparation for the control work;</li> <li>- preparation for the test on the topic “Diseases of the oral mucosa. Physical methods in the treatment and prevention of dental diseases.</li> </ul>	9	72
7	<p>Work with lecture material, which includes the development of lecture notes and educational literature, work with electronic educational</p>	10	58

	resources posted on the educational portal of the University; - search (selection) and review of literature and electronic sources of information on the problem, writing an abstract (essay, report, scientific article) on a given problem; -doing homework for the lesson; – performing home control work (solving problems, doing exercises); – study of the material submitted for independent study (separate topics, paragraphs); –practicum on academic discipline using software; – preparation for practical exercises; – preparation for the control work; - preparation for the test and certification on the topic "Diseases of the oral mucosa".		
	TOTAL (total - AH)-330		

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

№	Types and topics of SIW	Semester
	Writing articles, preparing reports for scientific conferences on the topic "Organizational structure of dental care. Prevention of dental diseases. Methods of examination of the patient. Dental and medical documentation. Sterilization of dental instruments. Prevention of dental caries. Oral hygiene.»	4
	Writing articles, preparing reports for scientific conferences on the topic "Dental caries. Treatment of dental caries.	5
	Writing articles, preparing reports for scientific conferences on the topic "Pulpitis".	6
	Writing articles, preparing reports for scientific conferences on the topic "Periodontitis".	7
	Writing articles, preparing reports for scientific conferences on the topic "Periodontal Diseases. Gingivitis. Periodontitis. Idiopathic diseases. Pathology of hard tissues of the tooth of non-cariou origin.	8
	Writing articles, preparing reports at scientific conferences on the topic "Diseases of the oral mucosa. Physical methods in the treatment and prevention of dental diseases.	9
	Writing articles, preparing reports at scientific conferences on the topic "Diseases of the oral mucosa".	10

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

№	Semester 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.		Current monitoring	Control of mastering the topic				
			Monitoring the student's individual work				

2.		Mid-term assessment	Exam/ Credit					
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The current control over the discipline is carried out using control questions, situational tasks, as well as test tasks.

Example:

1. Cement caries. Clinic, diagnostics, differential diagnostics, modern methods of treatment, choice of treatment method.
2. Mistakes and complications in the diagnosis and treatment of dental caries. Methods for their prevention and elimination.
3. Principles and stages of preparation of carious cavities.
4. Features of preparation and filling of carious cavities of 1, 2, 3, 4, 5, 6 Black classes.
5. Dental pulp. Histological structure, innervation, blood supply, main functions.

### Situational task in therapeutic dentistry No. 1

Patient K, 35 years old, an accountant by profession, turned to the Department of Therapeutic Dentistry with complaints of dryness and burning of the lips, pain in the buccal mucosa on the right, aggravated by talking and eating.

Objectively: the regional lymph nodes are enlarged, painful, mobile, soft-elastic consistency, the red border of the upper and lower lips is hyperemic, edematous, covered with small grayish scales, the skin and mucous membrane of the upper and lower lips, as well as the corners of the mouth of a physiological color, without pathological elements. On the mucous membrane of the cheek on the right there is an ulcer with uneven edges, covered with fibrinous plaque, painful on palpation. Crowns 1.5, 1.6 are partially destroyed, there are sharp edges, percussion is positive, the mucous membrane in the projection area of the tops 1.5, 1.6 is hyperemic, edematous. EDI 1.5 - 150  $\mu$ A, 1.6. - 200  $\mu$ A.



1. Make a preliminary diagnosis.
2. Carry out differential diagnostics.
3. Make a treatment plan.

### Situational task in therapeutic dentistry No. 2

Patient B, 39 years old, went to the dentist with complaints of bleeding gums and pain when chewing solid food, inability to eat irritating food, pain when swallowing, dry mouth. The doctor clarified that in recent days the patient had been feeling unwell, sweating, flies flickering before his eyes, in the evenings the temperature rose to 37.6 degrees, chills.

On examination: the skin and visible mucous membranes are pale. On the mucous membrane of the oral cavity, in places, small-pointed hemorrhagic rashes, ulcerations, necrotic plaque on the tonsils, the gums are loosened, hyperplastic, bleeding, their palpation is painful. The mucous membrane of the tongue is hyperemic, edematous, covered with densely soldered gray-white plaques that form an uneven surface, which are not removed when scraped, and an erosive bleeding surface is exposed when forcefully removed.

Submandibular and cervical lymph nodes are enlarged 15 \* 20 mm, painful, dense-elastic consistency, not soldered to each other and the skin.



1. Highlight the main syndromes in the patient's condition.
2. Your preliminary diagnosis.
3. What diagnostic methods can confirm your assumption.
4. Treatment tactics of a dentist in this situation.

Test tasks:

**1. THERAPEUTIC FACTOR IN DIATHERMOCOAGULATION IS**

electromagnetic oscillations of the microwave, decimeter, centimeter range of microwaves  
 exposure to a constant or alternating low-frequency magnetic field in continuous or intermittent modes  
 alternating current of high frequency, small voltage, large strength and density  
 alternating sinusoidal current of high frequency, high voltage and power up to 10 W  
 sinusoidal alternating current of low strength and low voltage, randomly varying in amplitude and frequency

**2. TECHNICAL DEVICE EMITTING IN THE FORM OF A DIRECTIONAL BEAM COHERENT POLARIZED MONOCHROMATIC ELECTROMAGNETIC RADIATION IS A LASER.**

**3. INDICATIONS FOR DEPOPHORESIS**

pregnancy  
 severe infection of the dentin  
 unsuccessful treatment of the tooth with "traditional methods"  
 festering jaw cyst  
 treatment of teeth with "problem" canals

**4. FUNCTIONALITY OF LEBAB MEASURES IN PERIODONTITIS**

laser therapy, removal of dental deposits, elimination of traumatic factors, surgical intervention  
 removal of dental deposits, elimination of traumatic factors, surgical intervention, laser therapy  
 removal of dental deposits, laser therapy, elimination of traumatic factors, surgical intervention  
 removal of dental deposits, elimination of traumatic factors, laser therapy, surgical intervention  
 elimination of traumatic factors, laser therapy, surgical intervention

**1. FOR ELECTRODONTODIAGNOSTICS USED**



2. АППАРАТ1111

2.

3.





4.



5.

#### 5. GENERAL CONTRAINDICATIONS TO PHYSIOTHERAPY

malignant neoplasms and suspicion of their presence, including hemoblastoses

hormonally active tumors in women in the growth stage, or in a condition requiring surgical treatment (mastopathy, endometriosis, uterine fibroids)

cachexia

systemic blood diseases

neuralgia

Boundary control in the discipline is carried out by conducting a test using tasks and test tasks.

Example:

#### Situational task in therapeutic dentistry No. 1

Patient K, 37 years old, went to the dentist with complaints of an aesthetic defect (gum enlargement), prolonged pain in the area of the teeth of the upper and lower jaws on the left. The pain started about a week ago. He considers himself practically healthy, smokes, took sulfonamides for a cold for 3 weeks. Objectively: there is a significant growth of the gums up to  $\frac{1}{2}$  of the height of the crown of the teeth. The gingival papillae are pale pink in color, tightly adjacent to the surface of the teeth, do not bleed. Dental attachment is not broken. Tooth 2.5 is a filling in the MOD cavity, percussion is painless, tooth 2.7 has a deep carious cavity on the medio-occlusal surfaces, widely communicating with the tooth cavity, deep probing is painful, percussion is painless. Tooth 3.8 - a filling on the occlusal surface, a carious cavity on the medial surface, percussion is slightly painful, EOD = 45  $\mu$ A. Tooth 3.7 is covered with an artificial crown, which is the support of the bridge. Percussion 3.7 is painless. On the radiograph - 3.7, the root canals are unevenly sealed, not reaching the physiological tops, in the periapical region - a focus of bone tissue rarefaction with fuzzy contours. Tooth 3.5 percussion is painless, on the radiograph - the root canal is tightly obturated to the apex, there is an expansion of the periodontal fissure throughout.



1. What is your diagnosis? Justify the answer.
2. What examination methods can you offer to clarify the diagnosis.
3. Perform differential diagnostics.
4. Treat this disease.

An example of test tasks:

#### 1. THE METHOD OF TRANSILLUMINATION IS BASED

on the assessment of shadow formations resulting from the passage of a cold beam of light harmless to the body through the object of study

on the impact on a biological object with a therapeutic purpose by electromagnetic radiation of the optical range, which has such properties as coherence, monochromaticity, polarization and directionality of the radiation flux

on the combined effect on the body of direct current and medicinal substances

on the influence of a direct impulse current of a half-sinusoidal shape with a frequency of 50 and 100 Hz

on the impact on the central nervous system with short-duration rectangular pulses (0.2–2 ms), amplitude and frequency (10–130 Hz)

## 2. INDICATIONS FOR THE TRANSILLUMINATION METHOD

diagnosis of dental caries, pulpitis detection of gingival dental deposits, cracks in the enamel for quality control of preparation of cavities for filling, filling and removal of dental deposits in the frontal group of teeth

all of the above

## 3. CONTRAINDICATIONS TO ELECTRODONTODIAGNOSIS

tooth covered with a metal or plastic crown

filling adjacent to the gum

conduction or infiltration anesthesia

anesthesia

instrument broken in the canal

## 4. DIRECT PULSE CURRENT OF A HALF-SINE FORM WITH A FREQUENCY OF 50 AND 100 Hz

- THIS IS diadynamic therapy.

Intermediate control in the form of an exam (after the 4th year) in the discipline is carried out in the form of an interview on tickets (using clinical situational tasks, tests).

Example:

### EXAMINATION TICKET No. 1

1. Fluorine, its role in the prevention of dental caries. Mechanism of anticariogenic action of fluorine. Mechanism of toxic action of fluorine.

2. Complications in the treatment of pulpitis, their prevention and elimination.

3. Catarrhal gingivitis of mild severity. Etiology, pathogenesis, clinic, modern methods of treatment.

### EXAMINATION TICKET No. 2

1. Disinfection, pre-sterilization cleaning and sterilization of dental instruments in practical dentistry.

2. Pulpitis. Classifications, etiology, pathogenesis.

3. Catarrhal gingivitis of moderate severity. Clinic, diagnostics, differential diagnostics, modern methods of treatment.

### EXAMINATION TICKET No. 3

1. Oral fluid, its composition, properties, role and significance for the oral cavity.

2. Initial hyperemia of the pulp. Clinic, diagnostics, differential diagnostics.

3. Hypertrophic gingivitis, edematous form. Clinic, diagnostics, differential diagnostics, modern methods of treatment.

### **Situational task in therapeutic dentistry No. 1**

Patient O., 36 years old, turned to the dental clinic with complaints of itching, burning, soreness in the gums, bleeding gums. From the anamnesis: ulcerative colitis, biliary dyskinesia.

Objectively: The mucous membrane of the marginal gums of the upper and lower jaws is hyperemic, with a cyanotic tinge, edematous, bleeds on probing, a large amount of dental deposits, periodontal pockets up to 4 mm deep, pathological mobility of the 1st degree. Tooth 2.4 - there is a shallow carious cavity on the medial surface, EOD = 5  $\mu$ A, tooth 2.6 - there is a white spot on the occlusal surface, probing and percussion are painless, EDI = 2  $\mu$ A, tooth 1.7 - on the medio-occlusal surface - a deep carious cavity in within the peripulpal dentin, a cold stimulus leads to a rapidly passing pain.



1. Make a preliminary diagnosis.



2. Carry out differential diagnostics.
3. Prescribe general and local treatment for these diseases

#### 1. PHYSICAL FACTORS USED IN THE BIOLOGICAL METHOD OF TREATMENT OF PULPITIS

laser therapy  
SMT therapy  
transchannel electrophoresis  
depophoresis  
diathermocoagulation

#### 2. FOR DIAGNOSIS OF CARIES USE

electrodiagnostics  
transillumination method  
diodynamometry  
magnetotherapy  
ultrasound therapy.

The final control is carried out at the end of the training, students pass the final state certification in the form of state final exams after the 5th year in 3 stages: certification of practical skills, test tasks, interviews on clinical situational tasks.

Example:

1. The system of state, social, hygienic and medical measures aimed at ensuring high level of dental health and prevention of dental diseases

- 1) medical examination
- 2) sanitation of the oral cavity
- 3) prevention

2. The method of health care for the population, including the necessary complex of wellness social and hygienic measures are

- 1) medical examination
- 2) sanitation of the oral cavity
- 3) prevention

#### 3. POSSIBILITY OF LEBAB MEASURES IN PERIODONTITIS

laser therapy, removal of dental deposits, elimination of traumatic factors, surgical intervention  
removal of dental deposits, elimination of traumatic factors, surgical intervention, laser therapy surgical intervention

removal of dental deposits, elimination of traumatic factors, laser therapy, surgical intervention  
elimination of traumatic factors, laser therapy, surgical intervention

#### **Situational task in therapeutic dentistry No. 1**

Patient T., 63 years old, went to the dentist with complaints of dryness and burning sensation in the mouth, bleeding gums.

From the anamnesis: for almost 7 years she has been using partial removable dentures for the lower and upper jaws. Frequent nosebleeds.

Objectively: the skin is pale, stretching of the corners of the mouth reveals linear erosions covered with translucent soft scales. The red border of the upper and lower lips is dry, hyperemic. In the oral cavity on the dorsal surface of the tongue, the filiform papillae are atrophied. The oral mucosa is edematous, atrophied, the epithelium is thinned, multiple petechiae and hemorrhages. Teeth 2.3, 3.3 - under stamped crowns, the necks of the teeth are exposed, probing is slightly painful. In the blood test - a sharp decrease in the number of platelets, giant platelets, prolongation of bleeding time.



1. Make a preliminary diagnosis.
2. Carry out differential diagnostics.
3. What is the histological picture in this disease.
4. Make a treatment plan.

7.2. Examples of evaluation tools:

1. EXAMINATION TICKET (example)

1. Contact point. Kinds. Indications and recovery technique. Types of matrices and matrix systems, application technique.
2. Complications at the stage of passage of the root canal in the treatment of pulpitis, their prevention and elimination.
3. Fluorine, its role in the prevention of dental caries. Mechanisms of anticariogenic action of fluorides.
2. Situational task (example)

Patient K., 22 years old, came to the dentist with a complaint of white spots of various shapes on the vestibular surface of teeth 12, 11, 21, 22, 31, 32, 41, 42. The spots are not accompanied by any discomfort. From the anamnesis: in the 1st year of life, patient K. suffered from severe pneumonia. The spots on the teeth appeared along with the eruption of the named teeth; during the life, the size, shape and color of the spots did not change.

1. Make a preliminary diagnosis. Perform differential diagnosis.
2. Plan the survey.
3. Make a comprehensive plan for the treatment and prevention of this disease.

7.3. Evaluation tools recommended for inclusion in the fund of evaluation tools for the final state certification.

Clinical situational tasks illustrated with photographs and radiographs with a list of questions on the topic. Test tasks. Conducting an exam in manual skills using modern dental materials and tools.

Example:

1. The method of public health services, including the necessary complex of wellness social and hygienic measures are

- 1) medical examination
- 2) sanitation of the oral cavity
- 3) prevention

2. POSSIBILITY OF LEBAB MEASURES IN PERIODONTITIS

laser therapy, removal of dental deposits, elimination of traumatic factors, surgical intervention  
 removal of dental deposits, elimination of traumatic factors, surgical intervention, laser therapy  
 removal of dental deposits, laser therapy, elimination of traumatic factors, surgical intervention  
 removal of dental deposits, elimination of traumatic factors, laser therapy, surgical intervention  
 elimination of traumatic factors, laser therapy, surgical intervention

Situational task in therapeutic dentistry No. 1

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atrophied, the epithelium is thinned, multiple petechiae and hemorrhages. Teeth 2.3, 3.3 - under stamped crowns, the necks of the teeth are exposed, probing is slightly painful. In the blood test - a sharp decrease in the number of platelets, giant platelets, prolongation of bleeding time.



5. Make a preliminary diagnosis.
6. Perform differential diagnosis.
7. What is the histological picture in this disease.
8. Make a treatment plan.

## 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	Therapeutic dentistry. Part 2: Periodontal disease: a textbook for universities 2 / Barer G. M.; Publisher: GEOTAR-Media, 2008	6	33
2	Atlas of diseases of the oral cavity / Langle R. P.; Publisher: GEOTAR-Media, 2008	1	32
3	Therapeutic dentistry. Guide to practical exercises: study guide / Maksimovsky Yu. M.; Publisher: GEOTAR-Media, 2011	1	102
4	Therapeutic dentistry: a textbook for students. med. universities / Borovsky E.V. Publisher: Medical News Agency, 2011	1	54
5	Publisher: Medical News Agency, 2011	1	5
6	Physiotherapy in the practice of therapeutic dentistry: teaching aid / Lukinykh L.M.; Ed. Nizhny State Medical Academy, 2015	1	33

### 8.2. Further reading

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	Dryness in the mouth. Classification. Differential diagnosis. Treatment: textbook / Assumption OA; Ed. : NGMA, 2007	2	37
2	Phantom course of therapeutic Phantom course of therapeutic dentistry / Nikolaev AI; Publisher: MEDpress-inform, 2009	1	96
3	Guidelines for work practice in therapeutic dentistry "Doctor's assistant .... / Lukinykh L. M.; Ed.: NGMA, 2010	6	65
4	Mistakes in endodontic treatment and ways to prevent them: a teaching aid / Murzova T.V.; Publisher: NizhGMA, 2010	1	35

5	Apical periodontitis: textbook / Lukinykh L. M.; Ed. Nizhny State Medical Academy, 2010	1	54
6	Therapeutic dentistry: a textbook for students. med. Universities / Borovsky E.V.; Publisher: Medical Information Agency, 2011	1	54
7	Test tasks in therapeutic dentistry / Lukinykh L. M.; Ed. Nizhny State Medical Academy, 2013	3	5
8	Dentistry. Recording and maintaining a medical history: a guide / Afanasiev V.V.; Publisher: GEOTAR-Media, 2013	1	50
9	Restoration of teeth with light-cured composite materials: a practical guide for the doctor / Makeeva I.M.; Publisher: MEDpress-inform, 2013	1	30
10	Treatment of periodontal diseases: textbook / Zhulev E. N.; Publisher: NizhGMA, 2016	6	1

**Educational and methodological materials published by the staff of the Department of Therapeutic Dentistry and used by both teachers and students:**

<i>No</i>	<i>Teaching aid, monograph</i>	<i>The author(s)</i>	<i>Edition</i>
1	Catarrhal gingivitis. Etiology, clinic, treatment. (Guidelines for students)	L.M. Lukinykh	Nizhny Novgorod, NGMI.-1992.-24p.
2	Reading radiographs of teeth and jaws. (Guidelines for students)	L.M. Lukinykh	Nizhny Novgorod, NGMI.-1992. -27p.
3	Scheme of clinical examination of the patient and writing an academic medical history. (Guidelines for students)	L.M. Lukinykh	Nizhny Novgorod, NGMI.-1992. -28p.
4	Periodontal disease (guidelines for students). Part 1	L.M. Lukinykh	Nizhny Novgorod, NGMA.-1993. -43p.
5	Periodontal disease (guidelines for students). Part 2	L.M. Lukinykh	Nizhny Novgorod, NGMA.-1993. -46 p.
6	Diseases of the oral mucosa mouth. (Tutorial)	L.M. Lukinykh S.I. Gazhva L.N. Kazarina Yu.N. Livshits MM. Poleshchuk L.V. Shestopalova L.I. Krasulova and others.	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1993.-211p.
7	Guidelines for industrial practice for students of the Faculty of Dentistry on the prevention of dental diseases.	L.M. Lukinykh S.I. Gazhva	Nizhny Novgorod, NGMA.-1994. -16 p.
8	Guidelines for students of the Faculty of Dentistry on the production practice of pediatric dentistry.	L.M. Lukinykh L.N. Kazarina	Nizhny Novgorod, NGMA.-1994.-18 p.
9	Guidelines for students of the Faculty of Dentistry for practical work in therapeutic dentistry.	L.M. Lukinykh L.N. Kazarina	Nizhny Novgorod, NGMA.-1995.-31 p.
10	Organization of therapeutic dental care in the armed forces in peacetime and	L.M. Lukinykh	Nizhny Novgorod, NGMA.-1996.-24 p.

	wartime.		
11	Dental caries.	L.M. Lukinykh S.I. Gazhva L.N. Kazarina	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1996.-128 p.
12	Guidelines for students of the Faculty of Dentistry to	L.M. Lukinykh L.N. Kazarina	Nizhny Novgorod, NGMA.-1997.-34p.
13	Treatment and prevention of dental caries. (Tutorial)	L.M. Lukinykh	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1998.-168 p.
14	Guidelines for foreign students of the Faculty of Dentistry to work practice in therapeutic dentistry.	L.M. Lukinykh	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1998.-32 p.
15	Guidelines for students of the 2nd year of the Faculty of Dentistry to the industrial practice "Nurse of a Dental Institution".	L.M. Lukinykh Y.N. Livshits N.N. Shakerova S.R. Sorokin	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1998.-10 p.
16	Dental caries (etiology, clinic, treatment, prevention).	L.M. Lukinykh	N. Novgorod: 2nd edition, Nizhegorod Publishing House. state med. Academy, 1999. -185 p.
17	Non-surgical treatment of periradicular jaw cyst. Monograph	L.M. Lukinykh G.D. Ovrutsky Yu.N. Livshits	Library of the practical doctor. -M.: Medicine.- 1999.-118s.
18	Apical periodontitis. (Tutorial)	L.M. Lukinykh Yu.N. Livshits	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1999.-92.S.
19	Pulpitis (Clinic, diagnosis, treatment).	L.M. Lukinykh L.V.Shestopalova	Nizhny Novgorod: Nizhegorod Publishing House. state med. academy, 1999.-88s.
20	Scheme of clinical examination of the patient and writing an academic medical history. (Guidelines for students of the Faculty of Dentistry)	L.M. Lukinykh I.I. Parshin	Nizhny Novgorod: Nizhegorod Publishing House. state med. Academy, 1999.-44 p.
21	Diseases of the oral mucosa.	L.M. Lukinykh L.N. Kazarina S.I. Gazhva L.V.Shestopalova Yu.N.Livshits	Nizhny Novgorod: Nizhegorod Publishing House. state med. academy, 2000.-p. 57-160.
22	Dental caries (etiology, clinic, treatment, prevention).	L.M. Lukinykh	N. Novgorod: 3rd edition, Nizhegorod Publishing House. state med. Academy, 2001. -185 p.
23	Pulpitis (Clinic, diagnosis, treatment).	L.M. Lukinykh L.V. Shestopalova	N. Novgorod: 2nd edition, Nizhegorod Publishing House. state med. Academy, 2002.-88s.
24	Scheme of clinical examination of the patient and writing an academic medical history. (Guidelines for students)	L.M. Lukinykh I.I. Parshin	Nizhny Novgorod: 2nd edition, Nizhny Novgorod Publishing House. state med. Academy, 2003. -44p.
25	Physiotherapy in the practice of therapeutic	L.M. Lukinykh	Nizhny Novgorod,

	dentistry.	O.A. Uspenskaya	NGMA.-2003.-36p.
26	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod, NGMA.-2003.-40p.
27	Guidelines for production practice in therapeutic dentistry of childhood for students of the Faculty of Dentistry.	L.M. Lukinykh L.N. Kazarina S.Yu. Kosyuga I.N. Chuprunova M.M. Ratsyuk	Nizhny Novgorod, NGMA.-2003.-38s.
28	Prevention of dental caries and diseases periodontal. Monograph	L.M. Lukinykh	M.: Medical book, 2003.- 196s.
29	Dental caries. Etiology, clinic, treatment, prevention.	L.M. Lukinykh	N. Novgorod: 4th edition, Nizhegorod Publishing House. state med. Academy, 2004.-186s.
30	Guidelines for students of the 2nd year of the Faculty of Dentistry to the production practice "Assistant Nurse of a Dental Institution".	L.M. Lukinykh E.V. Kitaeva	Nizhny Novgorod, NGMA. - 2004. -26s.
31	Guidelines for students of the 3rd year of the Faculty of Dentistry to work practice in therapeutic dentistry.	L.M. Lukinykh E.V. Kitaeva	Nizhny Novgorod, NGMA. - 2004. - 40 p.
32	Diseases of the mucous membrane of the oral cavity and lips in children.	/Ed.L.N. Kazarina	Nizhny Novgorod, NGMA. - 2004. - p. 264.
33	Apical periodontitis. (Tutorial)	L.M. Lukinykh Yu.N. Livshits	N. Novgorod: 2nd edition, Nizhegorod Publishing House. state med. Academy, 2004.-92.S.
34	Pulpitis (Clinic, diagnosis, treatment). (Tutorial)	L.M. Lukinykh L.V. Shestopalova	N. Novgorod: 3rd edition, Nizhegorod Publishing House. state med. Academy, 2004.-88C.
35	Dentist and patient: rights, obligations, a responsibility. Monograph	N.N. Bondarenko	M.: Medical book, 2004. - 96 p.
36	Diseases of the oral cavity.	/ Ed. L.M. Lukinykh	Nizhny Novgorod, Nizhny Novgorod Publishing House. state med. Academy, 2004.-510s.
37	Civil-legal bases of medical activity. Guidelines	N.N. Bondarenko	Nizhny Novgorod, Nizhny Novgorod Publishing House. state med. Academy, 2005.-48 p.
38	Scheme of clinical examination of the patient and writing an academic medical history. (Guidelines for students)	L.M. Lukinykh I.I. Parshin	Nizhny Novgorod: 3rd edition, Nizhny Novgorod Publishing House. state med. Academy, 2005. -44p.
39	Physiotherapy in the practice of therapeutic dentistry.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 2nd edition, NGMA. -2005.- 36s.
40	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 2nd edition, NGMA. -2005.- 40s.
41	Periodontal disease (clinic, diagnosis, treatment and prevention).	L.M. Lukinykh E.N. Zhulev I.N. Chuprunova	Nizhny Novgorod, Nizhny Novgorod Publishing House. state med. academy, 2005.-322p.

42	Legal literacy of dentists. Monograph	A.V. Demina G.A. Pashinyan L.M. Lukinykh	Moscow, Medical Book Publishing House, 2005.-160p.
43	Forensic stomatological identification of a person (state and development prospects). Monograph	G.A. Pashinyan L.M. Lukinykh G.N. Karpov	Moscow, Medical Book Publishing House, 2005.-157p.
44	Dental diseases during pregnancy and their prevention. Monograph	S. M. Tolmacheva L.M. Lukinykh	Moscow, Medical Book Publishing House, 2005.-150p.
45	Dental complications that developed after radiation and chemoradiotherapy (Clinical course, treatment and prevention of candidiasis that developed against the background of mucositis). Monograph.	L.I. Egorova L.M. Lukinykh	Moscow, Medical Book Publishing House, 2006.-155p.
46	Physiotherapy in the practice of therapeutic dentistry.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 3rd edition, NGMA. -2006.-36s.
47	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 2nd edition, NGMA.-2006.-40s.
48	Establishing the age and gender of a person by the degree of tooth wear, taking into account the presence of a number of pathological conditions and harmful working conditions. Monograph	G.A. Pashinyan L.M. Lukinykh A.A. Plishkin	Moscow, Medical Book Publishing House, 2007.-104 p.
49	Dryness in the mouth. Classification, differential diagnosis, treatment	O.A. Uspenskaya A.A. Plishkin N.V. Kazarina E.A. Shevchenko	Nizhny Novgorod: Publishing House of NizhGMA, 2007.-31 p.
50	Urogenital candidiasis and bacterial vaginosis.	E.A. Shevchenko A.A. Artifeksova O.A. Uspenskaya	Nizhny Novgorod: NizhGMA Publishing House, 2007.-27 p.
51	Dentistry for pregnant women.	O.A. Uspenskaya E.A. Shevchenko N.V. Kazarina	Nizhny Novgorod: Publishing House of NizhGMA, 2008.- 24 p.
52	Clinical and expert assessment of errors and complications in the practice of a pediatric dentist.	S.I. Gazhva E.S. Tuchik HER. Abramova N.N. Bondarenko	Nizhny Novgorod: Publishing House of NizhGMA, 2008.-300 p.
53	Guide to Forensic Dentistry.	Ed. G.A. Pashinyan	M: LLC
54	Scheme of clinical examination of the patient and writing a medical record of a dental patient.	L.M. Lukinykh	Medical Information Agency, 2009. -528 p.
55	Dentist and patient: legal reality.	N.N. Bondarenko	Nizhny Novgorod, Nizhny Novgorod Publishing House. state med. Academy, 2009. - 72p.
56	Guidelines for the production practice in therapeutic dentistry "Assistant to the dentist's therapist."	L.M. Lukinykh S. M. Tolmacheva L.I. Egorova E.V. Kitaeva	Moscow, Publishing house Medical book, Publishing house
57	Apical periodontitis. Tutorial	L.M. Lukinykh L.I. Egorova	"Dentistry", 2009.-124 p.
58	Methodical Instructions for the clinical practice in therapeutic stomatology for the 3-d year students of the stomatological	L.M. Lukinykh L.I. Egorova CM. Tolmacheva	Nizhny Novgorod: Publishing house of NizhGMA, 2010.-44 p.

	faculty "THE ASSISTANT OF STOMATOLOGICAL THERAPEUTIST".		
59	Guidelines for conducting work practice "Assistant Nurse of the Dental Department."	L.N. Kazarina L.V. Vdovina L.M. Lukinykh E.V. Kitaeva	Nizhny Novgorod: Nizhny Novgorod Publishing House. state med. Academy, 2010.-120 p.
60	Guidelines for the production practice in therapeutic dentistry "Assistant to the dentist's therapist."	L.M. Lukinykh CM. Tolmacheva L.I. Egorova E.V. Kitaeva	Nizhny Novgorod: NizhGMA Publishing House, 2010.-35 p.
61	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: Publishing house of NizhGMA, 2010.-40 p.
62	Scheme of clinical examination of the patient and writing a medical record of a dental patient.	L.M. Lukinykh	Nizhny Novgorod, Nizhny Novgorod Publishing House. state med. Academy, 2011. -72p.
63	Physiotherapy in the practice of therapeutic dentistry.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 5th edition, NGMA. -2011.-36s.
64	Physiotherapy in the practice of therapeutic dentistry.	L.M. Lukinykh O.A. Uspenskaya E.A. Shevchenko	Nizhny Novgorod: 6th edition, NGMA. -2012.-52s.
65	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 3rd edition, NGMA.-2012.-44p.
66	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions.	L.M. Lukinykh O.A. Uspenskaya	Nizhny Novgorod: 3rd edition, NGMA.-2013.-44p.
67	Urogenital infection and infertility (monograph)	Shevchenko E.A., Artifeksova A.A., Uspenskaya O.A.	Nizhny Novgorod: Publishing house of NizhGMA, 2012. - 160 pages.
68	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions	Lukinykh L.M. Uspenskaya O.A.	Tutorial. 5th edition. Publishing house NGMA. Nizhny Novgorod, 2013. 44 p.
69	Test tasks in therapeutic dentistry	Lukinykh L.M., Tiunova N.V., Egorova L.I., Zhdanova M.L., Plishkina A.A., Zolotukhin V.A., Kruglova N.V., Spiridonova S.A.	Nizhny Novgorod: Publishing house of NizhGMA, 2013. - 272 pages.
70	Optimization of complex treatment of inflammatory periodontal diseases: (monograph)	L.M. Lukinykh, N.V. Kruglova -	N. Novgorod: NizhGMA Publishing House, 2013 - 122 p.; ill.
71	Lichen planus of the oral mucosa: etiology, pathogenesis, clinic, modern methods of treatment (monograph)	Lukinykh L.M., Tiunova N.V.	Nizhny Novgorod: Publishing house of NizhGMA, 2013. - 116 p.
72	Reading radiographs of teeth and jaws at various age periods in normal and pathological conditions (textbook).	Lukinykh L.M. Uspenskaya O.A.	Tutorial. 6th edition). Publishing house NGMA. Nizhny Novgorod, 2014. 42 p.



73	Physiotherapy in the practice of therapeutic dentistry (educational manual)	Lukinykh L.M. Uspenskaya O.A. Shevchenko E.A.	Teaching aid. 2nd edition. Nizhny Novgorod: NizhGMA Publishing House, 2014.–52 p.
74	Irrigation of the root canal system (educational manual).	Lukinykh L.M., Tiunova N.V., Egorova L.I., Zhdanova M.L., Yartseva A.V.	Publishing house NGMA. Nizhny Novgorod, 2014. - 36 p.
75	Pulpitis. Etiology. Pathogenesis. Diagnostics. Treatment (textbook).	N.N. Bondarenko, L.M. Lukinykh.	Nizhny Novgorod: NGMA Publishing House, 2014. - 190 pp. ill.
76	Lichen planus (educational manual).	Lukinykh L.M., Tiunova N.V.	Publishing house NGMA. Nizhny Novgorod, 2014. 44 p.
77	Erythema multiforme exudative (educational manual)	L.M. Lukinykh, O.A. Uspenskaya, E.A. Shevchenko.	Nizhny Novgorod: Publishing house of NizhGMA, 2015. - 44 p., ill.
78	Chronic recurrent aphthous stomatitis (textbook)	O.A. Uspenskaya, L.M. Lukinykh, E.A. Shevchenko, N.V. Tiunova.	Nizhny Novgorod: Publishing house of NizhGMA, 2015. - 72 p., ill.
79	Obturation of the root canal system (training manual).	Lukinykh L.M., Tiunova N.V., Egorova L.I., Zhdanova M.L., Yartseva A.V.	Publishing house NGMA. Nizhny Novgorod, 2015. - 60 p.
80	Precancerous diseases of the oral mucosa and the red border of the lips (textbook).	Lukinykh L.M., Zhdanova M.L., Tiunova N.V.	Publishing house NGMA. Nizhny Novgorod, 2015. - 88 p.
81	Physiotherapy in the practice of therapeutic dentistry (educational manual)	O.A. Uspenskaya, L.M. Lukinykh, E.A. Shevchenko	Teaching aid. 3rd edition. Nizhny Novgorod: NizhGMA Publishing House, 2015.–52 p.
82	Reading radiographs of teeth and jaws at different age periods in normal and pathological conditions (textbook)	O.A. Uspenskaya, L.M. Lukinykh	Tutorial. 7th edition. Publishing house NGMA. Nizhny Novgorod, 2015. - 44 pages.
83	Scheme of examination and writing a medical record of a dental patient (guidelines).	Kondyurova E.V., Uspenskaya O.A.	Saransk: Publishing House Mordovs. un-ta, 2015. - 72 p.
84	Treatment of periodontal diseases (textbook)	E.N. Zhulev, N.V. Kruglova, A.V. Kochubeinik	Nizhny Novgorod, 2016- 162 c., illustrations
85	Halitosis. (Tutorial.)	O.A. Uspenskaya, N.V. Tiunova	ISBN 978-5-7032-1077-2.
86	Apical periodontitis (Tutorial).	Lukinykh L.M., Egorova L.I., Tiunova N.V., Zhdanova M.L.	Publishing house NGMA. Nizhny Novgorod, 2016. - 174p.
87	Orofacial system: the art of clinical diagnosis. (Tutorial).	E.N. Zhulev, V.D. Troshin, O.A. Uspenskaya, N.V. Tiunova.	N. Novgorod, Publishing house of NizhGMA, 2016.- 88 pages

### 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 (VEBS) PIMU	Proceedings of PIMU staff (textbooks, manuals, collections of tasks, methodological manuals, laboratory work, monographs, etc.)	Access by individual login and password from any computer and mobile device	No 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	Database "Medicine. Healthcare (VO) and "Medicine. Healthcare (SPO)" as part of the database "Electronic library of a technical university (ELS "Student Consultant"	Textbooks and teaching aids for higher medical and pharmaceutical education.	Access by individual login and password from any computer and mobile device	No limited
2	Database "Doctor's Consultant. Electronic Medical Library»	National guidelines, clinical guidelines, textbooks, monographs, atlases, reference books, etc.	Access by individual login and password from any computer and mobile device	No limited
3	Database "Electronic Library System "Bukap"	Educational and scientific medical literature of Russian publishing houses, incl. translated editions. The collection of subscription publications is formed point by point.	Access by individual login and password from any computer and mobile device. From university computers - access is automatic.	No limited
4	Electronic periodicals in the database "SCIENTIFIC ELECTRONIC LIBRARY eLIBRARY"	Electronic medical magazines	Access - from the computers of the university.	No limited

#### 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	Electronic articles and abstracts	Electronic medical magazines	No limited
2	Clinical recommendations of the Ministry of Health of the Russian Federation	Protocols for the management of various dental nosologies	No limited
3	Standards of Care <a href="http://www.rspor.ru/">http://www.rspor.ru/</a>	Medical care standards	No limited

4	State Register of Medicines <a href="http://www.drogreg.ru/Bases/WebReestrQuery.asp">http://www.drogreg.ru/Bases/WebReestrQuery.asp</a>	List of commonly used drugs	No limited
5	Federal State Institution Scientific Center for Expertise of Medicinal Products of Roszdravnadzor <a href="http://www.regmed.ru">http://www.regmed.ru</a>	Circulation of medicines	No limited
6	Pharmaceutical Information Foundation <a href="http://drugreg.ru">http://drugreg.ru</a>	Medications	No limited
7	Russian Encyclopedia of Medicines <a href="http://rlsnet.ru">http://rlsnet.ru</a>	Medications	No limited
8	Handbook Vidal. <a href="http://www.vidal.ru">http://www.vidal.ru</a>	Medications	No limited
9	STAR-Dental Association of Russia <a href="http://www.e-stomatology.ru">www.e-stomatology.ru</a>	Guidelines	No limited
10	Website of the Chief Freelance Dentist of the Ministry of Health of the Russian Federation <a href="http://www.msmsu.ru">www.msmsu.ru</a>	Laws	No limited
11	Interregional Society of Evidence-Based Medicine Specialists <a href="http://www.osdm.org/index.php">http://www.osdm.org/index.php</a>	Promotion of scientific achievements in medical practice	No limited
12	Moscow Center for Evidence-Based Medicine <a href="http://evbmed.fbm.msu.ru/">http://evbmed.fbm.msu.ru/</a>	Server of the Moscow Center for Evidence-Based Medicine and Pharmacotherapy	No limited
13	European Association of Scientists, Educators and Dental Professionals <a href="http://www.ed-academy">www.ed-academy</a>	Dental education, scientific activity	No limited
14	Russian Medical Academy of Postgraduate Education <a href="http://www.rmappo.ru/">www.rmappo.ru/</a>	Information about the departments and departments, scientific subdivisions. Selection committee.	No limited
15	American Dental Association of Dentists <a href="http://www.americandental.ru/index.html?page=23">www.americandental.ru/index.html?page=23</a>	International standards and requirements for dental products	No limited

## 9. Logistics support of discipline.

### 9.1. List of premises\* required for conducting classroom studies in the discipline.

#### Workshops:

1. Dental rooms equipped with the necessary equipment and equipment No. 5
2. X-ray room
3. Sterilization

#### Lectures:

1. Set of electronic presentations

Lecture hall, screen, projector, laptop, screen, TV, video camera, slidescope, VCR, PC, video and DVD players, monitors, sets of slides, tables / multimedia visual materials in various sections of the discipline, videos, boards, etc.

### 9.2. The list of equipment\* required for classroom training in the discipline.

Tables and albums.

1. Classification of caries.
2. Classification of pulpitis.
3. Classification of periodontitis.
4. Classification of periodontal diseases.
5. Classification of diseases of the oral mucosa.
6. Indexes:
  - a) periodontal index PI;
  - b) hygiene index according to Fedorov-Volodkina, Green-Vermillion;
  - c) simplified index of oral hygiene;
  - d) PMA index.
  - e) CPITN index
7. Endodontics.
8. Rules and stages of preparation of carious cavities.
9. Flap operation.
10. Open curettage.
11. Closed curettage.
12. The structure of enamel.
13. The structure of dentin.
14. The structure of cement.
15. Artistic restoration of teeth grades 1-6 Black.
16. Endodontic manipulations in difficult and impassable, previously sealed (with pastes, gutta-percha) root canals.

*Presentations, transparencies, albums, videos:*

1. Caries and its complications (pulpitis, periodontitis).
2. Prevention of caries.
3. Periodontal disease (gingivitis, periodontitis, periodontal disease, idiopathic diseases).
4. Diseases of the oral mucosa.
5. Non-cariou lesions of the teeth.
6. Anesthesia in the practice of therapeutic dentistry.
7. Methods of examination of the patient in the clinic of therapeutic dentistry.
8. Carifree dentistry.
9. High technologies in the practice of therapeutic dentistry (cofferdam, gutta-percha, Thermophiles, Ribbond, fiberglass pins, etc.).

*Dental instruments, devices:*

1. Dental instruments (tweezers, probes, mirrors, excavators, trowels, pluggers, matrix holders, matrices, tips, burs, polishers, carborundum stones, rubber bands and brushes in stock, endodontic instruments in stock, etc.).
2. Dental filling materials for filling root canals and carious cavities.
3. Dry oven, autoclave.
4. Germicidal lamp.
5. Bixes for sterilization.
6. Negatoscope.
7. Odontosensimeter, Digitest.
8. Apparatus Diathermocoagulator.
9. Hydromassage apparatus.
10. Ultradent apparatus.
11. Amalgamator.
12. Apparatus "Neuron-01".
13. Apparatus "Neuron-02".
14. Apparatus "Mirabel".
15. Apparatus IGNL.
16. Tonometer.
17. Phonendoscope.
18. Assistant's chair.

19. Dentist's chair.
20. Dentist's table.
21. Dental unit (Azimuth, Galant, DabiAtlant, Performer-IDek, Castellini).
22. Apex locator.
23. MiniPieson.
24. Assist.
25. Televisions and VCRs.
26. Laptop and multimedia projector.

*Training stands:*

1. Information (announcements).
2. Plans of lectures and practical classes, lists of recommended basic and additional literature for study.
3. Oral hygiene, hygiene products.
4. Sweeteners.
5. Prevention of dental caries and periodontal disease.
6. A set of orthopantomograms and intraoral radiographs.
7. Treatment, prevention of periodontal diseases and oral mucosa.

*Training dummies:*

1. Teeth with carious cavities of 1-6 Black classes.
2. Phantom head.
3. Phantom of oral hygiene.
4. Human teeth are artificial and natural.
5. Phantom for endodontic manipulations.
6. Workplace for each student (dental unit, dental chair, dentist's chair, dentist's table, doctor's desk).
7. Phantom jaws and toothbrushes for rational oral hygiene.
8. Pig heads for the demonstration of periodontal surgery.

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

1. role playing
2. business games
3. training
4. game design
5. computer simulation
6. situation-case etc.;

non-imitation technologies:

1. lecture (problematic, visualization, etc.),
2. discussion (with and without brainstorming),
3. programmed learning, etc.

Only 25% of interactive classes from the volume of classroom work.

**Examples of educational technologies in an interactive form:**

<b>№</b>	<b>Section name</b>	<b>Forms of classes using active and interactive educational technologies</b>
<b>1</b>	Periodontal disease. Gingivitis. Periodontitis. Periodontitis. Idiopathic diseases.	Role-playing game
<b>2</b>	Prevention of dental diseases	Seminar-discussion
<b>3</b>	Methods of examination of the patient. Dental and medical documentation.	business game
<b>4</b>	Pathology of hard tissues of the tooth of non-carious origin	Role-playing game
<b>5</b>	Dental caries	Role-playing game
<b>6</b>	Prevention of dental caries	Seminar-discussion
<b>7</b>	Treatment of dental caries	Role-playing game
<b>8</b>	Pulpitis	Seminar-discussion
<b>9</b>	Periodontitis	Seminar-discussion
<b>10</b>	Diseases of the oral mucosa	Lecture - visualization
<b>11</b>	Physical methods in the treatment and prevention of dental	Lecture - visualization

	diseases	
12	Periodontal disease. Gingivitis. Periodontitis. Periodontitis. Idiopathic diseases.	Role-playing game

**Role play design.** The methodology of the game can be demonstrated on the example of simulating a clinical situation - generalized periodontitis of varying severity (it can be mild, moderate or severe). There are several stages in the role-playing game.

- determination of the goal of the game, development of a game scenario depending on the topic of the lesson: study of the clinic, diagnosis, differential diagnosis of generalized periodontitis, of varying severity;
- instructing participants: the moderator (the role of a teacher or educator) names the topic of the lesson, determines its significance, draws students' attention to the need to highlight five competencies (especially legal aspects) that should be analyzed on this particular topic.
- distribution of roles, determination of the peculiarities of their behavior, depending on the role. The educational tasks of each are determined based on the game roles.

**Dive into the game.** Participants of the game are determined. In a role-playing game, learning takes place in the process of joint activity, but at the same time, each participant performs (solves) his task, in accordance with the role.

Students select cards with a given role in the "blind", determine the range of questions in accordance with the job responsibilities associated with the reception of a patient with generalized periodontitis. The "patient" card indicates the diagnosis, severity and aggravating moments (background disease, condition of the dentition: deep bite, partial absence of teeth, short frenulum or any other concomitant pathology). The rest of the participants in the game should not know the diagnosis.

**Game process.** The student-patient must formulate the complaints with which patients usually go to the doctor in this situation, model the clinical signs of the disease, in the form of individual symptoms characteristic of this particular case - generalized periodontitis of a certain severity.

The task of the doctor was to recreate the picture of the disease from individual symptoms, supplement it with the results of appropriate examination methods, and make a diagnosis that is known only to the student - the patient. At this stage of the game, the main points that were taken into account when discussing the course of the game were the observance of the procedure for examining the patient, compliance with the norms of ethics and deontology.

The student dentist clarifies the patient's complaints, details the conditions for the occurrence and development of these symptoms, how they stop. After a complete survey (anamnesis of the development of the disease, life), he identifies the leading symptoms. Conducts a detailed examination of the patient (external examination, examination of the oral cavity, the condition of hard tissues of the teeth), reveals the objective symptoms of the alleged diagnosis, determines and justifies the need for additional examination methods (X-ray, osteometry, Kulazhenko test, etc.) and their significance in making the final diagnosis. He clarified the need for a consultation consisting of an orthodontist, a surgeon or other related specialists to draw up a protocol for the complex treatment of a patient.

The radiologist describes the patient's x-ray, drawing attention to the degree of bone resorption, which determines the severity of the course of generalized periodontitis.

The lab doctor interprets the tests, identifying changes in the data and their implications for the clinic (for example, a blood test).

Head the dental department analyzes the work of the doctor, in terms of compliance with ethics, deontology, asepsis and antisepsis, the choice of drugs, the validity of their appointment.

An expert-analyst analyzes the work of all participants in the game step by step, evaluates the stages of work with the patient, and assigns marks according to the scorecard.

At the final stage, it is important to discuss the course of the game, the moderator summarizes the results of the game, discusses the performance of the participants, evaluates the participants in the game. The teacher, noting the positive aspects and shortcomings of the role performers, encourages discussion, enables participants to defend individual positions, determines the level of assimilation of knowledge, professional skills and abilities on a given topic.

### **Seminar-discussion**

*Preparatory stage.*

During the preparation period (7–10 days before the seminar), during independent work, a speaker, co-speaker are determined and the leaders of the initiative groups for each issue are determined. Each leader prepares a 5-7 minute speech in advance, revealing the relevance and significance of the issue under

consideration, its main problems. The composition of the expert group consisting of two people is determined to take into account the performances and give individual marks. During this period, a trainee is also appointed to lead the seminar.

His responsibilities include:

- compliance with the time limit for each question;
- management of the discussion of the issue (whom to give the floor for the report, ensuring order and discipline in the discussion of the issue);
- assistance to each group responding to interrogations, etc.

*Main stage.*

The seminar begins with an introductory speech by the teacher. After that, it is desirable to hear and discuss the report, as well as hear the opponent. Then the teacher determines the composition of the initiative group on the first question. After determining the composition of the group, he, together with the leader of the seminar, takes his place at two tables facing the entire audience.

The facilitator gives the floor for a 6-7-minute presentation to the group leader, and then questions on the essence of the first question of the seminar, and the initiative group answers them.

This part of the workshop is the most important. Each participant not only asks questions, but also puts forward his own hypotheses, argues, proves his case, repeatedly refers to lecture notes and manuals to clarify his knowledge and find more convincing and accurate arguments.

Thus, the main and basic requirement for the organization of work at such a seminar is the following: trainees should solve the problems posed by themselves as often as possible.

Speaking about the method of setting questions and answering them, it should be noted that the person asking the question may not address everyone, but a specific person in the initiative group. If this is not the case, then the facilitator regulates the even distribution of questions among the group members.

After the time allotted for the question, the facilitator gives the floor to the teacher, who makes a conclusion on the issue (reveals what is the essence of this issue, indicates what to pay special attention to, gives answers to questions that have not received proper coverage, etc. ). Then all subsequent questions of the seminar are discussed in the same way.

*The final stage:*

- the results of the seminar are summed up;
- the presentation of the expert group and the head of the seminar is heard with an assessment of the work of each trainee; - a survey of trainees is carried out; - Set tasks for independent work.

It should be noted that holding a seminar using the method of active dialogue requires some preparatory work and continuous improvement of the methodology. Conducting a seminar with this method allows you to achieve the goal only if you use the various elements of active learning methods in an integrated manner.

### *Conducting a business game*

**1. Introduction to the game.** Usually at this stage, participants are introduced to the meaning, goals and objectives of the game being played, the general rules, consulting and briefing. However, if necessary, the game may be preceded by a lecture or conversation on the topic "Methods of examining a patient. Dental and medical documentation.

**2. Dividing listeners into groups.** The optimal group size is 5-7 people; in each group, a leader is selected and, if necessary, playing roles are distributed (dentist, patient). Roles can be distributed both at the beginning of the game, and as needed, as it progresses.

**3. Immersion in the game.** In this fragment, the listeners receive a "game task", for example: to determine the examination methods used to diagnose periodontal diseases in a patient. The game participants analyze the proposed situation, diagnose and rank problems, agree on terminology, formulate problems, etc. In addition, they receive not only information, materials for analysis, but also attitudes on the behavior and rules of the game, therefore, there is a process of familiarization with the rules and entry into role-playing behavior.

**4. Gameplay.** At this stage, in accordance with the strategy adopted in each group, the search or development of solutions is carried out. During the discussion, a collective decision is developed, then a project is developed and substantiated, which is visualized on posters or a slide show, the documents necessary for the decision and its presentation at the plenary session are filled in using standard programs. At this stage, it is necessary to use the Internet for communication and information gathering; various search engines. Consultations with the teacher can be carried out by e-mail, using forums and live chats. Among the Internet resources most often used in independent work, it should be noted electronic libraries, educational portals, thematic sites, bibliographic databases, sites of periodicals. To perform calculations

and prepare presentations, it is recommended to use standard software packages.

**5. General discussion or plenum.** Each group delegates a representative of their team to present and justify their decisions or projects (exchange of opinions, opposition, questions and answers). To conduct intergroup communication, the spatial environment of the game changes, and special roles are assigned, as a rule, performing game functions (“devil's advocate”, provocateur, opponent, critic, etc.). Expert groups are actively working at the plenum, which evaluate not only the results of the projective activities of the teams, but also the culture of communication and presentation. As a result of the discussion, the teacher can also speak, but only with comments on the content of the discussion, on projects, and not in general on the whole game. In addition, the teacher at this stage has to conduct a plenum, and, consequently, raise questions and correctly manage the process of exchanging opinions.

**6. Summing up the game.** The need for this stage is especially important, since decisions and projects are evaluated here, different strategies are introduced, their effectiveness and competitiveness are determined. In addition, at this stage, points, penalty and incentive points are calculated, the best teams, players, projects are identified. It is at this stage that the game gets its logical conclusion. The evaluation system must ultimately correlate the planned goals and the result of the game.

**7. Unloading from the game.** There are many techniques that contribute to the "unloading" of participants from the gameplay. Their choice depends on the goals of the game and the game-technical competence of the teacher. The final part of the game can be devoted to the reflections of the participants about their future, about the prospects for using this kind of learning technologies in the educational process, homework, etc.

*Software:*

Distance education, tests for 2-5 courses, website of the department, electronic library, clinical situational tasks on all topics, lecture plans and practical classes, schedules, a list of practical skills and abilities of the student, questions for exams, etc.

**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/HN100 30 LLC "Softline Trade" from 04.12.2020
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Department of  
**THERAPEUTIC DENTISTRY**

**CHANGE REGISTRATION SHEET**

working program for the academic discipline

Field of study / specialty / scientific specialty: 31.05.03 DENTISTRY

*(code, name)*

Training profile: DENTISTRY

*(name) - for master's degree programs*

Mode of study: FULL-TIME

*full-time/mixed attendance mode/extramural*

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

\_\_\_\_\_ / \_\_\_\_\_  
department name, academic title

signature

print name