	Educational institution "Royal Metropolitan University"
	Quality Management System Educational and Methodological Complex of the discipline "Propaedeutics of Therapeutic Dentistry" Department of Dental Disciplines, Royal Metropolitan University 560004 "Dentistry"

Ministry of Science, Higher Education, and Innovation of the Kyrgyz Republic
Educational Institution
"Royal Metropolitan University"
Department of Dental Disciplines



"APPROVED"

Vice Rector for Academic and
and Administrative Affairs
N.A. Urazalieva

“ 6 ” 09 / 2025



**TEACHING AND METHODOLOGICAL COMPLEX OF THE
DISCIPLINE**

“PROPAEDUTICS OF THERAPEUTIC DENTISTRY”

of the main educational program
in the specialty 560004 “Dentistry” (for foreign citizens)

Graduate qualification: Specialist (Doctor)

Bishkek 2025



Educational institution
"Royal Metropolitan University"

Quality Management System
Educational and Methodological Complex of the Discipline "Propaedeutics of Therapeutic Dentistry"
Department of Dental Disciplines, Royal Metropolitan University
560004 "Dentistry"

Ministry of Science, Higher Education, and Innovation of the Kyrgyz
Republic
Educational Institution
"Royal Metropolitan University"
Department of Dental Disciplines



"APPROVED"

Vice Rector for Academic and
and Administrative Affairs
N.A. Urazalieva

"6" 09 2025



**WORKING PROGRAM OF THE DISCIPLINE
"PROPAEDUTICS OF THERAPEUTIC DENTISTRY"**

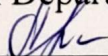
of the main educational program
in the specialty 560004 **"Dentistry" (for international students)**

Graduate Qualification: Specialist (Doctor)

Full-time program

Course	2
Semester	3
Exam (semester)	3
Credit (semester)	
Total credits in the curriculum	3
Total hours in the curriculum	90

Program developer:
A. E. Zholdosbekova

Reviewed and approved at a meeting of the
Department of Dental Disciplines
Protocol No. 1 dated September 6, 2025
Head of Department, PhD, A.K. Bektasheva
 (signature)

Bishkek 2025



Educational institution
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Educational and Methodological Complex of the Discipline "Propaedeutics of Therapeutic Dentistry"
Department of Dental Disciplines, Royal Metropolitan University
560004 "Dentistry"

The work program for the course "Propaedeutics of Therapeutic Dentistry" has been developed in accordance with the requirements of the State Educational Standard for Higher Education in specialty 560004 "Dentistry."

The work program has been approved by the Educational and Methodological Department of the RMU

Head of the Educational and Methodological Department

Kurtubaeva N.R.

(Full Name)

[Signature]

(signature)

"06" 09 2025

The work program has been approved by the head of the main educational program for specialty 560004 "Dentistry"

Head of the Main Educational Program

[Signature]

(Full Name)

Sapurova A.Z.

(Signature)

"06" 09 2025

External review provided on

M.D., professor Chokotova G.S.

"21" 01 2025 (review attached)

The work program has been approved by a specialist from the RMU Quality and Monitoring Department

Q&M Department

Chamberliev V.

(Full Name)

[Signature]

(Signature)

"06" 09 2025

РЕЦЕНЗИЯ

на рабочую программу дисциплины
«Пропедевтика терапевтической стоматологии»
по специальности 560004 «Стоматология»
(для иностранных граждан)
(ОУ «Роэль Метрополитен университет»)

Рабочая программа дисциплины «Пропедевтика терапевтической стоматологии» разработана в соответствии с требованиями Государственного образовательного стандарта высшего профессионального образования по специальности «Стоматология» и соответствует структуре основной образовательной программы подготовки врача-стоматолога.

Цели и задачи дисциплины сформулированы чётко и отражают её пропедевтическую направленность. Программа ориентирована на формирование у студентов базовых теоретических знаний и практических навыков, необходимых для понимания основ терапевтической стоматологии, диагностики, профилактики и подготовки к выполнению простейших лечебных манипуляций в полости рта. Особое внимание уделено вопросам этиологии и патогенеза стоматологических заболеваний, асептики и антисептики, работе с инструментарием, ведению медицинской документации и оказанию неотложной помощи. Содержание дисциплины логично структурировано и охватывает основные разделы курса: организацию стоматологической помощи, сбор анамнеза и клиническое обследование, диагностику кариеса, пульпитов, заболеваний пародонта и слизистой оболочки полости рта, основы профилактики и медикаментозной терапии. Теоретическая подготовка органично сочетается с практическими занятиями на фантомах и разбором клинических ситуаций.

В программе корректно определено место дисциплины в структуре ООП, обозначены междисциплинарные связи с фундаментальными и клиническими дисциплинами, что обеспечивает преемственность обучения. Формируемые профессиональные компетенции представлены в соответствии с требованиями образовательного стандарта и детализированы по уровням «знать», «уметь» и «владеть». Учебно-методическое и материально-техническое обеспечение дисциплины соответствует современным требованиям и обеспечивает проведение всех заявленных видов учебных занятий. В целом рабочая программа дисциплины «Пропедевтика терапевтической стоматологии» является методически обоснованной и рекомендуется к утверждению и внедрению в учебный процесс.

д.м.н., профессор кафедры
детской стоматологии
КГМА им. И.К. Ахунбаева




Подпись *Чолокова Г.С.* заверяю
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зав. общим отделом
И.К. АХУНБАЕВ АТЫНДАГЫ КЫРГЫЗ МАМЛЕКЕТТИК МЕДИЦИНАЛЫК АКАДЕМИЯСЫ
КЫРГЫЗСКАЯ ГОСУДАРСТВЕННАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ ИМ. И.К. АХУНБАЕВА

Г.С. Чолокова

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1. The working program of the academic discipline

1.1. Explanatory note

The mission of the OU RMU is to improve the health and quality of life of the population through high-quality training of medical personnel capable of intercultural interaction, based on the integration of advanced scientific knowledge, innovation and high standards of practice in the context of the unity of education, science and clinical activity.

Abstract of the academic discipline


"Propaedeutics of Therapeutic Dentistry" is a course covering the theoretical foundations of the structure and functions of the dental system and methods for examining dental patients. This course covers the principles of clinical reasoning, diagnosis, prevention, and basic treatment approaches in therapeutic dentistry. It is considered a core clinical discipline in dental education and serves as the foundation for further study in specialized areas of therapeutic dentistry and other clinical disciplines.

The purpose and objectives of the discipline

The purpose of discipline

The main objective of training in the discipline "Propaedeutics of Therapeutic Dentistry" is to develop students' clinical knowledge and practical skills in:

- morphology and anatomical and histological features of hard tissues of the tooth, periodontium and oral mucosa;
- physiological and pathological processes in the hard tissues of the tooth and surrounding tissues;
- methods of examining a dental patient (questioning, collecting anamnesis, examination, instrumental methods);
- principles of diagnosis of dental diseases;
- planning laboratory and instrumental research methods (radiography, thermal diagnostics, EOD, etc.);
- interpretation of survey results;
- identification of the main clinical symptoms and syndromes in therapeutic dentistry;
- principles of asepsis and antisepsis, infection control at a dental appointment;
- organizing the dentist's workplace, working with instruments and equipment;
- the basics of preparation of hard dental tissues;
- use of dental materials (filling materials, linings, adhesive systems);
- development of clinical thinking and diagnostic decision-making skills;
- basics of prevention of dental diseases;
- modern theoretical and practical approaches in therapeutic dentistry;

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preparation for independent professional activity of a therapeutic dentist;
 the development of universal and professional competencies for the provision of qualified dental care in accordance with modern healthcare standards.

Objectives of the discipline

- to form a broad and deep body of basic, fundamental medical knowledge that will shape the professional competencies of a physician capable of successfully solving his or her professional tasks;
 - to develop students' systematic knowledge of the anatomy, histology and physiology of the oral cavity organs;
 - to form basic knowledge about the causes, mechanisms of development and clinical manifestations of the main dental diseases (caries, pulpitis, periodontitis);
- to form and develop skills in clinical thinking and diagnosis of dental diseases;
 to teach methods of examining a dental patient and maintaining medical records;
 to develop practical skills in working with dental instruments and equipment;
 to teach the principles of preparation of hard dental tissues and the basics of restoring the anatomical shape of the tooth;
 to develop knowledge about dental materials and their rational use;
 to teach the rules of asepsis, antisepsis and infection control during a dental appointment;
 to develop the ability to differentially diagnose diseases of hard dental tissues;
 to prepare a specialist for independent treatment and diagnostic activities at a basic level;
 to develop an understanding of the organization of dental care and the fundamentals of medical legislation;
 develop skills in teamwork and professional communication with patients;


to form a system of knowledge, skills and abilities that ensure readiness for further study of clinical disciplines in the dental profile.

The block "Propaedeutics of Therapeutic Dentistry" is included in the basic part of the professional cycle for the specialty "Dentistry" (code 560004).

The place of the discipline in the structure of the OOP (prerequisites, postrequisites)

This discipline is studied by students majoring in Dentistry (for foreign citizens) and is included in the compulsory scope of disciplines studied in the State Educational Standard of Higher Professional Education.

The course "Propaedeutics of Therapeutic Dentistry" builds on the previous disciplines of physics, chemistry, normal physiology, normal anatomy, histology, cytology, embryology, microbiology, and Latin. The knowledge gained in "Propaedeutics of Therapeutic Dentistry" will be essential for future studies in the following disciplines: faculty therapeutic dentistry, periodontology, pediatric dentistry, and gerontostomatology.

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The main purpose of the program in propaedeutics of therapeutic dentistry is to develop students' clinical thinking and the ability to interpret anamnesis data, clinical data, and additional research methods for the correct diagnosis and targeted therapy.

Based on the main objectives of the course "Propaedeutics of Therapeutic Dentistry", the program material consists of the following block:

The course explores the anatomical and physiological characteristics of dental hard tissues and pulp, their age-related changes, and the fundamentals of pathological processes. Patient examination techniques are mastered, including medical history collection and clinical diagnostic methods. Particular attention is paid to the organization of dental appointments, the principles of asepsis and antisepsis, and the use of equipment and instruments. Practical training includes mastering cavity preparation techniques according to Black's classification, the use of filling materials and adhesive systems, and the stages of tooth restoration (isolation, filling, grinding, and polishing).

The total workload of the subject is 90 hours.

The course consists of lectures and practical exercises. Ongoing assessment includes tests and practical exercises using mock-ups, designed to test the required competencies. The final assessment is an exam.


Course prerequisites: normal and pathological physiology, microbiology, topographic anatomy, pathological anatomy, physics, chemistry, histology.

Post-requisites: therapeutic dentistry, pediatric dentistry, periodontology.

Competencies of students formed as a result of mastering the discipline, planned results of mastering the academic discipline.

- Graduate in the specialty Dentistry with the assignment of a specialist qualification "Doctor" in accordance with the goals of the OOP and the objectives of professional activity, must have the following professional competencies:

Code	Contents of competence
GC-1	able and ready to analyze socially significant problems and processes, to use methods of natural sciences, mathematics and humanities in various types of professional and social activities;
IC-1	able and ready to work with computer equipment and software for system and application purposes to solve professional problems;
SPC-1	able and willing to implement ethical, deontological and bioethical principles in professional activities;
PC-2	able and ready to conduct and interpret interviews, physical examinations, clinical examinations, results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical and autopsy material of patients, and to prepare medical records for outpatient and inpatient children and adults.

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PC-4	able and willing to apply aseptic and antiseptic methods, use medical instruments, carry out sanitization of treatment and diagnostic rooms, children's healthcare organizations, and possess the skills to care for sick children and adults;
PC-6	able and ready to work with medical and technical equipment used in work with patients, computer equipment, receive information from various sources, apply the capabilities of modern information technologies to solve professional problems;
PC-15	able and willing to collect and record a complete patient medical history, including oral health data;
PC-16	capable and ready to make a diagnosis based on the results of clinical and laboratory studies of biological materials and taking into account the laws of the course of pathology in organs, systems and the body as a whole.
PC-19	able and ready to diagnose typical dental diseases of the hard and soft tissues of the oral cavity, dentofacial anomalies in patients of all ages;
PC-20	able and ready to analyze and interpret the results of modern diagnostic technologies in children, adolescents and adults for successful treatment and preventive activities;
PC-22	able and ready to perform basic treatment measures for the most common dental diseases and conditions in adults and children.

LO1:Analyze and interpret clinical cases of therapeutic dentistry using modern scientific methods.

LO2:Apply computer technologies and specialized software for diagnostics and treatment planning in therapeutic dentistry.

LO3:Use the principles of bioethics, deontology and medical ethics when interacting with patients and in professional practice.

LO4:Communicate effectively and work in a team environment, actively participating in clinical case discussions and resolving conflicts.


LO5:Conduct a comprehensive examination of the oral cavity, collect anamnesis and prepare medical documentation in accordance with current standards.

LO6:Perform a pathophysiological analysis of dental diseases and correctly interpret the results of laboratory and instrumental studies.

LO7:Conduct diagnostics of dental diseases and periodontal tissues, as well as complications arising during therapeutic treatment.

LO8:Develop and implement an individualized therapeutic treatment plan, taking into account clinical guidelines and the latest technologies.

LO9:Use aseptic and antiseptic methods to ensure sanitary safety during dental procedures.

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LO10: Use modern digital tools for diagnosis, planning and implementation of therapeutic treatment.

After mastering this discipline, the student:

will know:

- Anatomical and histological structure of the tooth and its tissues.
- Functional features of hard tissues and dental pulp.
- Basic methods of examination of a dental patient.
- Etiology and pathogenesis of dental caries.
- Classification of caries and carious cavities according to Black.
- Principles of asepsis and antisepsis in dentistry.
- Equipment and organization of a dental office.
- Classification of dental instruments and materials.
- The main stages of preparation of carious cavities.
- Fundamentals of endodontics and the structure of root canals.

will understand:


- The relationship between dental anatomy and clinical manifestations of diseases.
- The importance of diagnostics for choosing a treatment method.
- The role of microbial factors in the development of caries.
- Principles of minimally invasive dental treatment.
- The importance of restoration tightness.
- The influence of violation of dissection technique on treatment outcome.
- The role of isolation of the working field in dental treatment.
- The importance of adhesive technologies in modern dentistry.
- Causes of complications during caries treatment.
- The influence of age-related changes on tooth structure.

will be able to use:

- Basic dental instruments by purpose.
- Methods of patient examination (inspection, percussion, probing).
- Black's classification in clinical practice.
- Principles of choosing filling material.
- Asepsis and antisepsis at work.
- Methods of isolating the working field (cofferdam).
- Adhesive systems depending on the clinical situation.
- Algorithm for caries diagnostics.
- Methods of preparation of different classes of cavities.
- Protocols for cavity preparation for filling.

will be able to carry out:

- Collecting a dental patient's anamnesis.
- Objective examination of the oral cavity.

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- Basic diagnosis of caries and its complications.
- Preparation of carious cavities on phantoms.
- Preparing the tooth cavity for filling.
- Applying insulation to the working field.
- Carrying out stages of tooth filling.
- Grinding and polishing of restorations.
- Compliance with the rules of asepsis and antisepsis.
- Organization of labor_places of a dentist.

will be able to analyze:


- Patient complaints and anamnesis data.
- Results of clinical examination.
- Condition of hard dental tissues.
- The depth and location of the carious cavity.
- Errors in tooth preparation.
- The quality of the restoration performed.
- Selection of filling material.
- Causes of secondary caries.
- Clinical situations for different Black classes.
- The effectiveness of the treatment methods used.

will be able to synthesize:

- Dental patient examination plan.
- Algorithm for caries diagnostics.
- An integrated approach to caries treatment.
- Selection of preparation method depending on the clinical situation.
- Individual treatment plan for the patient.
- Combined use of materials.
- Sequence of stages of tooth restoration.
- Principles of rational use of tools.
- Scheme for the prevention of complications.
- Clinical reasoning skills in dentistry.

will be able to evaluate:

- General condition of the patient's oral cavity.
- Hygienic status.
- Condition of hard dental tissues.
- Quality of cavity preparation.
- Sealing of restoration.
- Aesthetic characteristics of the filling.
- The functional viability of the tooth after treatment.
- The effectiveness of the chosen treatment method.

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- Risk of complications.
- Compliance with sanitary and hygienic standards at work.

1.2. Recommended educational technologies

The following educational technologies are used to help students master the academic discipline "Propaedeutics of Therapeutic Dentistry," gain knowledge, and develop professional competencies:


- lecture with elements of discussion and problem solving;
- lectures - electronic presentations;
- analysis of specific situations;
- role-playing game "doctor - patient";
- lecture-visualization;
- problem lecture;
- conference session;
- training;
- debate;
- brainstorming;
- master class;
- small group method;
- classes using phantoms;
- analysis of clinical cases;
- situational tasks;
- preparation and defense of medical history;
- student's research work;
- holding subject Olympiads;
- preparation of written analytical papers;
- preparation and defense of abstracts;

1.3. Scope of the discipline and types of academic work

The section data is presented in tabular form in accordance with the curriculum. It also specifies the volume of classroom instruction (lectures, seminars, practical classes, and labs) and independent student work (overall and by semester in which the course is studied), as well as the types of final assessments.

Form of study – full-time


According to the 2025 curriculum	3 sem.	Total	
		in hours	in loans
Total labor intensity	90	90	3
Classroom work	54	54	
Lectures	18		
Practical classes	36		

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Independent work	18	18	
SRSP	18	18	
Type of final control	Exam		

1.4. Structure of the discipline

1.4.1. Thematic plan for studying the discipline –Reflects the course structure, reveals the sequence of study of sections and topics of the program; is presented in the form of a table and provides information on the distribution of the number of hours by topics, types of classes (lectures, seminars, practical classes, laboratory work, independent work of students), the competencies developed, the educational technologies used, the methods and methods of teaching, and forms of assessment.

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Subject plan for studying the discipline and competency matrix (workload is indicated in academic hours)


No.	Name sections and topics (lectures and practical classes)	Classroom classes				Total hours on classroom work	SRSP	Independent work of a student	Formed competencies	Used educational technologies, methods and	Dummies	Forms of current and border control academic performance
		lectures	seminars	practical classes	laboratory work							
	3rd semester											
1	Introduction to the propaedeutics of therapeutic dentistry. Subject, objectives, and main sections of the discipline. Organization of dental care. Tooth anatomy. Tooth structure. Histology of hard dental tissues: enamel, dentin, cementum.	2		4		6	2	2	<i>GC-1, IC-1, SPC-1</i>	<i>lecture using video materials</i>	<i>Models of jaws with artificial teeth</i>	<i>Assessment of the acquisition of practical skills (abilities)</i>
2	Structural and functional stability of dental hard tissues. Structure and functions of dental pulp. Age-related changes in	2		4		6	2	2	<i>GC-1, IC-1, SPC-1</i>	<i>lecture-visualization</i>	<i>Models of jaws with artificial teeth</i>	<i>Testing, control work. Assessment of the</i>



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	the pulp. Dental pulp space.												<i>acquisition of practical skills (abilities).</i>
3	Dental patient examination methods: history taking, oral examination, probing, percussion, and palpation. Sanitary and hygienic requirements for dental office operations. Asepsis and antisepsis in therapeutic dentistry.	2		4		6	2	2	<i>PC-2, PC-4, PC-6, PC-15, PC-19</i>	<i>lecture using video materials</i>	<i>Models of jaws with artificial teeth, diagnostic instruments</i>	<i>Testing, control work. Assessment of the acquisition of practical skills (abilities).</i>	
4	Dental office equipment. Dental units. Ergonomics in dentistry. Prevention of occupational diseases. Instruments for examination and treatment in therapeutic dentistry. Classification and rules of use.	2		4		6	2	2	<i>PK-2, PC-4, PC-6, PC-15</i>	<i>lecture-visualization</i>	<i>Dental unit, jaw models, diagnostic instruments</i>	<i>Classes using training equipment and simulators. Testing. Quiz. Assessment of the acquisition</i>	

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													<i>of practical skills (abilities).</i>
5	Dental caries: etiology, pathogenesis, classification. Black's classification of cavities. Methods and principles of dental hard tissue preparation. Basic principles of cavity preparation.	2		4		6	2	2	PC-6, PC-15, PC-19, PC-20, PC-22	lecture using video materials	Artificial teeth, phantoms, dental unit, instruments		<i>analysis of clinical cases. classes using phantoms.</i>
6	Methods of preparation of classes I, II, III, IV and V according to Black's classification.	2		4		6	2	2	PC-6, PC-15, PC-19, PC-20, PC-22	problematic lecture	Artificial teeth, phantoms, dental unit, instruments		<i>Classes using phantoms. Testing. Quiz. Assessing the acquisition of practical skills (abilities). Solving situational problems</i>



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7	Temporary filling materials. Materials for permanent fillings. Cements and glass ionomer materials. Composite filling materials and adhesive systems.	2		4		6	2	2	PC-6, PC-15, PC-19, PC-20, PC-22	Plotting lecture	Artificial teeth, phantoms, dental unit, instruments	analysis of clinical cases. Classes using phantoms
8	Isolation of the working area. Isolation methods. Use of a cofferdam. Etching of hard dental tissue. Preparation for filling. Methods of filling carious cavities.	2		4		6	2	2	PC-6, PC-15, PC-19, PC-20, PC-22	Problematic lecture	Artificial teeth, phantoms, dental unit, instruments	business and role-playing educational game. Classes using phantoms
9	Grinding and polishing of fillings. Evaluation of the quality of tooth restoration. Fundamentals of endodontics. Endodontic instruments. Pulp space and age-related changes in root canals.	2		4		6	2	2	PC-6, PC-15, PC-19, PC-20, PC-22	problematic lecture	Artificial teeth, phantoms, dental unit, instruments	analysis of clinical cases. Classes using phantoms
		18		36		54	18	18				Exam

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Total hours by discipline:	18		36		54	18	18				
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Examples of educational technologies, methods and teaching techniques (abbreviated): traditional lecture (L), lecture-visualization (LV), problem lecture (PL), lecture-press conference (LPC), lesson-conference (LC), training (T), debates (D), brainstorming (MSh), master class (MC), round table (RT), activation of creative activity (ATD), regulated discussion (RD), forum-type discussion (F), business and role-playing educational game (DI, RI), small group method (MG), classes using simulators, imitators (Tr), computer simulation (KS), analysis of clinical cases (KS), preparation and defense of medical history (IB), use of computer training programs (CTP), interactive atlases (IA), attendance of medical conferences, consultations (VK), participation in scientific and practical conferences (SPC), congresses, symposia (Sim), student educational and research work (UIRS), conducting subject Olympiads (O), preparation of written analytical works (AP), preparation and defense of abstracts (R), project technology (PT), excursions (E), distance educational technologies (DOT).

Sample forms of current and midterm monitoring of academic performance (abbreviated): T – testing, Pr – assessment of mastery of practical skills (abilities), ZS – solving situational problems, CR – test, KZ – control assignment, IB – writing and defending a medical history, CL – writing and defending a supervisory sheet, R – writing and defending an abstract, S – interview on test questions, D – preparing a report, etc.

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1.4.2. Organization of independent work of students

No	Topic of independent work for students of 3rd semester:	Assignment for independent work	Recommended literature	Deadlines surrender (week number)
1.	Organization of dental care for the population and the role of the dentist in the healthcare system.	Abstract, presentation, preparation of the report.	1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018 2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017 3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025 4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023 5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019 6. Human anatomy. Atlas for dentists, orthopedic dentists / L. M. Litvinenko, D. B.	1



			Nikityuk - Moscow: Litterra, 2017.	
2.	Histological structure of hard dental tissues and its clinical significance.	Abstract, presentation, preparation of a report	<p>1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018</p> <p>2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017</p> <p>3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025</p> <p>4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023</p> <p>5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019</p> <p>6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017</p>	2
3.	Factors of resistance of hard dental tissues and mechanisms of demineralization.	Abstract, presentation, preparation using dummies.	<p>1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018</p> <p>2. Anatomy, physiology and biomechanics of the dental</p>	3



			<p>system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017</p> <p>3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025</p> <p>4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023</p> <p>5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019</p> <p>6. Human anatomy. Atlas for dentists, orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017.</p>	
4.	Morphofunctional features of dental pulp and its role in pathology	Abstract, presentation, preparation using dummies.	<p>1.Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018</p> <p>2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017</p> <p>3. Baranchugova, L. M. Histology and embryogenesis</p>	4



			<p>of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025</p> <p>4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023</p> <p>5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019</p> <p>6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017</p>	
5	Comparative characteristics of the main examination methods (inspection, percussion, palpation, probing)	Abstract, presentation, preparation of the report.	<p>1. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed., revised - Moscow: GEOTAR-Media, 2017</p> <p>2. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016</p> <p>3. Features of disinfection and sterilization in dentistry: a tutorial / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2020</p> <p>4. Microbiology, virology, immunology of the oral</p>	5



			<p>cavity: textbook / ed. V. N. Tsareva. - 2nd ed. , processed and additional - Language: GEOTAR-Media, 2021</p> <p>5. Features of disinfection and sterilization in dentistry: a textbook / E. A. Bazikyan - Moscow: GEOTAR-Media, 2016</p>	
6	Additional diagnostic methods in dentistry and their diagnostic value	Abstract, presentation, preparation of the report.	<p>1. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017</p> <p>2. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016</p> <p>3. Features of disinfection and sterilization in dentistry: a tutorial / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2020</p> <p>4. Microbiology, virology, immunology of the oral cavity: textbook / ed. V. N. Tsareva. - 2nd ed. , processed and additional - Language: GEOTAR-Media, 2021</p> <p>5. Features of disinfection and sterilization in dentistry: a textbook / E. A. Bazikyan - Moscow: GEOTAR-Media, 2016</p>	5
7	Ergonomics of the dentist's workplace and prevention of occupational diseases	Abstract, presentation, preparation of the report.	<p>1. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work:</p>	5



			<p>a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016</p> <p>2. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017</p> <p>3. Propaedeutic dentistry: textbook / E. S. Kalivradzhiyan et al. - Moscow: GEOTAR-Media, 2014</p> <p>4. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018.</p>	
8	Classification and functional purpose of dental instruments	Abstract, presentation. Preparation using dummies.	<p>1. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016</p> <p>2. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017</p> <p>3. Propaedeutic dentistry: textbook / E. S. Kalivradzhiyan et al. - Moscow: GEOTAR-Media, 2014</p> <p>4. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018.</p>	6
9	Modern filling materials: classification, properties and their clinical selection.	Abstract, presentation, report preparation.	<p>1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M.</p>	6




			<p>Maksimovsky. - Moscow: GEOTAR-Media, 2021</p> <p>2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023</p> <p>3. PropaedeuticDentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023</p> <p>4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / ed.E. A. Volkova, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.</p>	
10	Adhesive systems in dentistry: mechanisms of action and clinical significance.	Abstract, presentation, report preparation.	<p>1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021</p> <p>2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023</p> <p>3. PropaedeuticDentistry: situational problems: a tutorial / E. A. Bazikyan [et</p>	7



			al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023 4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / ed.E. A. Volkova, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015	
11	Isolation of the working field and its influence on the quality of restoration.	Abstract, presentation, report preparation.	1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021 2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023 3. PropaedeuticDentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023 4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / ed.E. A. Volkova, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015	7
12	Endodontic instruments: classification, properties and	Abstract, presentation, report preparation.	1. Endodontics: a textbook / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023	9



	principles of application.		<p>2. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021</p> <p>3. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2016</p> <p>4. Therapeutic dentistry: textbook / O. O. Yanushevich, Yu. M. Maksimovsky, L. N. Maksimovskaya, L. Yu. Orekhova. - 3rd ed. , processed and additional - Moscow: GEOTAR-Media, 2023</p> <p>5. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.</p>	
13	Age-related changes in the pulp space and root canals	Abstract, presentation, report preparation.	<p>1. Endodontics: a textbook / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023</p> <p>2. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M.</p>	9

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				<p>Maksimovsky. - Moscow: GEOTAR-Media, 2021</p> <p>3. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2016</p> <p>4. Therapeutic dentistry: textbook / O. O. Yanushevich, Yu. M. Maksimovsky, L. N. Maksimovskaya, L. Yu. Orekhova. - 3rd ed. , processed and additional - Moscow: GEOTAR-Media, 2023</p> <p>5. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015</p>
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1.4.3. Assessment tools for monitoring academic performance

- **Current and midterm (modular) control**

Current monitoring of students' knowledge may represent:


- oral survey;
- solving situational problems;
- assessment of the acquisition of practical skills using dummies;
- test task; test work;
- checking the completion of written homework;
- checking abstracts, reports, presentations.

Topics of abstracts (reports, presentations):

- Organization of dental care for the population.
- The role of a dentist in the prevention of dental diseases.
- History of the development of dentistry.
- Medical examination of dental patients: goals, objectives and stages.
- Medical examination of dental patients in different age groups.



- Histological structure of hard dental tissues
- Physiological functions of the tooth
- The importance of the structure of enamel and dentin in the development of caries
- Age-related changes in dental tissues
- Enamel demineralization: causes, mechanisms and clinical significance
- Remineralization and demineralization: a balance of processes
- Age-related changes in the pulp
- The role of pulp in protecting the tooth
- Pulp response to injury
- Pulp and its role in the development of inflammatory diseases
- Collecting anamnesis taking into account the patient's somatic condition
- Basic methods of clinical examination and their diagnostic value
- Algorithms for selecting additional examination methods
- X-ray diagnostics in dentistry
- Modern methods of sterilization in dentistry
- Quality control of sterilization and disinfection
- Routes of infection transmission in the dental office
- Organization of infection control
- Antiseptics: classification and mechanism of action
- Classification of dental instruments
- Requirements for instruments and their sterilization
- Tools for diagnosis and treatment
- Errors when using tools
- Modern theories of the origin of caries
- The role of microbial biocenosis in the development of caries
- Classification of caries and its clinical significance
- Black's Classification: Analysis and Application
- Biomechanical principles of preparation
- The effect of preparation on the pulp
- Errors and complications during preparation
- Modern approaches to minimally invasive treatment
- Features of the formation of class I cavities
- Preparation of contact surfaces (Class II)
- Creation of retention points
- Common mistakes in dissection
- The influence of cavity shape on the durability of the filling
- Requirements for preparation
- Peculiarities of working in the frontal group of teeth
- Formation of marginal adhesion

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- The influence of preparation on the aesthetics of future restoration
- Classification of filling materials
- Physicochemical properties of cements
- Glass ionomer cements: advantages and disadvantages
- Criteria for selecting material depending on the clinical situation
- Requirements for materials
- The mechanism of adhesion in dentistry
- Classification of adhesive systems
- Hybrid layer and its meaning
- Adhesive technique errors
- Comparison of generations of adhesives
- Insulation methods: a comparative analysis
- Cofferdam: indications and application technique
- Errors in isolating the working field
- The influence of moisture on the quality of restoration
- Alternative methods of insulation
- Preparing a tooth for filling
- Layer-by-layer material application technique
- Filling errors
- Factors affecting the quality of restoration
- Stages of finishing of fillings
- The influence of polishing on the durability of restoration
- Materials for grinding and polishing
- Finishing errors
- Quality criteria for filling processing
- Root canal anatomy
- Classification of endodontic instruments
- Age-related changes in root canals

Sample situational problems for the discipline:

Situational tasks

Problem 1

A 22-year-old patient complained of short-term pain in the area of the 3.6 tooth when eating sweet foods, which went away immediately after the irritant was removed.

Objectively: a carious cavity with pigmented edges is visible on the chewing surface of tooth 3.6. Probing along the cavity floor is painful, and the enamel at the edges is softened. Percussion is painless. The reaction to cold is short-lived.



What is the preliminary diagnosis? Determine the cavity's Black classification. What are the main treatment steps for this condition?

Problem 2

A 35-year-old patient complains of pain when biting in the area of tooth No. 4.6. The pain intensifies when chewing hard foods.

Objectively: the tooth crown is intact, no cavities are detected. Percussion is sharply painful. Palpation of the root apex is painful. Temperature tests show a weak reaction.

What additional examination methods need to be performed?

Suggest a possible diagnosis. What is the doctor's next course of action?

Problem 3

During the appointment, the patient undergoes an oral examination. The doctor uses a dental mirror and probe, but works without gloves, and the instruments are not removed from their sterile packaging in front of the patient.

What violations of sanitary and hygienic regulations were committed?

List the basic principles of asepsis and antisepsis.

What are the risks for the patient and the doctor?

Problem 4

While treating a patient's caries, the doctor began preparing the cavity. During the process, he left softened, infected dentin, creating a cavity with sharp angles and overhanging enamel edges.

What errors were made during dissection? What complications could this lead to?

List the basic principles of proper dissection.

Problem 5

A patient is undergoing treatment for caries on tooth No. 2.5. The dentist did not use a rubber dam before filling the tooth; the working area was moistened with saliva.

Why is isolation of the working field essential? What isolation methods are used in dentistry? How does the lack of isolation affect the quality of restoration?


Problem 6

When filling a carious cavity, the doctor used a composite material, but skipped the step of applying the adhesive system.

Assess the doctor's actions. What is the function of the adhesive system?

What complications may arise?

Problem 7

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A 28-year-old patient complained of an aesthetic defect in his anterior tooth (1.2). Objectively, a carious cavity, partially hidden under the enamel, was detected on the contact surface. Probing was moderately painful.

What Black classification does this defect belong to? What are the preparation considerations for this cavity? What materials are preferred for restoration?

Problem 8

The patient, 60 years old, complains of increased tooth sensitivity, enamel discoloration and difficulty chewing.

Objectively: generalized tooth wear is noted, the enamel is thinned, and the dentin is exposed in places.

What age-related changes occur in dental hard tissues? How do these changes influence treatment strategies? What are the diagnostic considerations for these patients?

Problem 9

After treating caries and placing a filling, the patient complains of a feeling of a "high" tooth and pain when biting.

What is the likely cause of these complaints? What mistakes might the doctor have made? What steps should be taken?

Problem 10

After completing the restoration, the dentist ground down the filling, but did not check the occlusion or perform final polishing.

Which restoration completion steps were missed? What are the possible consequences? How can I properly complete the tooth restoration?

*further see the FOS Application

***Boundary (modular) control* may represent:**

- testing by section (computer);

Sample test assignments for midterm (modular) assessment:


1. Which research method allows us to evaluate the tooth's response to thermal stimuli?

- a) Percussion
- b) Probing
- c) Thermal test
- d) Palpation

2. To which Black class does caries of the contact surface of molars and premolars belong?



- a) I
 - b) II
 - c) III
 - d) IV
3. What instrument is used to remove softened dentin?
- a. Excavator
 - b. Tweezers
 - c. Mirror
 - d. Spatula.
4. The main purpose of preparing a carious cavity:
- a) Removal of enamel only
 - b) Removal of infected tissue
 - c) Pulp removal
 - d) Changing the shape of a tooth
5. Which material releases fluoride and has an anti-caries effect?
- a. Composite
 - b. Amalgam
 - c. Glass ionomer cement
 - d. Ceramics
6. What step is required before applying the composite?
- a. Polishing
 - b. Etching and adhesion
 - c. Percussion
 - d. X-ray
7. What is the sign of medium caries?
- a) Pain when biting
 - b) Pain from sweets
 - c) Spontaneous pain
 - d) Absence of pain.
8. What factor most influences the adhesion of a filling?
- a. Color of the material
 - b. Dryness of the working field
 - c. Patient's age
 - d. Meal time
9. In what condition is tooth percussion usually painless?

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- a. Periodontitis
- b. Pulpitis
- c. Superficial caries
- d. Abscess

10. What needs to be checked after placing a filling?

- a. Patient pressure
- b. Occlusion
- c. Body temperature
- d. Pulse

*further see the FOS Application

• **Final control**

Final control at the end of the study of the academic discipline it is carried out in the form of an exam, which is exhibited based on the results of testing and midterm (modular) control in the discipline.

1.4.4. Course policy and assessment criteria

Students' knowledge is assessed using a point-rating system in accordance with the standard "Regulations on the modular point-rating system for assessing students' knowledge."

Discipline "Propaedeutics of Therapeutic Dentistry" assessed on a 100-point scale:

The maximum score is 100, of which:

- SRS - 20 points;
- current control - 40 points
- midterm control (module completion) - 40 points.

The results of the two modules are added together to produce an average score.


Scoring Policy	Module 1	Module 2, etc.
Classroom work (activity in discussions, oral questioning, group work, etc.)	40 points	40 points
Independent work: essay, report	20 points	20 points
Total for the module (testing)	40 points	40 points
Total for the discipline:	100 points	
Exam		

Final assessment in the form of a test is carried out based on the results of attendance, current and midterm (modular) assessment.

The final assessment form is a credit.

The following scale of grades and scores is used to evaluate student performance:


Rating and Scoring Scale				
Maximum score	Intervals			
		unsatisfactory	"satisfactorily"	"Fine"

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20	0-11	12-15	16-17	18-20
40	0-23	24-30	31-35	36-40
60	0-35	36-45	46-53	54-60
100	0-59	60-75	76-89	90-100

Academic achievement grading scale

Rating (points)	Letter grading system	Value for calculating GPA	Digital equivalent of the assessment	Assessment according to the traditional system
96-100%	A+	4.00	5	Great
93-95.99%	A	3.75		
90-92.99%	A-	3.67		
87-89.99%	B+	3.33	4	Fine
83-86.99%	B	3.00		
80-82.99%	B-	2.67		
77-79.99%	C+	2.33	3	Satisfactorily
73-76.99%	C	2.00		
70-72.99%	C-	1.67		
67-69.99%	D+	1.33	2	Unsatisfactory
63-66.99%	D	1.00		
60-62.99%	D-	0.67		
00-59.99%	F	0.00	1	Unsatisfactory
	P			Credit
	NP			Fail
	I		Not taken into account when calculating the average grade	Failed to comply with all disciplinary requirements for a valid reason
	W			Refusal to attend a course that is not mandatory
	AU			Attended the course as a listener, without receiving grades (awarded to a student if he/she has attended at least 80% of the classes in the

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				additional discipline as a listener).
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I - awarded to a student who has failed to complete all course requirements for a valid reason. The student has the right to complete all course requirements within the time limit established by the educational institution, after which the grade will be adjusted.

W - assigned to a student who decides to withdraw from a course no later than the sixth week of the semester. Applies only to elective courses.

AU - awarded to a student if he/she has attended at least 80% (eighty percent) of the classes in the additional discipline as a listener.

For each discipline, GPA is calculated automatically in the information system.

GPA (Grade Point Average) is a weighted average of a student's academic achievement. GPA is a key indicator of academic performance.


Based on academic performance, a GPA is calculated, with a maximum of 4.0. A student's GPA is calculated based on their academic performance in each semester and at graduation.

1.4.5. Educational, methodological and informational support of the discipline

List of sources and literature:

a) main literature:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed., revised - Moscow: GEOTAR-Media, 2017
3. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
4. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
5. Features of disinfection and sterilization in dentistry: a tutorial / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2020
6. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019

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7. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

b) additional literature:

1. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.
2. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
3. X-ray anatomy and X-ray diagnostics in dentistry: a tutorial / V. P. Truten. - 2nd ed., revised and enlarged. - Moscow: GEOTAR-Media, 20204. Diagnostic Imaging: Gynecology. Akram M. Shaaban. 2015
4. Dentistry. International classification of diseases. Clinical characteristics of nosological forms / M. Ya. Alimova, L. N. Maksimovskaya, L. S. Persin, O. O. Yanushevich - Moscow: GEOTAR-Media, 2016
5. Safe anesthesia in dentistry / S. A. Rabinovich [et al.]. - Moscow: GEOTAR-Media, 20186. Atlas of Gynecologic Oncology Imaging. Oguz Akin. 2014.

List of resources of the information and telecommunications network "Internet" necessary for mastering the discipline

Provide links to websites that are publicly accessible.


List of resources of the information and telecommunications network "Internet" required for mastering the discipline (modules)

- www.dentalcare.com, www.ohi-s.com
- www.kyrlibnet.kg.
- www.iprbookshop.ru.
- www.consilium-medicum.com.
- www.medportal.ru.
- www.studmedlib.ru
- Cochrane.org, sciencedirect.com.
- www.mediliter.ru,www.meduniver.com,
- kingmed.info, medlit.biz,
- allmedbook.ru, booksmed.com, medicalenglish.ru,
- library.bsu.edu.ru.

1.4.6. Material and technical support of discipline

When teaching students, modern methods and forms of teaching are used, using the latest information technologies, electronic educational resources and other information systems necessary for the successful implementation of educational, scientific and therapeutic activities.

The department has the necessary equipment for teaching, including demonstration devices, multimedia, posters, and visual aids. Classroom requirements include computer labs, academic and specially equipped classrooms, and laboratories, as well as a blackboard.

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The lecture room is equipped with a power supply kit (220 V, 2 kW, complete with an RCD), specialized furniture and office equipment (a blackboard for writing with chalk and felt-tip pen, a stand-lectern, a lecturer's desk, a chair-chair, classroom tables, a classroom chair, as well as technical teaching aids (a wall-mounted screen with an electric drive and remote control, a multimedia projector with a laptop).

The practical lesson consists of two parts: the first half is a review of the student's theoretical knowledge (etiology, clinical picture, complaints, etc.); the second half is a general examination of the patient, a simulation center where students can examine dental materials and instruments, see how a dental unit works, conduct an examination in a dental chair, and practice on artificial teeth.

Table 1

No. p/p	Type	Name	Note
1.	Presentations.	Throughout the lecture course	From 20 to 30 slides per presentation
2.	Written and test assignments.	Throughout the lecture course	In a significant way quantity
3.	Practical classes.	Throughout the course	In a significant way quantity

List of premises used


Table 2.

No.	Audience type	List of equipment
1	An auditorium for lecture-type classes.	A stationary multimedia projector, laptop, 3x4 m screen, whiteboard, and audio equipment. (microphone, speakers)
2	Auditorium for seminars, ongoing monitoring and midterm assessment, group and individual consultations	Stationary multimedia projector, laptop, 3x4 m screen, interactive whiteboard, dummies, phantoms.

1.4.7. Student research work

The research project in the discipline "Obstetrics and Gynecology" has the following goals: increasing the level of professional and creative training of students, improving the forms of involving young people in scientific research, and using the creative potential of students to solve current scientific problems.

The research work is aimed at solving the following problems:

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- to form an idea of the main stages of scientific research activities;
- to teach how to use the conceptual apparatus of scientific research in work;
- teach how to work with various information sources;
- development of skills for perception and analysis of professional information;
- development and improvement of decision-making and implementation abilities;
- training students by means of their acquisition of methods, techniques and skills for carrying out scientific research work during the learning process;
- development of their creative abilities, independence, initiative in studies and future professional activities within the framework of their specialty.

The program of scientific research work of students (SRW), as a section for mastering practical skills, includes:

- study of specialized literature and other scientific and medical information, achievements of domestic and foreign science and technology in the field of medical knowledge, preparation of scientific abstracts (literature reviews);
- participation in conducting scientific research or in carrying out certain developments in departments;
- collection, processing, analysis and systematization of scientific information on a topic or assignment;
- preparing reports and presenting a paper at a conference, preparing scientific work for publication;
- participation in mass events of the research and development system (student scientific conferences, seminars, subject Olympiads, competitions, Science Week, exhibitions, discussions, debates, etc.).

To solve the problem, students are offered to read and meaningfully analyze scientific monographs and articles on various issues of obstetrics and gynecology contained in list of resources of the information and telecommunications network "Internet":

<http://journals.medi.ru>

www.agog.org

www.obgyn.onlinelibrary.wiley.com

www.journals.lww.com

<http://www.doctor-ru.org/>

<http://www.med2000.ru/catalog.htm>

http://www.nlr.ru/res/inv/ic_med/index.php

<http://www.elibrary.ru/>

<http://www.medmir.com/>


<http://www.medLine.ru>

<http://varles.narod.ru>

<http://whodc.mednet.ru/>

<http://www.aonb.ru/iatp/guide/library.html>

<http://elibrary.rsl.ru/>

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<http://studentam.net/>

<http://www.europeana.eu/portal/>

<https://kuzdrav.ru/special/guideline/cragmz.php>

The results of work with scientific monographs and articles are discussed during practical classes.

To develop and improve communication skills, decision-making skills, and medical tactics in emergency situations, special training sessions are organized in the form of work in small groups, role-playing games, brainstorming, discussions, presentations, or, in preparation for which, students are divided into groups in advance, defending one or another point of view on the issue under discussion.

2. Educational and methodological materials

Educational and methodological materials (EMM), as methodological support for the discipline, are presented in the form of lecture texts, developments of practical classes, both in printed and electronic form.

2.1. Lecture notes

Lecture Topic #1: Introduction to the Propaedeutics of Restorative Dentistry. Subject, Objectives, and Main Sections of the Course. Organization of Dental Care. Tooth Anatomy. Tooth Structure. Histology of Hard Dental Tissues: Enamel, Dentin, Cementum.

1. The purpose of the lecture:

To develop in students an understanding of the subject and objectives of propaedeutics of therapeutic dentistry, the principles of organizing dental care, and to provide systematic knowledge of the anatomical structure of the tooth and the histological structure of its hard tissues (enamel, dentin, cementum), taking into account their clinical significance.

2. Issues under consideration:

- The concept of propaedeutics of therapeutic dentistry, its objectives and place in the system of medical education
- The main sections of therapeutic dentistry
- Organization of dental care for the population
- General anatomy of the tooth (crown, neck, root)
- Tooth structure: dental cavity and root canals
- Histology of enamel: structure, properties and functions
- Histology of dentin: structure and physiological role
- Histology of cementum: structure and significance

3. Educational technologies

-lecture using video materials

4. Primary and secondary literature:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018



2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025
4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023
5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019
6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

Propaedeutics of therapeutic dentistry is one of the core disciplines of dental education. It develops fundamental knowledge and practical skills in students necessary for further mastery of clinical disciplines. This discipline serves as a link between theoretical sciences such as anatomy, histology, and physiology and the clinical practice of a dentist.

The main goal Propaedeutics focuses on developing clinical thinking, mastering patient examination techniques, studying the structure of the dental system, and acquiring basic manual skills. This course introduces students to the fundamentals of diagnosis, treatment principles, and prevention of dental diseases.

Restorative dentistry as a clinical discipline includes several key areas. These include cariesology, which studies the etiology, pathogenesis, and treatment of dental caries; endodontics, which deals with diseases of the pulp and periodontium; periodontology, which studies pathologies of the tissues surrounding the tooth; and diseases of the oral mucosa. All these areas are based on a thorough understanding of the anatomical and histological structure of the tooth.

Dental care for the population is organized according to the principle of stages and accessibility.

At the primary level, care is provided in clinics and private dental offices, where prevention, diagnosis, and treatment of the most common diseases are carried out.

Secondary level The tertiary level is represented by specialized clinics offering more complex treatment. The tertiary level includes hospitals and research centers providing high-tech care. Key principles in organizing dental services include a preventative focus, comprehensive treatment, and an individualized approach to each patient.

Tooth The tooth is a complex organ composed of hard and soft tissues that performs chewing, speech, and aesthetic functions. Its structure is divided into the crown, neck, and root.



CrownThe neck is the visible part of the tooth, covered with enamel. The neck is the transition zone between the crown and the root. The root is located in the alveolar bone and is covered with cementum.

Inside the tooth is the dental cavity, which includes the pulp chamber and root canals. The cavity is filled with pulp—loose connective tissue containing blood vessels and nerves. The pulp performs trophic, protective, and sensory functions, ensuring the vital functions of the tooth.

The hard tissues of the tooth are represented by enamel, dentin and cementum, each of which has its own morphological and functional characteristics.

EnamelEnamel is the hardest tissue in the human body. It covers the crown of the tooth and serves a protective function. Enamel is composed of inorganic substances, primarily hydroxyapatite crystals, which accounts for its high strength. However, enamel is a fragile tissue, as it contains virtually no organic components and lacks the ability to regenerate. Microscopically, enamel is composed of enamel prisms oriented perpendicular to the tooth surface. Between the prisms is interprismatic material. The clinical significance of enamel lies in the fact that damage to it is the initial stage of caries development.

DentineDentin makes up the bulk of the tooth and is located beneath the enamel and cementum. Unlike enamel, dentin contains more organic components and water, making it more elastic and less brittle. The main structural unit of dentin are the dentinal tubules, which contain odontoblast processes. This allows dentin to be sensitive and respond to various stimuli. A distinction is made between primary, secondary, and tertiary dentin.

Primary dentin forms during tooth development, secondary dentin develops throughout life, and tertiary dentin forms in response to injury. Clinically, dentin plays an important role in transmitting pain sensations and protecting the pulp.

CementCementum covers the tooth root and ensures its fixation in the alveolus by attaching periodontal fibers. Its structure resembles bone tissue and can be acellular or cellular. It contains both inorganic and organic components. Unlike enamel, cementum has limited regeneration capacity. Its main function is to support the tooth and distribute chewing forces. Damage to the cementum can lead to tooth instability and the development of periodontal disease.

Thus, the anatomical and histological structure of a tooth determines its functionality and resistance to pathological processes. Knowledge of these characteristics is essential for understanding the mechanisms of dental disease development and choosing appropriate treatment methods.

In conclusion, it should be noted that the propaedeutics of therapeutic dentistry lays the foundation for the professional training of a dentist. It develops a systematic



understanding of tooth structure, diagnostic principles, and the organization of dental care, which is a necessary step for further mastery of clinical disciplines and successful practical work.

Lecture Topic #2: Structural and Functional Stability of Dental Hard Tissues. Clinical Changes in the Structure of Dental Hard Tissues. Structure and Function of Dental Pulp. Age-Related Changes in the Pulp. Dental Pulp Space.

1. The purpose of the lecture:

To develop in students a systematic understanding of the factors that ensure the structural and functional stability of hard dental tissues, the mechanisms of their damage and clinical changes, as well as to study the structure, functions of the dental pulp, the characteristics of the pulp space and age-related changes in the pulp, taking into account their clinical significance.

2. Issues under consideration:

- The concept of structural and functional stability of hard dental tissues
- Factors affecting the resistance of enamel and dentin
- Demineralization and remineralization processes
- Clinical changes in hard dental tissues (carious and non-cariou lesions)
- Morphology and structure of dental pulp
- The main functions of the pulp
- Age-related changes in dental pulp
- The pulp space of the tooth and its clinical significance

3. Educational technologies

- Lecture-visualization

4. Primary and secondary literature:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025
4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023
5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019
6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

Structural and functional stability The hard tissue structure of teeth is one of the key factors determining their resistance to adverse external and internal factors. A



tooth's resilience depends on its morphological structure, chemical composition, and the influence of the oral environment.

Structural stability refers to the ability of hard tissues to maintain their anatomical integrity, while functional stability reflects the ability of tissues to perform their functions under conditions of constant chewing load and exposure to chemical factors.

Numerous factors influence the stability of enamel and dentin. These include:

- tissue mineralization level,
- fluorine content,
- composition and properties of saliva,
- nutritional status,
- hygienic condition of the oral cavity.

SalivaIt plays a vital role in promoting remineralization processes and maintaining acid-base balance. Disruption of these mechanisms leads to decreased stability of dental tissue.

One of the key processes that determines the condition of hard tissues is the balance between demineralization and remineralization. **Demineralization** This occurs under the influence of organic acids formed by the microorganisms found in dental plaque. These acids leach out the mineral components of the enamel, leading to a decrease in its strength.

Remineralization, on the contrary, is a process of restoring the mineral composition due to the intake of calcium and phosphate ions from saliva.

An imbalance between these processes leads to the development of pathological changes. Clinical changes in dental hard tissues can be divided into carious and non-carious. Caries is characterized by the progressive destruction of enamel and dentin, resulting in tissue defects. Non-carious lesions include erosions, wedge-shaped defects, pathological wear, hypoplasia, and fluorosis. These changes can be associated with mechanical, chemical, or systemic factors.

Pulp- soft connective tissue located within the cavity of the tooth. The pulp contains blood vessels, nerve fibers, and cellular elements that support the vital functions of the tooth.


Structurally, the pulp is divided into several zones:

- peripheral (odontoblast layer),
- subodontoblastic layer,
- central part.

Odontoblasts play an important role in the formation of dentin and are involved in the protective reactions of the tooth.

The pulp performs several important functions:

- The trophic function is associated with providing nutrition to the hard tissues of the tooth.

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- The sensory function is manifested in the perception of painful stimuli.
- The protective function consists of the ability of the pulp to respond to damage by forming replacement dentin.
- The plastic function ensures the formation of new structural elements.

With age, significant changes occur in the pulp. A decrease in the number of cellular elements, decreased vascularity, and an increase in fibrous tissue are observed. Secondary and tertiary dentin often form, leading to a decrease in the pulp chamber volume and narrowing of the root canals. These changes are clinically significant, as they complicate endodontic treatment.

Pulp space The pulp chamber of a tooth includes the pulp chamber and the root canal system. Its shape and size depend on the anatomy of the tooth and the patient's age. In young patients, the pulp chamber is large, but with age, it significantly decreases. The clinical significance of the pulp space lies in its role in determining access to the root canals during endodontic treatment. Knowledge of the canal anatomy and its possible variations is essential for successful treatment.

Thus, the stability of dental hard tissue and the condition of the pulp are interrelated factors that determine dental health. Damage to the structure of hard tissue leads to pulp irritation, which can trigger inflammation and further tooth decay.

In conclusion, it should be noted that understanding the mechanisms of hard tissue stability, clinical changes and structural features of the pulp is important for the diagnosis, prevention and treatment of dental diseases.


Lecture Topic #3: Dental Patient Examination Methods: History Taking, Oral Examination, Probing, Percussion, and Palpation. Sanitary and Hygienic Requirements for Organizing a Dental Office. Asepsis and Antisepsis in Restorative Dentistry.

1. The purpose of the lecture:

To develop in students a systematic understanding of dental patient examination methods, teach them how to consistently collect anamnesis and conduct an objective examination, and also study sanitary and hygienic requirements for the organization of a dental office and the principles of asepsis and antisepsis.

2. Issues under consideration:

- General principles of examination of a dental patient
- Collection of anamnesis: structure and diagnostic value
- Objective examination of the oral cavity
- Dental probing technique
- Percussion: types and clinical significance
- Palpation in dentistry

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- Sanitary and hygienic requirements for a dental office
- Asepsis and antisepsis: concept, methods and meaning

3. Educational technologies

- Lecture using video materials

4. Primary and secondary literature:

1. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017
2. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016
3. Features of disinfection and sterilization in dentistry: a tutorial / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2020
4. Microbiology, virology, immunology of the oral cavity: textbook / ed. V. N. Tsareva. - 2nd ed. , processed and additional - Language: GEOTAR-Media, 2021
5. Features of disinfection and sterilization in dentistry: a textbook / E. A. Bazikyan - Moscow: GEOTAR-Media, 2016

Examination of a dental patient is the basis for diagnosis and subsequent treatment. It includes collecting anamnesis, performing a physical examination, and using specialized research methods. A properly performed examination allows for a diagnosis, determining the extent of tissue damage, and choosing the optimal treatment strategy.

The first stage of the examination is **anamnesis collection**. It includes ascertaining the patient's complaints, medical history, and lifestyle. The patient's complaints allow the physician to gain a preliminary understanding of the nature of the pathological process. Particular attention is paid to pain characteristics: its location, intensity, duration, radiation, and factors causing or relieving pain.

Medical history reflects the development of the pathological process over time: when the first symptoms appeared, how they changed, whether treatment was carried out previously.

Anamnesis of life includes information about past illnesses, allergies, bad habits, working conditions, and diet. This data is essential for assessing the patient's overall condition and identifying risk factors.

After collecting the anamnesis, **objective examination** begins with a visual examination, which assesses facial symmetry, skin condition, swelling, and lymph node enlargement. Next, an intraoral examination is performed, including an assessment of the mucous membrane, teeth, gums, and bite. The doctor checks for cavities, fillings, and hard tissue defects, as well as the color and integrity of the teeth.



Probing This is an important diagnostic method for determining the condition of dental hard tissues. Using a probe, roughness, softening of the dentin, and the depth of the cavity can be detected. Proper probing allows differentiation between superficial and deep dental lesions. However, excessive pressure can cause tissue trauma, so this method requires caution.

Percussion Percussion is used to assess the condition of the periodontium. It can be vertical or horizontal. Vertical percussion assesses the condition of the periodontal ligament, while horizontal percussion assesses the condition of the surrounding tissues. Pain during percussion indicates inflammation in the periodontium.

Palpation It is used to assess the condition of soft tissues. It helps determine pain, the presence of infiltrates, tissue mobility, and the condition of lymph nodes. This method is especially important in diagnosing inflammatory processes and periodontal pathologies.

Thus, the main examination methods allow us to obtain both subjective and objective information about the patient's condition, which is a necessary condition for making an accurate diagnosis.

Compliance with sanitary and hygienic requirements is an important part of a dentist's work. A dental office must comply with established standards to ensure the safety of both patients and medical staff.

These requirements include:


- proper organization of the workspace,
- availability of sterile instruments,
- use of personal protective equipment,
- regular disinfection of surfaces.

Asepsis A wound sterilization program is a set of measures aimed at preventing the introduction of microorganisms into the wound. It includes sterilization of instruments, the use of sterile materials, and adherence to the rules for handling them.

Antiseptics Antiseptics are used to destroy microorganisms already present in tissues or on surfaces.

Modern dentistry places high demands on infection control. This is due to the risk of transmitting infectious diseases such as viral hepatitis, HIV, and others. Therefore, strict aseptic and antiseptic measures are essential for safe work.

In conclusion, it should be noted that proper patient examination and adherence to sanitary and hygienic standards are the foundation of effective and safe dental

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practice. They ensure accurate diagnosis, successful treatment, and the protection of the health of both the patient and the dentist.

Lecture Topic #4: Dental Office Equipment. Dental Unit. Ergonomics in Dentistry. Prevention of Occupational Diseases. Examination and Treatment Instruments in Restorative Dentistry. Classification and Rules of Use.

1. The purpose of the lecture:

To develop in students a systematic understanding of dental office equipment, the structure and functions of dental units, the principles of ergonomics and the prevention of occupational diseases of dentists, as well as to study the classification of instruments for examination and treatment and the rules for their rational use.

2. The issues under consideration:

- Equipment of a dental office and its functional zones
- Dental unit: design and main elements
- Principles of ergonomics in dentistry
- Organization of the doctor's and assistant's workplace
- Occupational diseases of dentists and their prevention
- Classification of dental instruments
- Examination instruments and their diagnostic value
- Treatment tools and rules for their use

3. Educational technologies


- lecture-visualization

4. Primary and secondary literature:

1. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016
2. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017
3. Propaedeutic dentistry: textbook / E. S. Kalivradzhiyan et al. - Moscow: GEOTAR-Media, 2014
4. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018

Modern dental officeA dental office is a specialized medical space equipped with the necessary equipment for the diagnosis, treatment, and prevention of dental diseases. A well-organized office plays a vital role in ensuring the physician's efficiency, patient safety, and compliance with sanitary and hygienic standards.

The office is divided into several functional zones: the doctor's work area, the patient's area, the sterilization area, and auxiliary rooms. The work area should provide easy access to equipment and instruments, as well as ease of performing procedures. Particular attention is paid to lighting, ventilation, and equipment

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placement.

The central element of a dental office is the dental unit. It is a complex of equipment including a patient chair, a dentist's station, an assistant's station, a water and air supply system, and a lighting system. The patient chair should provide a comfortable position and the ability to change body position for various procedures. The dentist's station contains handpieces, instruments, and control systems. The assistant's station facilitates work by feeding instruments and removing fluid from the oral cavity.

Dental unitThe system is equipped with turbine and micromotor handpieces used for preparing hard dental tissue. It also includes a saliva ejector, a vacuum cleaner, a water-air syringe, and a lighting system that provides excellent visibility of the working area.

A dentist's efficiency depends largely on adherence to ergonomic principles. Ergonomics in dentistry aims to optimize working conditions, reduce physical strain, and improve the quality of treatment. The dentist must maintain a correct posture while working, avoiding excessive body tilt and muscle tension. The patient is positioned in the chair to ensure easy access to the treatment area.

Organizing work "in four hands"An assistant is an important element of ergonomics. This reduces treatment time, improves precision, and reduces physician fatigue. Proper placement of instruments and equipment ensures their accessibility and safety.

Dentistry's professional work carries a high risk of developing diseases of the musculoskeletal system, vision, and nervous system. Common problems include osteochondrosis, scoliosis, chronic fatigue syndrome, and hand disorders. Prevention includes adherence to ergonomic principles, regular exercise, breaks, and proper workstation organization.


Tools,used in therapeutic dentistry, are divided into diagnostic and therapeutic.

To diagnostic toolsinclude a dental mirror, probe and tweezers.

Mirrorallows you to examine hard-to-reach areas of the oral cavity, the probe is used to detect defects in hard tissues, and tweezers are used to hold materials and instruments.

Healing instrumentsIncludes instruments for preparation, cavity treatment, and the placement and modeling of filling materials. These include excavators, pluggers, smoothers, spatulas, and other instruments. Each instrument has a specific purpose and should be used strictly according to its intended use.

Proper use of instruments is essential for effective dental work. This includes following safety precautions, proper instrument grip, controlling pressure, and prompt sterilization. Incorrect use of instruments can lead to damage to dental tissue and complications.

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Thus, dental office equipment, a rational organization of the workflow, and the proper use of instruments are the foundation of a dentist's successful professional practice. Adherence to the principles of ergonomics and occupational disease prevention helps maintain the dentist's health and improve the quality of care.

Lecture Topic #5. Dental Caries: Etiology, Pathogenesis, Classification.

Black's classification of carious cavities.

Methods and principles of dental hard tissue preparation. Basic principles of cavity preparation.

1. The purpose of the lecture:

To develop in students a systematic understanding of the etiology and pathogenesis of dental caries, to study modern approaches to its classification, including the classification of carious cavities according to Black, and to master the basic methods and principles of preparation of hard dental tissues.

2. Issues under consideration:

The concept of dental caries and its prevalence
 Etiological factors in the development of caries
 Pathogenesis of the carious process
 Classification of dental caries
 Black's classification of carious cavities
 Objectives and tasks of preparation of hard dental tissues
 Methods of preparation
 Basic principles of cavity preparation


3. Educational technologies

- Lecture using video materials

4. Primary and secondary literature:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015

Dental caries Dental atrophy is one of the most common human diseases and is a pathological process characterized by demineralization and destruction of hard dental tissues due to the influence of microorganisms. This disease is multifactorial

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in nature and develops as a result of the interaction of several factors.

The main etiological factors of caries include:

- dental plaque microorganisms,
- carbohydrates in food,
- condition of hard dental tissues
- the time of exposure to these factors.

Cariogenic bacteria, such as *Streptococcus mutans*, play a key role, as they can ferment carbohydrates to produce organic acids. These acids lower the pH level in the oral cavity, leading to the dissolution of the mineral components of enamel.

Pathogenesis of caries The disease involves several stages. Initially, enamel demineralization occurs, manifesting as a chalky spot. If left untreated, the process progresses, affecting the dentin, leading to the destruction of its structure and the formation of a cavity. Subsequently, pulp involvement and the development of complications such as pulpitis and periodontitis are possible.

Classification of caries It can be based on the depth of the lesion (initial, superficial, moderate, deep), location, progression, and activity of the process. This classification allows the physician to determine the stage of the disease and choose the optimal treatment strategy.

One of the most common is Black's classification of carious cavities, which is based on the location of the lesion. This classification distinguishes five main classes.

First class includes cavities located in the fissures and pits of the chewing teeth.

Second grade— lesions of the contact surfaces of molars and premolars. Class III covers the contact surfaces of incisors and canines without damage to the cutting edge.


Fourth grade characterized by a lesion involving the cutting edge.

Fifth grade Includes cervical lesions of teeth. Black's classification is of great clinical importance, as it determines the specifics of tooth preparation and restoration.

Dissection Dental ablations involve the mechanical removal of diseased tissue to create a cavity suitable for subsequent filling. The primary goal of ablations is to remove infected dentin and create conditions for secure adhesion of the filling material.

Methods of preparation Treatments can be mechanical or modern, minimally invasive. Mechanical methods include the use of a dental drill with various types of tips and burs. Modern methods include laser preparation, air-abrasive technologies, and chemical-mechanical methods of caries removal. These methods are aimed at preserving the maximum amount of healthy tooth tissue.

Principles of dissection Formulated taking into account the anatomy of the tooth,

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the properties of the filling materials, and the requirements for the durability of the restoration. The main principles include:

- gentle treatment of tooth tissues,
- complete removal of infected dentin,
- maintaining strong tissues,
- creating a cavity shape that ensures retention and stability of the filling,
- ensuring tightness of the marginal fit.

An important aspect is cavity preparation, taking into account the functional load and anatomical features of the tooth. Incorrect preparation can lead to complications such as pulp damage, reduced tooth strength, and poor filling adhesion.

Modern dentistry focuses on a minimally invasive approach, which removes only the diseased tissue while preserving as much healthy tissue as possible. This increases the longevity of the tooth and reduces the risk of complications.

Thus, dental caries is a complex, multifactorial process requiring a comprehensive approach to diagnosis and treatment. Knowledge of its etiology, pathogenesis, and classification, as well as mastery of preparation methods and principles, are the foundation of a dentist's successful clinical practice.

Lecture Topic No. 6. Methods of preparing carious cavities of classes I, II, III, IV and V according to Black's classification

1. The purpose of the lecture:

To develop in students a systematic understanding of the methods for preparing carious cavities of various classes according to Black, to master the features of cavity formation depending on the location of the lesion, and to reinforce the principles of rational and minimally invasive preparation of hard dental tissues.

2. Issues under consideration:

- General stages and principles of cavity preparation
- Features of preparation of class I cavities according to Black
- Method of preparation of class II cavities
- Features of the formation of contact surfaces
- Method of preparation of class III cavities
- Features of preparation of class IV cavities
- Method of preparation of class V cavities
- Errors and complications during preparation

3. Educational technologies

- Problem lecture.

4. Primary and secondary literature:



1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015

Preparation of carious cavities A carious preparation is one of the key stages of caries treatment and is aimed at removing damaged tissue, creating a cavity, and creating conditions for a long-lasting restoration. The preparation technique is determined by the location of the carious process, the anatomical features of the tooth, and the requirements for the filling material.

Regardless of the class of cavity, preparation includes several sequential stages:

- opening of the carious cavity,
- expanding access,
- removal of softened dentin,
- cavity formation,
- finishing of edges.

In modern dentistry, great importance is attached to the principles of minimally invasive treatment, which preserves the maximum volume of healthy tissue.

Class I cavities According to Black, fillings are located in the fissures and natural depressions of the chewing surfaces of molars and premolars. During preparation, special attention is paid to opening the fissures and removing diseased tissue. The cavity is formed taking into account the anatomy of the tooth, preserving the strong areas of enamel. The cavity floor is usually flat, with slightly tapering walls, which ensures the strength of the tooth and the retention of the filling.

Class II cavities These are located on the contact surfaces of molars and premolars. Their preparation is more complex, as it requires access to the contact surface. This requires the formation of an occlusal platform connected to the main cavity. Particular attention is paid to the formation of the contact point and the prevention of injury to the adjacent tooth. It is important to ensure sufficient retention and stability of the filling, as well as to restore the anatomical shape of the tooth.

Class III cavities They are placed on the contact surfaces of the anterior teeth without involving the incisal edge. Preparation is performed taking into account aesthetic requirements. Access is usually achieved from the lingual surface to preserve the vestibular enamel. The cavity is formed as gently as possible, preserving healthy tissue.

Cavities IV Class II teeth are characterized by damage to the contact surface



involving the incisal edge. Their preparation requires special attention to the strength of the future restoration. Additional retention elements are created to ensure the stability of the filling. Restoring the aesthetics and function of the tooth is of great importance.

Cavities VClasses are located in the cervical region of the tooth. Preparation in this area is determined by the structural features of the enamel and cementum. The cavity is formed taking into account the minimum tissue thickness and the proximity of the pulp. Particular attention is paid to the smoothness of the margins and ensuring the seal of the restoration.

When preparing all classes of cavities, it is necessary to adhere to the following basic principles:

- removal of only the affected tissues,
- preservation of healthy tooth structures,
- creating a form that ensures the retention of the filling,
- ensuring tightness of the marginal fit.
- control of preparation depth to prevent damage to the pulp.

ErrorsDuring preparation, these may include excessive tissue removal, insufficient cleaning of the cavity, improper formation of the walls and bottom, and damage to adjacent teeth.

Such errors lead to complications, reduced tooth strength, and compromised durability of the restoration.

Modern approaches to preparation are aimed at minimizing tissue trauma and using adhesive technologies to avoid excessive cavity expansion. This increases treatment effectiveness and preserves the natural tooth structure.

Thus, Black's technique for preparing carious cavities requires a thorough knowledge of dental anatomy, an understanding of the clinical features of different classes of cavities, and strict adherence to the principles of rational treatment.


Lecture Topic #7:Temporary filling materials. Materials for permanent fillings. Cements and glass ionomer materials. Composite filling materials and adhesive systems.

1. The purpose of the lecture:

To develop in students a systematic understanding of the classification and properties of temporary and permanent filling materials, to study the characteristics of cements and glass ionomer materials, and to examine modern composite materials and adhesive systems, their mechanisms of action, and clinical application.

2. Issues under consideration:

- Classification of filling materials

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- Temporary filling materials: composition, properties and indications
- Materials for permanent fillings: requirements and types
- Cements in dentistry: classification and properties
- Glass ionomer cements: composition and mechanism of action
- Composite filling materials: types and properties
- Adhesive systems: classification and adhesion mechanism
- Errors in the use of filling materials.

3. Educational technologies

- problematic lecture

4. Primary and secondary literature:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.


Filling materials Fillings are an integral part of therapeutic dentistry and are used to restore the anatomical shape and function of teeth after the removal of carious tissue. Modern materials must meet a number of requirements, including biocompatibility, strength, resistance to saliva and temperature fluctuations, and the ability to provide a hermetic seal. Depending on the duration of use, filling materials are divided into temporary and permanent.

Temporary materials They are applied for short periods of time and are used for diagnostic and therapeutic purposes, such as treating pulpitis or periodontitis. They must be easy to insert and remove, have sufficient strength and seal, and not irritate the tooth tissue.

Temporary materials include zinc oxide eugenol cements, temporary pastes, and prefabricated temporary fillings. These materials have antiseptic properties, but have limited mechanical strength and are not intended for long-term use.

Materials for permanent fillings They are used for long-term tooth restoration. They are subject to more stringent requirements: high strength, wear resistance, good adhesion to tooth tissue, aesthetics, and durability. Permanent materials include cements, composites, and other modern materials.

Cements Cements are one of the groups of filling materials widely used in dentistry. They are used for both temporary and permanent fillings, as well as as lining materials. Cements include zinc phosphate, polycarboxylate, and glass ionomer

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cements. They have different properties and are used depending on the clinical situation.

A special place is occupied by **glass ionomer cements**. They have the ability to chemically bond with tooth tissue, release fluoride, and provide additional protection against caries. They consist of powder (aluminosilicate glass) and liquid (polyacrylic acid). Their mechanism of action is based on an acid-base reaction. These materials have good biocompatibility, but are inferior to composites in terms of strength and aesthetics.

Composite filling materials Composites are the most widely used in modern dentistry. They consist of an organic matrix, an inorganic filler, and a binder. Composites are classified as macro-, micro-, hybrid, and nanocomposites. They offer high strength, good aesthetics, and the ability to precisely shape teeth.

One of the key advantages of composites is their ability to adhere when using special adhesive systems. **Adhesive systems** Ensure a strong bond between the filling material and the tooth tissue. The adhesion mechanism involves the steps of etching, priming, and bonding.

As a result, a hybrid layer is formed, providing a micromechanical and chemical bond between the material and dentin.

Adhesive systems They are classified by generation and method of application. Modern systems simplify the restoration process and improve its reliability. However, adhesion effectiveness largely depends on proper application technique and working conditions, including isolation of the work area.

Mistakes when using filling materials These errors can lead to a loss of restoration integrity, secondary caries development, pulp inflammation, and reduced longevity of the filling. These errors include improper material selection, improper application technique, inadequate isolation of the working area, and failure to adhere to the adhesive preparation steps.


Therefore, the choice of filling material and the correct technique for its application are crucial for successful caries treatment. Modern materials allow for excellent aesthetic and functional results when used strictly according to clinical recommendations.

Lecture Topic #8: Isolation of the Working Field. Isolation Methods. Application of a Cofferdam. Etching of Hard Tooth Tissue. Preparation for Filling. Methods of Filling Carious Cavities

1. The purpose of the lecture:

To develop in students a systematic understanding of the importance of isolating the working field, master isolation methods and techniques for using a cofferdam, study the processes of etching hard dental tissues and the stages of preparation for filling, and master the basics of filling techniques for carious cavities.

2. Issues under consideration:

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- The Importance of Isolating the Working Field in Dentistry
- Insulation methods and their comparative characteristics
- Cofferdam: indications, advantages and application technique
- The mechanism of etching of hard dental tissues
- Preparing the cavity for filling
- Stages of adhesive processing
- Methods of filling carious cavities
- Errors in insulation and sealing.

3. Educational technologies

- problematic lecture

4. Primary and secondary literature:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015

Isolation of the working field Isolation is a mandatory step in therapeutic dentistry, ensuring the quality and longevity of treatment. The main purpose of isolation is to protect the surgical field from moisture, saliva, blood, and microorganisms, as well as to create optimal working conditions for the dentist and the application of filling materials. Failure to properly isolate the field can lead to decreased adhesion of materials, the development of secondary caries, and pulpal complications.

There are several methods of isolating the working field.

TOrelative isolation These methods include the use of cotton swabs, saliva ejectors, and retractors. These methods are easy to use but do not provide complete protection from moisture.

Absolute isolation This is achieved using a cofferdam, which is a latex or latex-free plate fixed to the teeth using special clamps and a frame.

Cofferdam Provides reliable protection for the working area, improves visibility, prevents the entry of saliva and microorganisms, and enhances patient safety by preventing aspiration of instruments and materials. Its use is especially important when working with adhesive systems and moisture-sensitive composite materials.

Technique of applying a cofferdam This involves selecting a clamp, perforating holes according to the tooth position, fixing a latex plate, and sealing the edges.



Despite its complexity, using a rubber dam significantly improves the quality of treatment.

The next stage of preparation for filling is **etching** Hard dental tissues. This process involves treating the enamel and dentin with acid, most often 35–37% orthophosphoric acid, to create a micro-rough surface. Etching removes the smear layer and opens the dentinal tubules, facilitating the penetration of adhesive components.

After etching, the surface is rinsed and dried in a controlled manner. It is important to avoid overdrying the dentin, as this can lead to the collapse of collagen fibers and reduced adhesion effectiveness. Next, a primer is applied to penetrate the dentin and prepare the surface for bonding. Bonding creates a strong bond between the tooth tissue and the filling material, creating a so-called hybrid layer.

Preparing a cavity for filling involves not only adhesive treatment but also final cleaning of the cavity, checking its shape, and ensuring the working area is dry. These steps are crucial for a successful treatment outcome.

Methods of filling carious cavities The method depends on the material used, but in most cases, a layered technique for applying composite material is used. Each layer is polymerized using a light source, which reduces polymerization shrinkage and ensures the strength of the restoration. During the filling process, it is important to restore the anatomical shape of the tooth, contact points, and occlusal surfaces. After the filling is completed, finishing treatment is performed, including grinding and polishing the filling. This ensures a smooth surface, prevents plaque accumulation, and improves the aesthetics of the restoration.


Errors in insulation and sealing These errors may include insufficient dryness of the working area, improper etching techniques, improper application of adhesive systems, and improper filling formation. These errors lead to reduced bond strength, loss of seal, and the development of complications.

Thus, isolating the working area, properly preparing the hard dental tissues, and following the filling technique are key factors in successful caries treatment. Modern technologies allow for achieving excellent functional and aesthetic results, provided all treatment stages are strictly followed.

Lecture Topic #9: Grinding and polishing of fillings. Evaluation of the quality of tooth restoration. Fundamentals of endodontics. Endodontic instruments. Pulp space and age-related changes in root canals.

1. The purpose of the lecture:

To develop students' understanding of the principles of finishing restorations, criteria for assessing the quality of fillings, and to study the basics of endodontics, the classification of endodontic instruments, and the characteristics of the pulp space, taking into account age-related changes in root canals.

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2. Issues under consideration:

- The Importance of Grinding and Polishing Fillings
- Stages of finishing restorations
- Criteria for assessing the quality of dental restoration
- Introduction to Endodontics: Goals and Objectives
- Classification of endodontic instruments
- Dental pulp space: anatomy
- Root canal morphology
- Age-related changes in pulp and root canals

3. Educational technologies

- lecture using video materials

4. Primary and secondary literature:


1. Endodontics: a textbook / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
2. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
3. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2016
4. Therapeutic dentistry: textbook / O. O. Yanushevich, Yu. M. Maksimovsky, L. N. Maksimovskaya, L. Yu. Orekhova. - 3rd ed., processed and additional - Moscow: GEOTAR-Media, 2023
5. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

Finishing of seals, which includes grinding and polishing, is the final stage of tooth restoration and plays a vital role in ensuring its durability and functionality. The main goal of these procedures is to create a smooth, anatomically correct filling surface that maintains occlusion, does not damage surrounding tissue, and prevents plaque accumulation.

Grinding This procedure is performed using abrasive instruments of varying grit sizes and aims to remove excess filling material, smooth the surface, and correct the shape of the restoration. Care must be taken to avoid damaging the surrounding tooth tissue and compromising the marginal seal of the filling.

Polishing Polishing is the next step and is aimed at making the filling surface smooth and shiny. Special polishing discs, brushes, and pastes are used for this. A smooth surface reduces microbial adhesion and reduces the risk of secondary caries.

The quality of the restoration is assessed based on a number of criteria. These include the anatomical shape of the tooth, the precision of the marginal fit, the absence of overhanging margins, the smoothness of the surface, the color and translucency

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matching the natural tooth tissue, and the proper restoration of contact points and occlusal relationships. Failure to comply with these parameters can lead to functional and aesthetic problems.

Endodontics Endodontics is a branch of therapeutic dentistry that deals with the diagnosis and treatment of diseases of the pulp and periapical tissues. The primary goals of endodontic treatment are the removal of infected pulp, root canal treatment, and hermetic sealing.

Pulp space The pulp chamber of a tooth includes the pulp chamber and the root canal system. It has a complex anatomical structure, which can vary significantly depending on the type of tooth and the individual characteristics of the patient. Understanding the anatomy of the pulp space is crucial for successful endodontic treatment.

Endodontic instruments These instruments are designed for mechanical root canal treatment. They are divided into manual and machine-operated. Manual instruments include files and reamers, which are used to widen and clean the canals. Machine-operated instruments are used with special tips and allow for more efficient treatment.


Instruments are also classified by shape, size, and purpose. They must be highly durable, flexible, and resistant to fracture. Proper instrument selection and technique are essential for preventing complications such as canal perforation or instrument breakage.

Root canal morphology Characterized by a variety of shapes and directions. Canals can be straight or curved, with additional branches and anastomoses. These features complicate the treatment process and require high qualifications from the physician. With age, significant changes occur in the pulp space. In young patients, the pulp chamber is larger and the pulp horns are prominent.

With age, secondary dentin deposits, leading to a reduction in the volume of the tooth cavity and narrowing of the root canals. A decrease in the number of cellular elements and blood vessels is also observed, reducing the pulp's regenerative capacity.

Age-related changes complicate endodontic treatment, as canals become less accessible and more tortuous. This requires the use of specialized methods and instruments.

Thus, grinding and polishing of fillings ensures the longevity of the restoration, and assessing its quality allows for the identification and correction of potential defects. Knowledge of the fundamentals of endodontics, the anatomy of the pulp space, and the characteristics of root canals is essential for the successful treatment of pulp

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diseases.

In conclusion, it should be noted that a comprehensive approach, including the correct implementation of all stages of treatment—from restoration to endodontic intervention—ensures a high level of dental care and the preservation of tooth function.

2.2. Development of practical/seminar/laboratory classes

3rd semester

Lesson Topic 1: Introduction to the propaedeutics of therapeutic dentistry. Subject, objectives, and fundamental sections of the discipline. Organization of dental care.

1. Objective of the lesson:

To study the subject, objectives, and structure of therapeutic dentistry; to develop an understanding of the organization of dental care and the role of the dentist.

2. Educational technologies

-lecture-discussion, work in small groups, post-test

3. Basic concepts that students should learn while studying the topic:

- propaedeutics of therapeutic dentistry
- structure of the dental service
- organization of dental care
- functions of a dentist
- medical records

4. Questions for the lesson:


- What does propaedeutics study?
- structure of dental care
- objectives of the discipline
- the role of a doctor
- organization of reception

5. Questions for self-control:

- definition of propaedeutics
- main sections of dentistry
- functions of a doctor
- types of dental care

6. Primary and secondary literature to the topic:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025

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4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023
5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019
6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Organization of dental care for the population.
 - The role of a dentist in the prevention of dental diseases.
 - History of the development of dentistry.
 - Medical examination of dental patients: goals, objectives and stages.
 - Medical examination of dental patients in different age groups.

8. Location of the lesson:

Department of Dental Disciplines, Russian Medical University, Moskovskaya, 172.

Lesson Topic 2: Anatomy of the tooth. Tooth structure. Histology of hard dental tissues: enamel, dentin, cementum.

1. Objective of the lesson:

To study the anatomical structure of the tooth and the histology of hard tissues; to develop an understanding of their role in clinical practice.

2. Educational technologies

-Pre-test, using dummies of jaw models with artificial teeth, case method, post-test


3. Basic concepts that students should learn while studying the topic:

- crown and root of the tooth, definition
- enamel, dentin, cement, definition
- histological structure of tissues
- functions of hard tissues
- mineralization processes

4. Questions for the lesson:

- histological structure of the tooth
- dental tissue
- functions of enamel
- features of dentin
- the role of cement
- the connection of dental tissues with each other

5. Questions for self-control:

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- tissues that make up the tooth
- functions of enamel
- features of the structure of dentin
- the role of cement

6. Primary and secondary literature to the topic:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025
4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023
5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019
6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Histological structure of hard dental tissues
 - Physiological functions of the tooth
 - The importance of the structure of enamel and dentin in the development of caries
 - Age-related changes in dental tissues

Lesson Topic 3: Structural and functional stability of dental hard tissues. Clinical changes in the structure of dental hard tissues.

1. Objective of the lesson:


To study the structural features of hard dental tissues and their resistance to external factors; to develop an understanding of clinical changes.

2. Educational technologies

- Pre-test, work in small groups, post test.

3. Basic concepts that students should learn while studying the topic:

- enamel strength
- demineralization
- remineralization

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- tissue stability
- clinical changes

4. Questions for the lesson:

- tissue stability factors
- demineralization processes
- clinical changes
- the role of saliva

5. Questions for self-control:

- What influences enamel resistance?
- demineralization, definition
- remineralization, definition
- the role of saliva in mineralization
- causes of tissue damage

6. Primary and secondary literature to the topic:


1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025
4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023
5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019
6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Enamel demineralization: causes, mechanisms and clinical significance
 - Remineralization and demineralization: a balance of processes

Lesson Topic 4: Structure and functions of dental pulp. Age-related changes in the pulp. The pulp space of the tooth.

1. Objective of the lesson:

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To study the anatomical and histological structure of dental pulp, its functions, and age-related changes; to develop an understanding of the pulp's role in dental function and the development of pathological processes.

2. Educational technologies

-Conference-session (C-S) work in small groups

3. Basic concepts that students should learn while studying the topic:

- dental pulp (coronal and root)
- cellular composition (odontoblasts, fibroblasts)
- functions of the pulp (trophic, protective, sensory)
- pulp chamber and root canals
- age-related changes in the pulp

4. Questions for the lesson:

- structure of the pulp
- functions of the pulp
- cellular composition
- age-related changes
- the role of pulp in pathology

5. Questions for self-control:


- What functions does the pulp perform?
- cellular composition of the pulp
- changes in pulp with age
- the role of pulp in sensitivity
- the ability of the pulp to regenerate.

6. Primary and secondary literature to the topic:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Anatomy, physiology and biomechanics of the dental system / edited by S. D. Arutyunov, L. L. Kolesnikov, V. P. Degtyarev, I. Yu. Lebedenko - Moscow: GEOTAR-Media, 2017
3. Baranchugova, L. M. Histology and embryogenesis of the oral cavity organs: a tutorial / L. M. Baranchugova, V. I. Obydenko, Ts. B. Bayaskhalanova. - Moscow: GEOTAR-Media, 2025
4. Biological chemistry. Biochemistry of the oral cavity: textbook / T. P. Vavilova, A. E. Medvedev. - Moscow: GEOTAR-Media, 2023
5. Histology and embryology of the oral cavity organs and teeth: a tutorial / Gemonov V.V., Lavrova E.N., Falin L.I. - Moscow: GEOTAR-Media, 2019
6. Human anatomy. Atlas for dentists and orthopedic dentists / L. M. Litvinenko, D. B. Nikityuk - Moscow: Litterra, 2017

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;

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- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Age-related changes in the pulp
 - The role of pulp in protecting the tooth
 - Pulp response to injury
 - Pulp and its role in the development of inflammatory diseases

Lesson Topic 5: Methods of examination of a dental patient: collection of anamnesis, examination of the oral cavity, probing, percussion, palpation.

1. Objective of the lesson:

To study methods of examining a dental patient; to develop skills in collecting anamnesis and conducting a clinical examination.

2. Educational technologies

-Conference-lesson (CL), work in small groups, use of jaw models and diagnostic instruments.

3. Basic concepts that students should learn while studying the topic:

- subjective methods (anamnesis, complaints)
- objective methods (examination, percussion, palpation)
- dental status
- diagnostic methods
- stages of examination

4. Questions for the lesson:


- anamnesis collection
- oral examination
- examination methods
- percussion and palpation
- additional methods

5. Questions for self-control:

- stages of examination of a dental patient
- types of anamnesis
- diagnostic methods in dentistry
- subjective methods (anamnesis, complaints)
- objective methods (examination, percussion, palpation)
- the role of history taking and examination in making a diagnosis

6. Primary and secondary literature to the topic:

1. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
2. Dentistry. Recording and maintaining a medical history: a guide / Edited by V. V. Afanasyev, O. O. Yanushevich. - 2nd ed., corrected and enlarged. - Moscow: GEOTAR-Media, 2016
3. X-ray anatomy and X-ray diagnostics in dentistry: a textbook / V. P. Truten. - 2nd ed., revised and enlarged. - Moscow: GEOTAR-Media, 2020

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4. Propaedeutics of dental diseases: textbook / edited by S. N. Razumova, I. Yu. Lebedenko, S. Yu. Ivanov - Moscow: GEOTAR-Media, 2019

5. Dental instruments: atlas / E. A. Bazikyran. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Collecting anamnesis taking into account the patient's somatic condition
 - Basic methods of clinical examination and their diagnostic value
 - Algorithms for selecting additional examination methods
 - X-ray diagnostics in dentistry

Lesson Topic 6: Sanitary and hygienic requirements for dental office operations. Asepsis and antisepsis in therapeutic dentistry.

1. Objective of the lesson:

To study sanitary and hygienic requirements in dentistry, the principles of asepsis and antisepsis, and to develop infection prevention skills.

2. Educational technologies

-Conference-session (C-S) work in small groups, use of dental instruments.


3. Basic concepts that students should learn while studying the topic:

- asepsis, definition
- antiseptic, definition
- sterilization, its types
- pre-sterilization cleaning
- disinfection, its types
- infection control in dentistry
- complete protocol for processing dental instruments
- types of office cleaning
- requirements for organizing a dental office

4. Questions for the lesson:

- sterilization methods
- complete instrument processing protocol
- types of antiseptics
- sanitary regime
- infection control in dentistry
- checking the sterility of instruments
- preparing a dental office

5. Questions for self-control:

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- asepsis, definition
- antiseptic, definition
- cleaning and preparing dental equipment for work
- sterilization methods
- the difference between disinfection and sterilization
- samples used to control disinfection and pre-sterilization cleaning
- types of antiseptics
- organization of a dental office

6. Primary and secondary literature to the topic:

1. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017
2. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016
3. Features of disinfection and sterilization in dentistry: a tutorial / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2020
4. Microbiology, virology, immunology of the oral cavity: textbook / ed. V. N. Tsareva. - 2nd ed. , processed and additional - Language: GEOTAR-Media, 2021
5. Features of disinfection and sterilization in dentistry: a textbook / E. A. Bazikyan - Moscow: GEOTAR-Media, 2016

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Modern methods of sterilization in dentistry
 - Quality control of sterilization and disinfection
 - Routes of infection transmission in the dental office
 - Organization of infection control
 - Antiseptics: classification and mechanism of action

Lesson Topic 7: Dental Office Equipment. Dental Unit. Ergonomics in Dentistry. Prevention of Occupational Diseases in Dentists.


1. Objective of the lesson:

Learn about dental office equipment and ergonomic principles; develop skills for proper workplace organization.

2. Educational technologies

-Conference-session (C-S) work in small groups, use of dental unit and instruments.

3. Basic concepts that students should learn while studying the topic:

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- Dental unit, definition and what it consists of
- tools, types and purposes
- ergonomics of the doctor and dental assistant
- doctor's workplace
- prevention of occupational diseases

4. Questions for the lesson:

- office equipment
- organization of the doctor's workplace
- ergonomics of the doctor and assistant, four-handed work
- prevention of occupational diseases

5. Questions for self-control:

- What does a dental unit consist of?
- rules of ergonomics
- dental office equipment
- disease prevention.

6. Primary and secondary literature to the topic:

1. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016
2. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017
3. Propaedeutic dentistry: textbook / E. S. Kalivradzhiyan et al. - Moscow: GEOTAR-Media, 2014
4. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018


7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Modern dental units and their characteristics
 - Ergonomics of the doctor's workplace
 - The impact of non-compliance with ergonomic rules on the health of doctors
 - Organizing the assistant's workspace
 - Prevention of occupational diseases in dentistry

Lesson Topic 8: Examination and treatment instruments in therapeutic dentistry. Classification and rules of use.

1. Objective of the lesson:

To study dental instruments and the rules for their use; to develop skills in their use.

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2. Educational technologies

-Conference-session (C-S) work in small groups, use of dental instruments.

3. Basic concepts that students should learn while studying the topic:

- diagnostic tools
- therapeutic instruments
- classification of instruments
- appointment
- rules of use

4. Questions for the lesson:

- types of instruments
- their purpose
- rules of use
- sterilization

5. Questions for self-control:

- What instruments are used in therapeutic dentistry?
- their functions
- rules of work
- rules for processing instruments


6. Primary and secondary literature to the topic:

1. Dental instruments: atlas / E. A. Bazikyan. - 3rd ed. , erased - Moscow: GEOTAR-Media, 2017
2. Introduction to Dentistry / Sevbitov AV - Moscow: GEOTAR-Media, 2018
- 3 Features of disinfection and sterilization in dentistry: a textbook / E. A. Bazikyan - Moscow: GEOTAR-Media, 2016
4. Organization and equipment of a dental clinic, office. Sanitary and hygienic requirements. Ergonomic principles of a dentist's work: a textbook / edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2016
5. Propaedeutic dentistry: textbook / E. S. Kalivradzhiyan et al. - Moscow: GEOTAR-Media, 2014.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Classification of dental instruments
 - Requirements for instruments and their sterilization
 - Tools for diagnosis and treatment
 - Errors when using tools

Lesson Topic 9: Dental caries: etiology, pathogenesis, classification. Black's

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classification of carious cavities.

1. Objective of the lesson:

To study the etiology, pathogenesis and classification of caries; to develop diagnostic skills.

2. Educational technologies

-Conference-session (C-S) work in small groups, case method

3. Basic concepts that students should learn while studying the topic:

- Caries, definition
- etiology
- pathogenesis
- Black's classification
- classification by depth of damage
- the concept of a carious cavity

4. Questions for the lesson:

- causes of caries development
- stages of development
- Black's classification
- classification by depth of damage
- diagnosis of caries at different stages

5. Questions for self-control:

- caries, definition
- stages of caries development
- causes of caries development
- the link between poor hygiene and the development of dental caries

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021


2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

3. Propaedeutic dentistry: situational tasks: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
Topics of abstracts (presentations, reports):

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- Modern theories of the origin of caries
- The role of microbial biocenosis in the development of caries
- Classification of caries and its clinical significance
- Black's Classification: Analysis and Application

Lesson Topic 10: Methods of preparing hard dental tissues. Basic principles of preparing carious cavities.

1. Objective of the lesson:

To study the principles and methods of preparing hard dental tissues; to develop skills in preparing for caries treatment

2. Educational technologies

- pre-test, Conference-session (C-S) work in small groups, work with phantoms, post-test

3. Basic concepts that students should learn while studying the topic:

- Preparation of carious cavities
- carious cavity
- stages of preparation
- principles of dissection
- instruments used in dissection
- formation of a carious cavity

4. Questions for the lesson:


- stages of preparation
- principles of dissection
- tools used
- errors during dissection
- dissection methods
- formation of a carious cavity

5. Questions for self-control:

- dissection, definition
- existing stages of preparation
- errors in preparation
- existing methods of preparation

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

	Educational institution Royal Metropolitan University
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4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Biomechanical principles of preparation
 - The effect of preparation on the pulp
 - Errors and complications during preparation
 - Modern approaches to minimally invasive treatment

Lesson Topic 11: Method of preparation of carious cavities of classes I and II according to Black's classification.

1. Objective of the lesson:

To study the specifics of preparing Class I and II carious cavities according to Black; to develop skills in proper cavity formation taking into account the anatomy of the tooth.

2. Educational technologies

-Conference-session (C-S) work in small groups, work on phantoms

3. Basic concepts that students should learn while studying the topic:

- Black's classification
- Class I (fissures and pits)
- Class II (contact surfaces)
- stages of preparation
- retention forms


4. Questions for the lesson:

- Black's classification
- Features of class I
- features of class II
- stages of preparation
- mistakes

5. Questions for self-control:

- what belongs to class I
- what belongs to class II
- features of cavity formation
- principles of dissection

6. Primary and secondary literature to the topic:

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1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Features of the formation of class I cavities
 - Preparation of contact surfaces (Class II)
 - Creation of retention points
 - Common mistakes in dissection
 - The influence of cavity shape on the durability of the filling

Lesson Topic 12: Methods of preparation of carious cavities of classes III, IV and V according to Black.

1. Objective of the lesson:

To study the technique of preparing carious cavities of classes III, IV, and V; to develop skills in aesthetic and functional preparation.

2. Educational technologies


-Conference-session (C-S) work on phantoms

3. Basic concepts that students should learn while studying the topic:

- Class III (contact surfaces of the front teeth)
- Class IV (with corner destruction)
- Class V (cervical region)
- aesthetics of restoration
- types of access

4. Questions for the lesson:

- features of class III
- Features of class IV
- Features of Class V
- retention points
- types of access

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5. Questions for self-control:

- What is the difference between class III and IV?
- Features of Class V
- requirements for formed cavities
- principles of dissection
- retention points

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Requirements for preparation
 - Peculiarities of working in the frontal group of teeth
 - Formation of marginal adhesion
 - The influence of preparation on the aesthetics of future restoration

Lesson Topic 13: Temporary filling materials. Materials for permanent fillings. Cements and glass ionomer materials.

1. Objective of the lesson:


To study the types of filling materials and their properties; to develop skills in material selection.

2. Educational technologies

-Conference-session (C-S) work in small groups, work on phantoms

3. Basic concepts that students should learn while studying the topic:

- temporary materials
- permanent materials
- cements
- glass ionomers
- properties of materials

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- requirements for materials

4. Questions for the lesson:

- types of materials
- their properties
- testimony
- choice of material

5. Questions for self-control:

- Types of materials
- Differences between materials
- Indications for each type of material
- Properties of temporary materials
- Properties of materials for permanent fillings

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021

2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:


- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
Topics of abstracts (presentations, reports):
 - Classification of filling materials
 - Physicochemical properties of cements
 - Glass ionomer cements: advantages and disadvantages
 - Criteria for selecting material depending on the clinical situation
 - Requirements for materials

Lesson Topic 14: Composite filling materials and adhesive systems.

1. Objective of the lesson:

To study composite materials and adhesive systems and develop skills in their application.

2. Educational technologies

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-Conference-session (C-S) work on phantoms.

3. Basic concepts that students should learn while studying the topic:

- composites
- adhesion
- adhesive systems
- etching
- hybrid layer
- polymerization

4. Questions for the lesson:

- types of composites
- components of the adhesive system
- types of adhesive systems
- adhesive protocol
- stages of adhesion
- errors during the adhesive protocol and filling

5. Questions for self-control:


- composite, definition
- adhesion
- adhesive protocol
- hybrid layer, definition
- mechanism of action of etching
- formation of a chemical bond between the tooth and the material

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - The mechanism of adhesion in dentistry
 - Classification of adhesive systems

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- Hybrid layer and its meaning
- Adhesive technique errors
- Comparison of generations of adhesives

Lesson Topic 15: Isolation of the working area. Isolation methods. Use of a cofferdam.

1. Objective of the lesson:

Learn methods of isolating the working area; develop skills in using a cofferdam.

2. Educational technologies

-Conference-session (C-S) work in small groups, work on phantoms

3. Basic concepts that students should learn while studying the topic:

- insulation
- cofferdam
- clamps
- frame
- advantages

4. Questions for the lesson:

- isolation methods
- cofferdam
- indications for isolation
- superposition technique
- instruments used to apply a cofferdam


5. Questions for self-control:

- cofferdam, definition
- existing isolation methods
- instruments used to apply a cofferdam
- advantages of insulation
- stages of cofferdam application

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

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- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Insulation methods: a comparative analysis
 - Cofferdam: indications and application technique
 - Errors in isolating the working field
 - The influence of moisture on the quality of restoration
 - Alternative methods of insulation

Lesson Topic 16: Etching of hard dental tissues. Preparation for filling. Methods for filling carious cavities.

1. Objective of the lesson:

Learn methods of tooth preparation and filling; develop restoration skills.

2. Educational technologies

-Conference-session (C-S) work on phantoms.

3. Basic concepts that students should learn while studying the topic:

- etching
- adhesion
- filling
- stages of filling

4. Questions for the lesson:

- stages of filling
- mechanism of action of etching
- filling materials
- errors and complications during etching
- errors in sealing


5. Questions for self-control:

- etching, definition
- mechanism of action of orthophosphoric acid
- cavity filling technique
- errors in sealing

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021

2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

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3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Preparing a tooth for filling
 - Layer-by-layer material application technique
 - Filling errors
 - Factors affecting the quality of restoration

Lesson Topic 17: Grinding and Polishing Fillings. Assessing the Quality of Tooth Restoration.

1. Objective of the lesson:

To study grinding and polishing methods and develop skills in assessing the quality of restoration.

2. Educational technologies

-Conference-session (C-S) work in small groups, work on phantoms

3. Basic concepts that students should learn while studying the topic:

- grinding
- polishing
- finishing
- quality of restoration
- smoothness

4. Questions for the lesson:


- stages
- tools
- quality criteria

5. Questions for self-control:

- the meaning of polishing
- stages of restoration polishing
- evaluation criteria

6. Primary and secondary literature to the topic:

1. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021

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2. Propaedeutics of dental diseases: textbook / O. O. Yanushevich, E. A. Bazikyan, A. A. Chunikhin [et al.]; edited by O. O. Yanushevich, E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

3. Propaedeutic Dentistry: situational problems: a tutorial / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023

4. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Stages of finishing of fillings
 - The influence of polishing on the durability of restoration
 - Materials for grinding and polishing
 - Finishing errors
 - Quality criteria for filling processing

Lesson Topic 18: Fundamentals of Endodontics. Endodontic Instruments, Pulp Space, and Age-Related Changes in Root Canals.

1. Objective of the lesson:

To study the basics of endodontics, the structure of root canals and instruments, and to develop an understanding of root canal treatment.

2. Educational technologies

-Conference-session (C-S) work in small groups, demonstration of endodontic instruments

3. Basic concepts that students should learn while studying the topic:

- endodontics
- root canals
- endodontic instruments
- channel processing
- irrigation


4. Questions for the lesson:

- structure of canals
- endodontic instruments

5. Questions for self-control:

- endodontics
- stages of treatment
- endodontic instruments

6. Primary and secondary literature to the topic:

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1. Endodontics: a textbook / E. A. Bazikyan [et al.]; edited by E. A. Bazikyan. - Moscow: GEOTAR-Media, 2023
2. Therapeutic dentistry. Caries and diseases of dental hard tissues. Endodontics: a guide to practical classes: a tutorial / Yu. M. Maksimovsky, A. V. Mitronin; edited by Yu. M. Maksimovsky. - Moscow: GEOTAR-Media, 2021
3. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2016
4. Therapeutic dentistry: textbook / O. O. Yanushevich, Yu. M. Maksimovsky, L. N. Maksimovskaya, L. Yu. Orekhova. - 3rd ed., processed and additional - Moscow: GEOTAR-Media, 2023
5. Therapeutic dentistry. Dental diseases. In 3 parts. Part 1.: textbook / edited by E. A. Volkov, O. O. Yanushevich - Moscow: GEOTAR-Media, 2015.

7. List of questions and tasks for independent work:

- elaboration of educational material based on lecture notes, educational and scientific literature;
- working with questions for self-control;
- preparation of abstracts and presentations.
 Topics of abstracts (presentations, reports):
 - Root canal anatomy
 - Classification of endodontic instruments
 - Age-related changes in root canals

3. Methodological recommendations/instructions for students


3.1. Methodological recommendations for students on studying the discipline

The study of the theoretical part of the disciplines is intended not only to deepen and consolidate the knowledge acquired in the classroom, but also to promote the development of students' creative skills, initiative, and time management.

The material taken during lectures must be regularly reviewed and supplemented with information from other sources of literature, presented not only in the course program, but also in periodicals.

When studying a course, you should first read the recommended literature for each topic and compile a brief summary of the key concepts, terms, and information that must be memorized and that is fundamental to mastering subsequent topics in the course. To expand your knowledge of the course, it is recommended to use online resources; conduct searches in various systems and use materials from websites recommended by the instructor.

Each student keeps a workbook, the design of which must meet the requirements, the main ones are the following:

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- the title page indicates the subject, well, group, last name, Name, student's patronymic;
- each work is numbered in accordance with the methodological instructions, indicate the date of completion of the work;
- write down the title of the work in full, purpose and principle of the method, briefly characterize the progress of the task and the object of the study;
- If necessary, provide a graphic image; The results of the tasks are presented in the form of graphic images with mandatory captions to them, as well as tables or describe verbally;
- at the end of each work, a conclusion or inference is made, which are discussed when summing up the lesson.

All initial notes must be made in a notebook as you complete the tasks.

To check the student's academic activity and the quality of his or her work, the workbook is periodically checked by the teacher.

The material taken during lectures must be regularly reviewed and supplemented with information from other sources of literature, presented not only in the course program, but also in periodicals.

When studying a course, you should first read the recommended literature for each topic and compile a brief summary of the key concepts, terms, and information that must be memorized and that is fundamental to mastering subsequent topics in the course. To expand your knowledge of the course, it is recommended to use online resources; conduct searches in various systems and use materials from websites recommended by the instructor.

3.2. Methodological recommendations for the implementation of practical/seminar classes, laboratory work.

Practical classes These are held after lectures and serve as explanatory, generalizing, and reinforcing elements. They can be held not only in the classroom but also outside the educational institution.


During practical classes, students absorb and comprehend new learning material. Practical classes are systematic, regularly following each lecture or two or three lectures.

Practical classes are carried out according to the schedule of the educational process and independent work of students in disciplines.

When preparing for practical classes, it is necessary to study the methodological recommendations for its implementation in advance. Pay attention to the purpose of the lesson, on the main questions to prepare for the lesson, on the content of the lesson topic.

Before each practical lesson, students review the seminar plan, including a list of topics and questions, a bibliography, and homework assignments for the material covered. The following seminar preparation plan is recommended:

1. Work through lecture notes;

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2. Read the main and additional literature recommended for the section being studied;
3. Answer the questions in the seminar plan;
4. Study the topic and select literature for writing essays, reports, etc.;

3.3. Methodological recommendations for completing independent work.

When studying the discipline "Obstetrics and Gynecology", the following types of independent work of students are used:

- study of theoretical material using lecture notes and recommended teaching aids, educational dummies, educational literature, and reference sources;
- independent study of some theoretical issues not covered in lectures, with writing papers and preparing presentations;

Students are invited to read and analyze monographs and scientific articles on issues in obstetrics and gynecology. The results of their work with these texts are discussed during practical classes.

To develop independent work skills, students complete assignments by independently consulting textbooks, reference books, and scientific and methodological literature. Assignment completion is assessed both during practical classes through oral presentations and group discussions, and through written independent work.

Section 1.4.2 provides topics for independent study of theoretical material, assignment for each topic, deadline for submitting work, educational literature.

Section 1.4.3. contains topics for writing an abstract.

Section 2.2 provides assignments, problems, and exercises for each course topic. A list of necessary literature for independent study is provided.

Independent work helps students develop essential skills such as choosing and solving a given problem, collecting and analyzing published data, and the ability to identify key points and draw informed conclusions.

3.4. Guidelines for completing papers, reports, and essays


Abstract -a written summary of the content of a scientific paper on the given topic. This is an independent research work., where the student reveals the essence of the problem being studied with elements of analysis on the topic of the abstract. Brings together different points of view, as well as personal views on the issues of the topic of the paper. The content of the abstract should be logical, presentation of the material to wear problematic and thematic nature.

Requirements for the abstract:

The volume of the abstract may vary within the range 9-10 printed pages.

Main sections: table of contents (plan), introduction, main content, conclusion, list of references.

The text of the abstract should contain the following sections:

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-title page with indication:names of the university,departments,essay topics,Full name of the author and full name of the teacher

- introduction,relevance of the topic.
- main section.
- conclusion(analysis of literature search results);conclusions.
- the list of literary sources must have at least10bibliographic titles,including network resources.

The text part of the abstract is formatted on a sheet of the following format:

- top indent – 2 cm; left indent – 3 cm; right indent – 1.5 cm; bottom indent – 2.5 cm;
- text font: Times New Roman, font height – 14, space – 1.5;
- Page numbers are at the bottom of the sheet. The first page is not numbered.

The abstract must be written competently and in a respectful manner. References to references, including periodicals from the past five years, must be included.

Abstract evaluation criteria:

- relevance of the research topic;
- compliance of the content with the topic;
- depth of material processing;
- the correctness and completeness of the development of the questions posed;
- the significance of the conclusions for further practical activities;
- correctness and completeness of use of literature;
- compliance of the abstract design with the standard;
- the quality of the message and answers to questions during the defense of the abstract.


3.5. Guidelines for preparation for final certification.

Final certification in the form of a credit test for the course "Propaedeutics of Therapeutic Dentistry" is conducted based on the results of attending classes, current and midterm (modular) control.

In this regard, to successfully pass the final assessment, it is recommended that the student attend all classes and actively participate in classroom activities and complete independent work.

All modules are conducted according to a modular schedule. The tests themselves have three sections: an exam, a module, and a practice mode. The exam and module are available as scheduled, and the practice mode is available on the online educational platform. a platform where students can practice solving tests online.

Each student has their own ID number and password to access this platform. Students can log in from a computer, tablet, or phone, select a course, and view relevant course materials, lecture notes (in PPT or PDF format), and complete a quiz (MCQ) for each topic.

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3.6. Methodological recommendations for student research work.

The purpose of research is to develop students' intellectual abilities by studying the algorithm of scientific research and acquiring initial experience in carrying out a research project using the educational material of their chosen specialty.

The main objectives and results of the research work are:

- mastering scientific methods of cognition and deepening the theoretical knowledge of students in their specialty;
- mastery of modern methods of scientific research;
- development of students' practical skills in independently searching for scientific and technical information, conducting theoretical and/or experimental work;
- students acquire the ability to analyze the results of conducted research, formulate conclusions and recommendations;
- developing in students the ability for independent, creative, active work to continuously update and enrich their scientific knowledge.

When completing research work, a student must master the following basic steps:


- independent search for information on a given topic;
- selection of essential information necessary for full coverage of the problem being studied, separation of this information from secondary information (within the framework of a given topic);
- analysis and synthesis of knowledge and research on the problem;
- generalization and classification of information on research problems;
- logical and consistent disclosure of the topic;
- generalization of psychological knowledge on the problem and formulation of conclusions from a literature review of the material;
- stylistically correct presentation of scientific thought of the abstract type;
- competent design of scientific abstract text;
- correct presentation of scientific work;
- creation of a glossary of terminology;
- role-playing games and trainings on a given topic, discussions, situational tasks.

For research work, a senior student must do the following:

- write an abstract using general scientific and special methods,
- participate in scientific projects;
- prepare and deliver a report or presentation on a given topic at conferences and round tables;
- study and analyze general concepts, programs, clinical protocols on a given topic;
- write a medical history or birth history of the patient, including laboratory and instrumental examination.

In order to conduct research work, it is recommended for 10th semester students:


- participate in a scientific project, scientific conference;

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- manage a planned or standardized patient under the guidance of a teacher;
- write a birth history, prepare a partogram or a protocol for a cesarean section;
- present a prepared report at a conference;
- study and analyze programs and clinical protocols on a given topic.

4. Glossary


- An abutment is an element that connects a dental implant to a crown or other prosthesis.
- An abscess is a limited purulent inflammation accompanied by the formation of a cavity filled with pus.
- Agalia is a decreased or complete absence of salivation.
- Adaptation to treatment is the process of getting a child used to dental procedures, often using behavioral techniques.
- Adaptation of a prosthesis is the process of a patient getting used to wearing a prosthesis, including functional and psychological aspects.
- Adhesion is the ability of materials to firmly adhere to dental tissue.
- Actinic cheilitis is a chronic inflammation of the lips caused by prolonged sun exposure; it is common in older people.
- Alveolitis is an inflammation of the tooth socket after its extraction (often called "dry socket").
- Anatomy of a baby tooth - structural features of a temporary tooth: thin enamel, large pulp chamber, short roots.
- Anesthesia is pain relief. In surgical dentistry, the most commonly used anesthesia is conduction, infiltration, topical, and intraligamentary anesthesia.
- A malocclusion is a deviation from physiological occlusion; it can develop from an early age.
- Tooth apathy—the absence of a tooth's response to thermal or electrical stimuli—often indicates pulp necrosis.
- Atypical extraction is a complex tooth extraction that requires root cutting, flap cutting, trepanation, etc.
- Alveolar ridge atrophy is a decrease in jaw bone volume following tooth loss; a common problem in the elderly.
- Gum atrophy is a decrease in gum volume, often accompanied by exposure of tooth roots.
- A beam prosthesis is a prosthesis that is fixed on implants or teeth using a beam system.
- A biopsy is the taking of a tissue sample for histological examination.
- A biopsy is the removal of a tissue sample for histological examination (for example, suspicious formations on the mucous membrane).

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- Biocompatibility of prostheses is the ability of materials not to cause allergies, toxic or irritating effects in weakened patients.
- Paget's disease is a chronic bone disorder that can affect the jaws and complicate dental treatment.
- Bruxism is the involuntary grinding or clenching of teeth, often during sleep.
- Bruxism in children—grinding of teeth during sleep—can be associated with emotional stress or bite development.
- Tubercular anesthesia is a type of infiltration anesthesia used in the upper jaw.
- Baby bottle caries is early childhood caries that occurs due to prolonged contact of teeth with formula, juices, or breast milk at night.
- A clasp denture is a removable denture with a metal arch base that evenly distributes the chewing load.
- Vestibuloplasty is a surgical correction of the vestibule of the oral cavity (often performed during prosthetics).
- Vestibuloplasty is a surgical deepening of the oral vestibule, often necessary before prosthetics in cases of severe tissue atrophy.
- The temporomandibular joint (TMJ) is the joint between the lower jaw and the skull, often involved in trauma or inflammation.
- Vital pulpotomy is a partial removal of the pulp while preserving its viability.
- Susceptibility to infections - decreased local immunity of the oral mucosa in the elderly.
- Tooth restoration is the process of restoring the shape, function and aesthetics of a damaged tooth (e.g. with inlays, crowns).
- A temporary crown is a temporary covering for a prepared tooth, protecting it until a permanent structure is installed.
- A temporary filling is a material that temporarily fills a tooth cavity until a permanent filling is placed.
- A temporary filling is a filling material placed for a short period of time, often in anticipation of permanent treatment.
- Temporary (baby) bite – a complete set of baby teeth, usually formed by 2.5–3 years.
- A hematoma is a collection of blood in soft tissue following injury or surgery.
- Hemisection is the removal of one of the roots of a multi-rooted tooth along with part of the crown.
- Fissure sealing is a preventative procedure: filling the fissures (grooves) on chewing teeth to protect against caries.
- A sleeve crown is a one-piece cast metal crown that covers the entire tooth.
- Gingivitis is an inflammation of the gums without disruption of the gingival attachment.
- Enamel hypoplasia is a congenital or acquired disorder of enamel formation, often manifested as spots, grooves or chips.

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- Hyposalivation is a decrease in salivation, especially when taking medications (antidepressants, antihypertensive drugs, etc.).
- Glossalgia is a burning pain or discomfort in the tongue, often without apparent cause, often associated with psychosomatics or vitamin deficiency.
- Gnathology is the science of the function of the masticatory apparatus, especially the temporomandibular joint (TMJ).
- Granuloma is a chronic inflammatory focus at the apex of the tooth root, surrounded by connective tissue.
- Cyst decompression is a surgical method of reducing the size of a cyst while preserving teeth.
- Dementia is a cognitive impairment that makes oral hygiene and treatment difficult.
- Dental implants are artificial roots implanted into the jawbone to secure dentures.
- Dentin is the hard tissue of the tooth under the enamel, the main mass of the crown and root.
- Depophoresis is a method of root canal treatment using electric current and medications.
- The gums in children are the mucous membrane covering the alveolar process; in children, they are looser and prone to swelling and inflammation.
- A dental defect is the absence of one or more teeth, which requires orthopedic treatment.
- Dissection is the cutting of tissues.
- Dysphagia is difficulty swallowing and often requires a special approach when fitting prosthetics.
- Dysfunction of the masticatory muscles - a disorder of the muscles involved in chewing, which can manifest itself as clicking, pain, and asymmetry.
- Chewing trauma is a chronic injury to the mucous membrane caused by biting, nibbling, or an uncomfortable denture.
- Chewing efficiency is the patient's ability to fully chew food with a denture.
- Burning mouth syndrome is a burning or tingling sensation, more common in older women, in the absence of any apparent underlying pathology.
- A dystopic tooth is a tooth that has erupted in an incorrect position (for example, outside the dental arch).
- An erupting tooth is a tooth that is going through the eruption stage, which often causes discomfort, drooling, and moodiness.
- An impacted tooth is a tooth that has not fully erupted due to anatomical or pathological reasons (often wisdom teeth).
- Children's dental formula: children have 20 milk teeth (temporary bite).
- Tartar is mineralized dental plaque.

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- Tartar - often forms faster due to changes in the composition of saliva and poor hygiene.
- A dental bridge is a fixed structure that replaces missing teeth by supporting them on adjacent teeth.
- Dental plaque is a soft film on the teeth containing bacteria and food debris, a precursor to tartar.
- A dental prosthesis is an orthopedic structure that restores partially or completely lost teeth.
- A denture is the primary means of restoring dental health in the elderly; it can be complete or partial, removable or fixed.
- Play adaptation is a method of psychologically preparing a child for treatment through games, stories, and demonstrations.
- An immediate denture is a temporary denture installed immediately after tooth extraction.
- Immunosenescence is an age-related decline in immune defense that increases the risk of inflammation in the oral cavity.
- Dental implantation is the installation of an artificial titanium root (implant) into the jaw for subsequent prosthetics.
- Caries indexation is a quantitative assessment of the prevalence and intensity of caries in a child (for example, the KPU index).
- Individual hygiene is the adaptation of dental cleaning methods to the patient's physical and cognitive capabilities.
- A custom tray is a device for taking precise impressions of the teeth and mucous membrane.
- Incision is the dissection of soft tissues (for example, when opening an abscess).
- Irrigation of the canal is washing the root canal with antiseptic solutions for disinfection.
- Oral candidiasis is a fungal infection that is often observed in cases of xerostomia, wearing dentures, or taking antibiotics.
- A children's mouthguard is a silicone or plastic protective pad for teeth (for example, during bruxism or sports).
- Caries is the destruction of hard dental tissues under the influence of acids produced by bacteria.
- Deciduous tooth decay is the destruction of the hard tissues of a temporary tooth; it develops more rapidly than in adults due to anatomical features.
- A ceramic crown is an aesthetic crown made of zirconium dioxide, porcelain or glass ceramics.
- Cystectomy is the removal of a dental cyst along with the root apex.
- A clasp is a metal element of a clasp or partial removable denture that holds it on the supporting teeth.




- A wedge-shaped defect is a non-carious lesion of a tooth in the neck area, in the form of a wedge-shaped notch.
- Moller's ring is a ring-shaped hyperemia of the gum around an erupting tooth.
- Comprehensive rehabilitation – restoration of the entire dental system (in cases of complete edentia or severe bite deformations).
- Corticotomy is the removal of the cortical (outer) bone plate to access the lesion.
- Xerostomia is a feeling of dry mouth; a common complaint in the elderly, especially when treating chronic diseases.
- Curettage is the scraping of pathological tissues (for example, granulomas from a socket or periodontal pocket).
- Mucosal lability is increased sensitivity of the mucous membrane, leading to irritation upon contact with dentures.
- Lacunae and fissures are natural depressions on the surface of teeth that often require sealing in childhood.
- Sedation therapy - treatment under drug-induced sleep/sedation in anxious or young children.
- A ligature is a thread or wire used to tie off blood vessels or secure tissues.
- Lignin, a natural component used in some dental materials, is well tolerated by elderly patients.
- A cast inlay is a microprosthesis made of metal or ceramic that replaces the damaged part of a tooth.
- Flap surgery is a surgical procedure involving the removal of a mucoperiosteal flap (for example, during root apex resection).
- Prosthesis play is an undesirable mobility of the orthopedic structure.
- Masticatory dysfunction is a disorder of chewing function due to tooth loss, muscle weakness, or malocclusion.
- Medication-assisted root canal treatment involves injecting medication into the root canal to kill the infection.
- Mesial bite is a form of malocclusion in which the lower incisors overlap the upper ones.
- Modeling is the creation of a wax or digital model of the future prosthesis.
- A baby tooth is a temporary tooth that erupts during childhood and is replaced by a permanent tooth.
- A bridge prosthesis is a structure made of several crowns that forms a “bridge” over a defect in the dental row.
- Mucocele is a cyst of the minor salivary glands, most often on the lower lip, which may require removal.
- Malocclusion is an age-related change in the bite due to tooth loss, wear and tear, and atrophy of the jaws.
- Malocclusion is an incorrect closure of the teeth of the upper and lower jaws.

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- Disruption of teething is a deviation from the normal timing or order of teeth emergence.
- Hereditary dental anomalies are genetic disorders of the number, shape or structure of teeth (e.g. adentia, microdontia).
- Neurinoma is a benign tumor that originates from the nerve sheaths.
- Neurolysis is the surgical release of a nerve from compressing tissue.
- A nylon denture is a flexible, removable denture made of soft polymer, more comfortable but less durable.
- Trigeminal neuropathy may present with facial pain, including oral pain, and requires careful dental intervention.
- Pulp necrosis is the death of pulp tissue (nerve) of the tooth.
- A fixed prosthesis is a structure that is permanently fixed in the oral cavity (for example, crowns, bridges, implants).
- Reverse bite is a pathological position of the incisors: the lower ones overlap the upper ones (similar to a mesial bite).
- Obturation of the root canal is the filling of the root canal with filling material after its treatment.
- Odontogenic infection is an infection that arises from dental tissues or adjacent structures.
- Odontogenic infection is an infection originating from a tooth or its periodontal tissues, often leading to abscesses and phlegmons.
- An occlusal pad is an orthopedic device for correcting bite or protecting teeth from bruxism.
- Occlusion is the contact between the teeth of the upper and lower jaws when they close.
- Orthodontic monitoring is a regular assessment of the development of a child's bite, starting at 5–6 years of age.
- Orthopedic bite correction is the restoration of a correct bite using prosthetics.
- Orthopedic treatment is the restoration of teeth with prostheses, taking into account the individual characteristics of tissue aging.
- Osteoporosis is a decrease in bone density that affects the condition of the jaws and the stability of dentures.
- Osteotomy is a dissection of bone tissue.
- Periodontosis/periodontitis is a chronic inflammatory disease of the gums and surrounding tooth tissues, a common problem among the elderly.
- Periodontitis is an inflammation of the tissues surrounding the tooth root.
- Perioprosthesis is the condition of the tissues around orthopedic structures (for example, gums and bone around implants).
- Periostotomy is an incision of the periosteum.
- Frenuloplasty is the correction of a frenulum of the lip or tongue that interferes with normal function or prosthetics.

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- A complete removable denture is the main treatment for complete edentulism and requires regular monitoring and correction.
- A complete removable denture is a denture that replaces all the teeth on one jaw.
- Permanent dentition – formed after 12–13 years, includes 28 permanent teeth (excluding wisdom teeth).
- Preparation - grinding of a tooth for a crown or inlay.
- Pulpitis is an inflammation of the pulp (nerve) of the tooth.
- Pulpitis of a baby tooth is an inflammation of the pulp, treated taking into account the anatomy and the need to preserve the tooth until replacement.
- Early caries is caries that develops in children under 3 years of age, often on the front teeth.
- Root apex resection is the removal of the apex of the tooth root containing the site of inflammation.
- Alveolar bone resorption is a loss of bone after tooth extraction, which is especially pronounced in the elderly.
- Prosthesis repair is the restoration of a damaged orthopedic structure.
- Tooth restoration is the restoration of the shape and function of a damaged tooth (for example, with a photopolymer or glass ionomer cement).
- Retention elements are parts of the prosthesis that improve its fixation (clasps, buttons, beams, etc.).
- Retention is the ability of a prosthesis to remain in the oral cavity.
- Tooth retention is a delay in the eruption of a tooth.
- Gum retraction is the movement of the gums to allow for accurate impression taking.
- Gum retraction is the movement of the gum edge away from the tooth for better visualization and work.
- Gum recession is a lowering of the gum level, exposing the root of the tooth.
- Sedation is the process of putting a child into a controlled, relaxed state to reduce fear and discomfort.
- Sedation is the medicinal calming of a patient during surgical interventions.
- Senile gingivitis is an inflammation of the gums associated with age-related tissue changes and poor hygiene.
- Dentin sensitization is increased sensitivity of a tooth to irritation.
- Sensory impairments – decreased taste, smell, tactile sensitivity, affecting the patient's quality of life.
- Sinus lift is a surgical lifting of the maxillary sinus floor to create bone volume for an implant.
- Scanning (intraoral) - obtaining a digital impression using a scanner, without traditional masses.

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- A mucosal-supporting prosthesis is a structure that rests on the gum and alveolar process.
- Tooth change is a physiological process of replacing baby teeth with permanent ones, which begins at 5–7 years of age.
- Thumb/pacifier sucking is a bad habit that can cause malocclusion.
- Stomatitis is an inflammatory disease of the oral mucosa.
- Denture stomatitis is an inflammation of the mucous membrane under a removable denture, often caused by prolonged wearing without a break.
- A dental infection is an infection that originates in the mouth and spreads to other areas.
- A removable denture is a denture that the patient can remove and put on independently.
- Packing is the insertion of gauze or material into a wound to stop bleeding or promote drainage.
- Taylor denture is a type of clasp denture with a minimal base and maximum metal construction.
- Thermoplastic is a material for flexible dentures (e.g. acrylic, nylon, polyurethane).
- Topical fluoridation is the local application of fluoride-containing preparations to strengthen enamel and prevent caries.
- Total adentia is the complete absence of teeth.
- Tooth trauma in children – bruise, fracture, dislocation of a tooth – is a common problem in childhood.
- Hand tremors can interfere with independent oral hygiene and require special hygiene devices.
- Bone trepanation is the creation of an opening in the bone to access the site of inflammation or a cyst.
- Trophic disorders are a deterioration in tissue nutrition (for example, gums) due to vascular diseases and aging.
- A shortened lingual/labial frenulum is an anatomical condition that affects speech, eating, and bite. It may require plastic surgery.
- Installing a crown is the final stage of prosthetics, which includes fixing the structure to the tooth.
- Establishing contact with the child is an important stage of the appointment: building trust and reducing anxiety.
- Prosthesis stability is the ability of the structure to remain stable during chewing; it deteriorates with jaw atrophy.
- Loss of retention is a weakening of the fixation of the prosthesis, requiring correction or relining.
- Oral care is an important part of geriatric care and can be performed by relatives or staff.

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- Fixation of a prosthesis is a method of attaching a prosthesis to teeth or implants (mechanical, cement, screw).
- Denture fixation – improving the retention of a removable denture using creams, gels or structural elements.
- A fissure is a natural groove on the surface of chewing teeth that is often prone to caries.
- Fissure caries is caries in the natural grooves of chewing teeth, often developing in children after the eruption of molars.
- Phlegmon is a diffuse purulent inflammation of soft tissues without clear boundaries (a dangerous complication).
- Flux (periostitis) is an inflammation of the periosteum, often with swelling of the face.
- Flux (periostitis) is a purulent inflammation of the periosteum, often with swelling of the cheek.
- A milled framework is a precisely manufactured prosthetic framework (usually made of zirconium or titanium) created using CAD/CAM.
- Fluorosis is a chronic excess of fluoride, which manifests itself as spots and defects in the enamel.
- Functional restoration – the goal of treatment is to restore chewing, speech and aesthetics with minimal stress on the body.
- Angular cheilitis (cheilitis in the corners of the mouth) is cracking and inflammation in the corners of the mouth, often associated with a deficiency of B vitamins or a yeast infection.
- Cheilitis in children is an inflammation of the red border of the lips, which can be caused by irritation, allergies, or infection.
- An all-ceramic crown is an aesthetic crown without a metal frame.
- Cementation is the process of gluing a crown or inlay to a tooth using special dental cement.
- Circulatory disorders are circulatory disorders that affect healing after dental procedures.
- Maxillofacial surgery is a branch of surgery that deals with the treatment of diseases and injuries of the jaws, face, and soft tissues.
- Splinting is the fixation of loose teeth or jaw fractures using splints.
- Extracoronary fixation is the attachment of a prosthesis outside the crown of the tooth (for example, using clasps).
- Electroodontometry is a method of diagnosing the condition of the pulp using electric current.
- Emotional states such as anxiety, depression, and fear are common reactions of elderly patients to dental treatment.
- Endodontics is a branch of dentistry that deals with the treatment of root canals.

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- Enamel erosion is the destruction of enamel due to exposure to acids (in the diet or from gastroesophageal reflux).
- Smile aesthetics are important not only for young people: older patients also value restoring the appearance of their teeth.
- Aesthetic restoration is the restoration of teeth taking into account their appearance, especially relevant for the front teeth of children.
- Aesthetic prosthetics is the restoration of teeth with an emphasis on the natural appearance and harmony of the smile.
- Iatrogenesis is damage caused by medical intervention (for example, improper grinding of teeth during prosthetics)

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Application 1

Change Registration Sheet Form

p/p	Document (order, order, etc. (indicating the number and date) which reflects the changes	Signature	Full name
1			
2			
3			

5. Reference materials and appendices –*are indicated as necessary.*