

**PRIVATE HIGHER EDUCATIONAL INSTITUTION
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"
Department of Dentistry**

"APPROVED"

Acting Head of the Department

 Oleksandr BIDA

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE

**"Practical training in dentistry.
Pediatric therapeutic dentistry"**

LEVEL OF HIGHER EDUCATION Second (master's) level

DEGREE OF HIGHER EDUCATION Master's degree

BRANCH OF KNOWLEDGE 22 Healthcare

SPECIALTY 221 Dentistry

COURSE 5

Reviewed and approved
at a meeting of the
Department of Dentistry
Protocol No. 1 dated
August 31, 2022

Kyiv 2022

Working program of educational discipline training in dentistry in pediatric therapeutic dentistry the preparation of applicants for higher education of the second (master's) level of higher education in the specialty 221 Dentistry .

Developers: MD, Professor Kuts V.P., assistant Shabranska V.V.

Approved by the Central Methodical Council of the Academy Protocol No. 1 of 31.08 2022

Agreed

First Vice-Rector



Oleksandra SOROKA

INTRODUCTION

The working educational program was drawn up in accordance with the following regulatory documents :

the Law of Ukraine "On Higher Education" dated 07.1.2014 No. 1556-VII; by the order of the Ministry of Education and Culture of Ukraine of June 24, 2019 No. 879 "On approval of the standard of higher education in specialty 221 "Dentistry" for the second (master's) level of higher education"; the educational and professional program (OPP) of specialist training in specialty 221 "Dentistry" for the second (master's) level of higher education; educational program of the educational discipline "Children's therapeutic dentistry".

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE (ABSTRACT)

Pediatrics dentistry is a complex and multi-component specialty, where a specialist who acts like a dentist must think like a pediatrician. The preparation and activity of such a specialist requires a lot of effort, skill, time and energy. Every specialist who works with children should know the peculiarities of the antenatal and postnatal periods of development and formation of hard tissues of the teeth, jaw bones, and soft tissues of the face, as well as how these processes are affected by the health of the future mother and the child itself, various negative factors that can lead to the occurrence and development of dental diseases. He should also know the features of clinical manifestations and patterns of the course of pathological processes in the maxillofacial region in children, as well as methods of treatment and prevention of dental diseases in different age periods.

Based on the knowledge gained by students at the general biological, general clinical, dental departments and the department of children's diseases, it is necessary to teach students the peculiarities of the clinic, diagnosis and treatment of dental diseases in children of various ages and to prepare a doctor capable of working in medical and preventive dental institutions after the internship different levels. The future dentist must know the modern principles of organization and management of curative and preventive dental care, be able to organize the primary prevention of dental diseases, dental rehabilitation of children.

Informative description academic discipline

"Children's therapeutic stomatology" (VII - VIII semester)

Year of study	4th course
Lectures	10
Practical training	70
Independent work of students	40
In total	120 (4 credits)

The subject of study of the academic discipline "**Children's therapeutic stomatology**" in the 4th year of study are :

- the main stages of the development of temporary and permanent teeth; influence of various factors on tooth development processes;
- methods of examination of children with dental caries and its complications; the value of additional examination methods for the diagnosis of dental caries and its complications;
- etiology, pathogenesis, classification of dental caries in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of caries of temporary and permanent teeth in children of different ages;
- modern filling materials, indications for use in the clinic of children's therapeutic dentistry; peculiarities of filling carious cavities of different classes in temporary and permanent teeth in children with different filling materials;
- etiology, pathogenesis, classification of pulpitis in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of pulpitis of temporary and permanent teeth in children of different ages, choice of treatment method and drugs;
- etiology, pathogenesis, classification of periodontitis in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of periodontitis of temporary and permanent teeth in children of different ages, choice of treatment method, medicines and materials for temporary and permanent obturation of root canals;
- etiology, pathogenesis, classification of non-carious dental lesions in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of acquired and congenital malformations of the hard tissues of teeth in children of various ages, the concept of a multidisciplinary approach to the treatment of non-carious dental lesions in children;
- etiology, pathogenesis, classification of traumatic dental lesions in children. Clinical manifestations, diagnosis, differential diagnosis and treatment of traumatic lesions of temporary and permanent teeth in children of different ages.

Interdisciplinary connections

"Children's therapeutic dentistry" as a discipline

a) is based on students' previous study of human anatomy; histology, embryology and cytology, medical biology, medical chemistry, biological and bioorganic chemistry, medical physics, microbiology, virology and immunology, children's diseases and integrates with these disciplines;

b) lays the foundations for students to study such clinical disciplines as prevention of dental diseases, children's surgical dentistry, therapeutic dentistry, orthodontics;

c) is based on the study by students of propaedeutics of the dental profile: propaedeutics of children's therapeutic dentistry, propaedeutics of therapeutic

dentistry, propaedeutics of orthopedic dentistry and is integrated with these disciplines;

d) integrates with the following clinical disciplines: prevention of dental diseases, children's surgical dentistry, orthodontics and therapeutic dentistry;

e) forms an idea of professional responsibility for the quality of caries treatment and its complications in children of different ages and the need for widespread introduction of primary prevention of dental diseases, in particular dental caries.

1. PURPOSE AND OBJECTIVES OF THE EDUCATIONAL DISCIPLINE

1.1 The purpose of teaching the educational discipline "Child therapeutic use of modern dental materials and medicines.

1.2 The tasks of studying the educational discipline "Children's therapeutic dentistry" are aimed at forming an integral, **general and professional (special) competences and achievement** of the second (master's) level of the field of knowledge 22 - "Health care" specialty 221 - "Dentistry" defined in the Standard of Higher Education of Ukraine.

1. To isolate and identify the leading clinical symptoms and syndromes in caries and its complications in temporary and permanent teeth in children according to standard methods, using the patient's history, examination data, knowledge about the person, his organs and systems, to establish a probable nosological or preliminary clinical diagnosis:

facial asymmetry;

toothache;

pain in the soft tissues of the maxillofacial area;

hyperesthesia; headache;

defects of the crown part of the tooth;

discolored teeth;

inflammatory infiltrates of tissues of the maxillofacial area;

change in the color of the skin, the mucous membrane of the oral cavity;

changes in the shape of the teeth; lymphadenopathy; dental deposits; fistula course;

restrictions in opening the mouth;

tooth mobility.

2. Collect information about the general condition of the patient, evaluate the psychomotor and physical development of the child, the condition of the maxillofacial region.

3. Prescribe and analyze (mandatory and optional) additional examination methods for children with caries and its complications in temporary i permanent teeth for differential diagnosis:

general blood test; general analysis of urine; interpretation of X-ray diagnostics of the dental and jaw apparatus; microbiological examination of oral fluid; immunological research; functional diagnostics (luminescent, etc.).

4. Determine the final clinical diagnosis, adhering to ethical and legal norms, by making a reasoned decision and logical analysis of the received subjective and objective data of clinical and additional examinations, carrying out differential diagnosis under the control of the head physician in the conditions of a medical institution :

- with caries of temporary and permanent teeth;
with diseases of the pulp of temporary and permanent teeth; with periodontitis of temporary and permanent teeth;
with traumatic injuries of temporary and permanent teeth; - with non-carious lesions of the hard tissues of the teeth.

5. Determine the type of treatment by making a reasoned decision according to existing algorithms and standard schemes:

- with caries of temporary and permanent teeth;
with diseases of the pulp of temporary and permanent teeth; with periodontitis of temporary and permanent teeth;
with traumatic injuries of temporary and permanent teeth; - with non-carious lesions of the hard tissues of the teeth.

6. To carry out treatment according to existing algorithms and standard schemes under the control of the supervising physician in the conditions of a medical institution:

- with caries of temporary and permanent teeth;
with diseases of the pulp of temporary and permanent teeth;
with periodontitis of temporary and permanent teeth;
with traumatic injuries of temporary and permanent teeth; - with non-carious lesions of the hard tissues of the teeth.

7. Perform medical dental manipulations and on the basis of a preliminary and/or final diagnosis of caries and its complications in temporary and permanent teeth in children:

- amputation of the pulp of temporary and permanent teeth;
- removal of dental layers;
- determination of acid resistance of enamel;
- sealing of fissures;
- diagnostic use of dyes;
- pulp extirpation of temporary and permanent teeth;
- electroodontology;
- local anesthesia in the treatment of caries and its complications;
- deep fluoridation of hard tissues of temporary teeth;

- application and removal of temporary fillings and hermetic dressings;
- overlaying a cofferdam;
- obturation of root canals of temporary and permanent teeth;
- filling carious cavities of temporary and permanent teeth with various filling materials;
- coating of teeth with therapeutic and preventive gels, varnishes;
- preparation and cleaning of root canals of temporary and permanent teeth;
- preparation of carious cavities of temporary and permanent teeth, taking into account the type of filling material;
- conducting professional oral hygiene;
- direct and indirect coating of the pulp;
- drawing up an algorithm for individual oral hygiene;
- grinding and polishing of seals from all types of sealing materials.

8. *To comply with the requirements of ethics, bioethics and deontology in their professional activities.*

9. *Plan and implement preventive measures to prevent the spread of dental diseases in children.*

1.3 Competencies and learning outcomes,

According to the requirements of the project Standard, the discipline ensures that students acquire *the following competencies:*

Integral and :

The ability to solve tasks and problems in the field of health care in the specialty "Dentistry" in professional activity or in the process of learning, which involves conducting research and/or implementing innovations and is characterized by the uncertainty of conditions and requirements.

General :

1. Ability to abstract thinking, search, analysis, synthesis; processing information from various sources, the basics of evidence-based medicine..
2. Ability to continuous learning.
3. Knowledge and understanding of the subject area and understanding of the profession.
4. Ability to implement knowledge in practical activities.
5. Ability to communicate orally and in writing in the national language. Ability to communicate in a foreign language.
6. Ability to effective professional and interpersonal communication and use of information and communication technologies.
7. The ability to adapt to new conditions and situations and the ability to act autonomously in them.

8. Ability to identify and solve problems.
9. Ability to work in a team, in particular interdisciplinary and international.
10. Compliance with deontological norms in professional activity.
11. The ability to implement a system of knowledge and practical skills to ensure a healthy way of life for one's own and patients.
12. The ability to self-assess one's own achievements and increase their level.
13. The ability to assess the state of the environment, to contribute to the elimination of its negative effects on health.
14. The ability to act socially responsibly and civically.
15. Ability to organize legal support and management of professional activity.
16. Leadership in the development and implementation of innovations and their use in professional activities.
17. The ability to realize one's rights and responsibilities as a member of society, to realize the need for its sustainable development, the rule of law.
18. The ability to preserve and multiply moral, cultural, scientific values i achievements of society.

Special (professional, subject):

1. The ability to collect medical information about the child and analyze clinical data for caries and its complications.
2. Ability interpret the results of laboratory and instrumental studies for the differential diagnosis of caries and its complications.
3. The ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis of caries and its complications.
4. The ability to plan and carry out measures for the prevention of dental diseases, in particular dental caries.
5. The ability to design the process of providing medical care - to determine the approaches, plan, types and principles of treatment of caries and its complications in children.
6. The ability to determine a rational diet in the treatment of caries and its complications in children.
7. The ability to determine the tactics of treatment of children with caries and its complications and concomitant somatic diseases.
8. The ability to perform medical and dental manipulations necessary for the treatment of caries and its complications in children.
9. Ability to treat caries and its complications in children.
10. The ability to organize and carry out a screening examination among children in order to determine risk groups for the development of caries.
11. The ability to assess the impact of the environment on the state of health of the population and the peculiarities of the course of caries and its complications in children.
12. Ability to maintain regulatory medical documentation.
13. Processing of state, social and medical information.
14. Ability to organize and carry out rehabilitation activities children with caries complications and dental injuries.

MATRIX OF COMPETENCES

No	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
	<i>General competences</i>				
1	Ability to think abstractly, search, analyze, synthesize, process information from various sources of evidence-based medicine.	To know the current trends in the development of the industry and the indicators characterizing them.	Be able to analyze professional information, make informed decisions, acquire up-to-date knowledge.	Establish appropriate connections to achieve goals.	To be responsible for the timely acquisition of modern knowledge.
2	Ability to continuous learning.	To know the current trends in the development of the industry, innovations that can be introduced into professional	Be able to analyze professional information that requires updating and integration of knowledge.	Establish appropriate connections to achieve goals.	Be responsible for continuous professional development with a high level of autonomy.

		activity.			
3	Knowledge and understanding of the subject area and understanding of the profession.	To know the peculiarities of the professional activity of a dentist.	To be able to qualitatively carry out professional activities that require updating and integration of knowledge.	Form a communication strategy in professional activities.	To be responsible for the quality of professional activity.
4	The ability to implement knowledge in practical activities, situations	Know the methods of implementing knowledge in solving practical tasks.	Be able to use you have professional knowledge to solve practical problems.	To establish connections with subjects of practical activity.	To be responsible for the validity of the decisions made.
5	Ability to communicate orally and in writing in the national language. Ability to communicate in a foreign language.	Know the state language, including the professional direction. Possess a foreign language at a level sufficient for professional communication.	Be able to use national and foreign languages for professional activities and communication.	Form a communication strategy in professional activities using the state language and a foreign language.	Be responsible for using the national language when communicating with patients and colleagues.
6	Ability to effective professional and interpersonal communication and use of information and communication technologies.	Have modern knowledge in the field of information and communication technologies used in professional activities.	Be able to use information and communication technologies in a professional field that requires updating and integration of knowledge.	Using information and communication technologies in professional activity.	Be responsible for continuous development of professional knowledge and skills.

7	The ability to adapt to new conditions and situations and the ability to act autonomously in them.	Know the methods of implementing knowledge in solving practical tasks of professional activity.	Be able to use you have professional knowledge for adaptation and actions in a new situation.	Establish connections with subjects of practical activity.	To be responsible for the quality of the performance of professional tasks in a new situation.
8	Ability to identify and solve problems.	Know the methods of implementing knowledge in identifying, setting and solving problems of professional activity.	Be able to use you have professional knowledge to identify and solve problems of professional activity.	Establish connections with subjects of practical activity with for the purpose of detection, formulation and solution problems of professional activity.	To be responsible for the validity of the decisions made regarding the solution problems of professional activity.
9	The ability to work in a team, in particular interdisciplinary national and international her	Know the ways of collective interaction while working in a team.	Be able to use to acquire knowledge for choosing a communication strategy during collective interaction.	Form a communication strategy in professional activities.	Be responsible for continuous professional development.
10	Compliance with deontological norms in professional activity.	Know the moral and ethical principles of a medical specialist and the rules of professional subordination.	I will use-apply the moral and ethical principles of a medical specialist and the rules of professional	adheres to to follow the moral and ethical principles of a medical specialist and the rules of professional	To bear personal responsibility for observing the moral and ethical principles of a medical specialist and the rules of professional subordination.

			subordination in practical activities.	subordination during professional activity .	
1 1	The ability to implement a system of knowledge and practical skills regarding the safety of one's own life and patients.	The ability to assess the level of danger when performing professional tasks.	To be able to carry out professional activities in compliance with the rules of safety of one's own life and patients.	To ensure high-quality performance of professional compliance activities safety rules own life and patients.	Be personally responsible for compliance with safety rules when performing professional tasks.
1 2	The ability to self-assess one's own achievements and increase their level.	Ability to evaluate and ensure quality in the performance of professional tasks.	To know the methods of evaluation of indicators of the quality of professional activity.	Be able to provide quality performance of professional work	Establish connections to ensure quality performance of works.
1 3	The ability to assess the state of the environment, to contribute to the elimination of its negative effects on the health of society.	Ability to assess the state of the environment based on information from relevant sources and its possible impact on dental health.	To be able to analyze indicators of the quality of the environment and their impact on the state of health of the population.	Ensure quality performance of professional tasks in terms of environmental protection.	To bear personal responsibility for compliance with the rules of environmental protection when performing professional tasks.
1 4	The ability to act socially responsibly and civically.	Know your social and public rights and responsibilities .	To form one's civic consciousness , to be able to act in accordance with it.	Ability to convey their public and social position	To bear responsibility for one's civic position and activities.
1 5	Ability to organize legal support and management of	Know legal provisions and the basics of management of professional	Perform professional duties in the legal field, based on	To organize one's professional activities and duties in the	To be responsible for the performance of professional duties in the legal

	professional activity.	activity.	modern approaches to the management of professional activity.	legal field, based on modern approaches to management.	field.
1 6	Leadership in the development and implementation of innovations and their use in professional activities.	Know the innovations that can be applied in the professional activity of a dentist.	Perform professional duties, use or the latest methods and technologies.	Constantly introduce innovations in practical professional activity.	To be responsible for the quality of the performance of professional tasks using the latest technologies.
1 7	The ability to realize one's rights and responsibilities as a member of society, to realize the need for its sustainable development, the rule of law.	Know your social and public rights and responsibilities as a member of society.	To form one's civic consciousness, to be able to act in accordance with it.	Ability convey their public and social position	To bear responsibility for one's civic position and activities.
1 8	Ability to preserve and multiply moral, cultural, scientific values and achievements of society.	To know the moral, cultural, scientific values and achievements of society.	To form one's civic consciousness taking into account moral, cultural, scientific values and achievements of society.	Ability convey their public and social position consciousness, taking into account moral, cultural, scientific values and achievements of society.	To bear responsibility for one's civic position and activities.
	<i>Special (professional) competences</i>				

1	Ability to collect medical information and analyze clinical data of examination of children with non-carious lesions of hard dental tissues, caries and its complications, diseases of periodontal tissues and oral mucosa.	Know dental algorithms th examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.	To be able to perform a dental examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases we are tissues of the periodontium and mucous membrane of the oral cavity.	Communicate and interact with the child's parents and the teacher during dental procedures examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.	To bear personal responsibility for the correctness of the dental examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.
2	The ability to interpret the results of laboratory and instrumental of studies used in the examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of	Know the indications for the appointment of laboratory and instrumental of studies used in the examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous	Be able to interpret laboratory and instrumental data of studies used in the examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous	Communicate and interact with colleagues and the teacher during the analysis of the results of laboratory and instrumental studies used in the examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications,	To bear personal responsibility for the correct interpretation of the results of laboratory and instrumental of studies used in the examination of children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the

	the oral cavity.	membrane of the oral cavity.	membrane of the oral cavity.	diseases of the periodontal tissues and the mucous membrane of the oral cavity.	oral cavity.
3	Ability to diagnose: determine preliminary, clinical, final, accompanying diagnoses in children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.	Know the leading clinical signs of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity. in children at different stages of their development.	Be able to determine preliminary, clinical, final, accompanying diagnoses in children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.	Communicate and interact with colleagues and the teacher during the determination of preliminary, clinical, final, concomitant diagnoses in children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.	To bear personal responsibility for the correct determination of preliminary, clinical, final, concomitant diagnoses in children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity at various stages of their development.
4	The ability to plan and carry out preventive measures in children of different ages regarding non-carious lesions of the hard tissues of the	To know modern methods of prevention of non-carious lesions of hard tissues of teeth, caries and its complications, diseases of	To be able to plan and carry out measures for the prevention of non-carious lesions of the hard tissues of the teeth, caries and its	Communicate and interact with colleagues, parents, teachers during the planning and implementation of measures	To bear personal responsibility for the correct planning and implementation of measures for the prevention of non-carious lesions of the hard tissues of the

	teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity.	periodontal tissues and oral mucosa in children of different ages.	complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	for the prevention of non-carious lesions of the hard tissues of teeth, caries and its complications, diseases of periodontal tissues and oral mucosa in children of various ages.	teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.
5	The ability to design the process of providing dental care, determine the principles of treatment of non-carious lesions of hard dental tissues, caries and its complications, diseases of periodontal tissues and oral mucosa in children of various ages.	To know modern methods of treatment of non-carious lesions of hard tissues of teeth, caries and its complications, diseases of periodontal tissues and oral mucosa in children at various stages of their development, which are based on the principles of evidence-based medicine.	Be able to design the process of providing dental care, determine the principles of treatment of non-carious lesions of hard dental tissues, caries and its complications, diseases of periodontal tissues and oral mucosa in children, based on the principles of evidence-based medicine.	Communicate and interact with colleagues and the teacher when determining the principles of treatment of non-carious lesions of hard dental tissues, caries and its complications, diseases of periodontal tissues and oral mucosa in children at various stages of their development.	Bear personal responsibility for the correctness of determining the principles of treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children at various stages of their development.
6	The ability to determine a rational diet in the treatment of	Know the basic principles of nutrition,	To be able to determine a rational diet in the treatment	Communicate and interact with both the teacher and	To bear personal responsibility for the correctness of the definition of a

	non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	which can be applied in the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	parents when determining a rational diet in the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	rational diet in the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.
7	The ability to determine the tactics of managing children with non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of periodontal tissues and the mucous membrane of the oral cavity and accompanying somatic diseases.	To know the features of the course of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children with concomitant somatic diseases - we.	To be able to perform dental manipulations in accordance with the algorithms for the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children with concomitant	Communicate and interact with parents and teacher while performing dental of manipulations for the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity	To bear personal responsibility for the correct performance of dental of manipulations for the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children with concomitant somatic diseases we.

			somatic diseases-we _	in children with concomitant somatic diseases we.	
8	The ability to perform medical and dental manipulations in the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	Know the algorithms for performing dental manipulations during the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	To be able to perform dental manipulations in accordance with the algorithms for the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	Communicate and interact with colleagues and the teacher while performing dental manipulations for the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	To bear personal responsibility for the correct performance of dental manipulations on phantoms for the treatment of non-carious lesions of hard dental tissues, caries and its complications, diseases of periodontal tissues and oral mucosa in children of different ages.
9	The ability to treat the main diseases of the organs and tissues of the oral cavity in children.	Know modern clinical guidelines and treatment protocols main diseases of the organs and tissues of the oral cavity in children.	Be able to apply modern clinical guidelines and protocols in treatment main diseases of the organs and tissues of the oral cavity	Establish connections with subjects of practical activity with for the purpose of detection, formulation and solution problems of	To be responsible for the validity of the decisions made regarding the solution problems of professional activity.

			in children.	professional activity.	
10	The ability to organize and carry out a screening examination to identify risk groups for the development of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	Know modern methods of screening examination in dentistry to identify risk groups for the development of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of periodontal tissues and oral mucosa in children of various ages.	Be able to organize and conduct screening examination to identify risk groups for the development of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of periodontal tissues and oral mucosa in children of various ages.	Establish connections with subjects of practical activity with for the purpose of detection, formulation and solution problems of professional activity.	To be responsible for the validity of the decisions made regarding the solution problems of professional activity.
11	The ability to assess the impact of the environment on the health of children.	To know the main parameters characterizing the state of the natural environment and their impact on the health of children .	To be able to analyze the parameters characterizing the state of the natural environment and their impact on the health of the children's population	Establish connections with subjects of practical activity with for the purpose of detection, formulation and solution problems of professional activity.	To be responsible for the validity of the decisions made regarding the solution problems of professional activity.
12	Ability to maintain regulatory medical documentation.	Know the forms of standard medical dental documentation.	Be able to correctly enter the necessary information in the medical	Establish connections with subjects of practical	To bear personal responsibility for the quality of medical dental documentation.

			dental documentatio n	activity.	
1 3	Processing of state, social and medical information.	Know the sources state, social and medical information.	Be able to analyze information from sources of state, social and medical information.	Establish connections with subjects of practical activity.	To be responsible for the validity of the decisions made regarding the solution problems of professional activity.
1 4	Ability to organize and carry out rehabilitation activities for children with diseases of the oral cavity.	Know the rehabilitation measures that can be used in the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of different ages.	Be able to conduct rehabilitation measures in the treatment of non-carious lesions of the hard tissues of the teeth, caries and its complications, diseases of the periodontal tissues and the mucous membrane of the oral cavity in children of various ages.	Establish connections with subjects of practical activity.	To be responsible for the validity of the decisions made regarding the solution problems of professional activity.
1 5	The ability to legally secure one's own professional activity.	Know your social and public rights and responsibilities as a dentist.	To form one's civic consciousness , to be able to act in accordance with professional rights and responsibilitie s.	Ability to defend their civil and social rights position	To bear responsibility for one's civic position and activities.

LEARNING OUTCOMES:

Integrative final program learning outcomes, the formation of which is facilitated by the educational discipline "Pediatric Therapeutic Dentistry":

- 1 . Identify and identify leading clinical symptoms according to standard methods, using data from the anamnesis and examination of the child; establish a probable nosological or preliminary clinical diagnosis of caries and its complications in temporary and permanent teeth in children.
2. Collect medical information about the general condition, evaluate the child's psychomotor and physical development; on the basis of the results of clinical and additional research methods, evaluate information regarding the diagnosis of caries and its complications in temporary and permanent teeth.
3. Prescribe and analyze additional (mandatory and optional) examination methods (radiological, functional, etc.) in children with caries and its complications for diagnosis and differential diagnosis.
4. To determine the final clinical diagnosis of caries and its complications in temporary and permanent teeth in children, observing the relevant ethical and legal norms, by making a reasoned decision and logical analysis of the received subjective and objective clinical data, additional examination, carrying out differential diagnosis under the supervision of a doctor - a manager in the conditions of a medical institution.
5. Plan and implement measures for the prevention of dental diseases among children to prevent the spread of dental caries.
6. Analyze the epidemiological situation and carry out mass and individual, general and local medical and non-medical dental caries prevention measures.
7. To determine the type of caries treatment and its complications in temporary and permanent teeth in children by making a reasoned decision according to existing algorithms and standard schemes.
- 8 Determine a rational diet in the treatment of caries and its complications in temporary and permanent teeth in children based on a preliminary or final clinical diagnosis by making a reasoned decision according to existing algorithms and standard schemes.
- 9 Determine the tactics of managing children with caries and its complications and accompanying somatic diseases by making a reasoned decision according to existing algorithms and standard schemes.
10. Carry out treatment of caries and its complications in temporary and permanent teeth in children according to existing algorithms and standard schemes under the supervision of the head physician in the conditions of a medical institution.
11. To assess the influence of the environment on the state of health of the population and the development of caries and non-carious lesions of hard tissues of temporary permanent teeth in children

12. To comply with the requirements of ethics, bioethics and deontology when varnishing caries and its complications in temporary and permanent teeth in children.

Learning outcomes for the discipline.

Y as a result of studying the educational discipline "Children's therapeutic dentistry", the student should know:

- the main stages of development of temporary and permanent teeth;
- terms of eruption and formation of roots of temporary and permanent teeth;
- modern ideas about the etiology and pathogenesis of dental caries in children;
- to analyze the prevalence and intensity of dental caries in children in terms of age and the factors influencing these indicators;
- clinical classification of dental caries and formulation of caries diagnosis; - regularities of the clinical course of caries of temporary teeth in depending on the age of the child; - peculiarities of the course of caries in permanent teeth, depending on the stage tooth development; - diagnostic and differential diagnostic signs of caries of temporary and permanent teeth in children; - treatment of caries of temporary and permanent teeth in children;
- selection of filling materials and medicines for the treatment of caries of temporary and permanent teeth in children at different age periods;
- errors and complications in the treatment of caries of temporary and permanent teeth in children, their prevention and elimination;
- classification of non-carious dental lesions in children and formulation of the diagnosis;
- clinical features of non-carious dental lesions in children and to have an idea of the need for a multidisciplinary approach to their treatment;
- anatomical and physiological features of the pulp of temporary and permanent teeth at different stages of their development;
- modern ideas about the etiology and pathogenesis of pulpitis in temporary and permanent teeth in children;
- classification of pulpitis;
- regularities of the clinical course of pulpitis in temporary and permanent teeth in children of different ages;
- diagnostic and differential diagnostic signs of pulpitis of temporary and permanent teeth in children;
- methods of treatment of pulpitis; algorithms for performing basic methods of treating pulpitis in children;
- errors and complications in the treatment of pulpitis in children, their prevention and elimination;
- anatomical and physiological features of the periodontium of temporary and permanent teeth at different stages of their development;

- modern ideas about the etiology and pathogenesis of periodontitis in temporary and permanent teeth in children;
- classification of periodontitis;
- regularities of the clinical course of periodontitis in temporary and permanent teeth in children of different ages;
- diagnostic and differential diagnostic signs of periodontitis of temporary and permanent teeth in children;
- choice of periodontitis treatment method, algorithms for performing a conservative periodontitis treatment method;
- errors and complications in the treatment of periodontitis in children, methods of their prevention and elimination;
- clinic, diagnosis and principles of treatment of traumatic lesions of temporary and permanent teeth in children.

As a result of studying the educational discipline "Children's therapeutic dentistry" the student should be able to:

- carry out diagnostics and differential diagnosis of various forms of caries of temporary teeth in children of different ages;
- carry out treatment of caries of temporary teeth in children by various methods (remineralization therapy, deep fluoridation of enamel and dentine using the ART method, preparation and filling with various filling materials);
- carry out diagnostics and differential diagnosis of various forms of caries of permanent teeth in children of different ages;
- be able to choose filling materials for the treatment of caries and non-caries dental lesions in children;
- carry out diagnostics and differential diagnosis of various forms of non-caries dental lesions in children of various ages;
- determine treatment tactics and carry out treatment of various forms of non-caries dental lesions in children of different ages.;
- carry out treatment of caries of permanent teeth in children by various methods (remineralizing therapy, deep fluoridation, preventive filling, preparation and filling with various filling materials);
- to prescribe general treatment of dental caries to children with a decompensated form of caries and accompanying somatic diseases;
- diagnose and carry out differential diagnosis of various forms of pulpitis in temporary and permanent teeth in children;
- to choose a method of treating pulpitis of a temporary or permanent tooth depending on the form of the pulpitis, the stage of tooth development and other factors;
- treat pulpitis in temporary and permanent teeth in children using various methods;
- diagnose and carry out differential diagnosis of various forms of periodontitis in temporary and permanent teeth in children;

- ## 2. INFORMATION VOLUME OF THE EDUCATIONAL DISCIPLINE

Independent work of students - 24 hours in the 7th and 16 hours in the 8th semester .

[illegible]

permanent teeth. Periods of establishment, mineralization, eruption and formation of temporary and permanent teeth in children. Determination of factors influencing the processes of tooth development in children.												
Topic #2. Caries of temporary teeth in children. Patterns of clinical manifestations and course. Diagnosis, differential diagnosis, treatment. Peculiarities of preparation and filling of carious cavities, choice of filling materials.	8.5	0.5	3			5						
Topic #3. Caries of permanent teeth in children. Patterns of clinical manifestations and course. Diagnosis, differential diagnosis, treatment Preparation and filling of carious cavities in various forms of caries. Selection of sealing materials. General treatment of caries: planning, methods.	8.5	0.5	3			5						
Topic No. 4: Errors and complications in the treatment of	6.5	0.5	3			3						

caries in children of different ages. Their prevention and elimination.												
Topic #5: No carious lesions of hard tooth tissues in children: hypoplasia, fluorosis. Etiology, clinic, diagnosis, differential diagnosis, treatment, prevention. Hereditary malformations of the hard tissues of the teeth: amelogenesis imperfecta, dentinogenesis, Stanton-Kapdepon dysplasia. Clinic, diagnosis, tactics of a pediatric dentist.	6.5	0.5	3			3						
Together according to content module 1	33	2	15			16						
<p align="center"><u>Content module 2.</u> " Pulpitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment".</p>												
Topic #1: Pulpitis of temporary teeth in children. Regularities of the clinical course in children of different ages. Clinic, diagnosis, differential diagnosis, treatment. The choice of treatment method for pulpitis in temporary teeth in children depends on the form of pulpitis and the	6	1	3			2						

stage of tooth development.												
Topic #2: Pulpitis of permanent teeth in children. Patterns of clinical manifestations in children of different ages. Clinic, diagnosis, differential diagnosis . The choice of treatment method for pulpitis in permanent teeth in children depends on the form of pulpitis and the stage of tooth development. Conservative method. Indications, execution method, efficiency control, prognosis.	4	1	3									
Topic #3: Treatment of pulpitis of permanent teeth in children. Vital and devital amputation and pulp extirpation. Indications, method of execution, choice of filling materials for root fillings.	6	1	3			2						
Topic #4 : Errors and complications in the treatment of pulpitis of temporary and permanent teeth in children. Their prevention and elimination.	4	1	3									
Topic #5 Periodontitis of	7		3			4						

Topic No. 10: Traumatic lesions of permanent teeth in children. Causes, clinic, diagnosis			3									
Topic No. 11: Peculiarities of treatment of permanent traumatic lesions teeth in children.	3		3									
Topic No. 12: Protection of medical history	9		3			6						
Topic No. 13: Difzalik	8		4			4						
Together according to content module 3	60	4	40			16						
In total	120	10	70			40						

**Thematic plan of lectures on children's therapeutic dentistry 7
SEMESTER**

No	Topic of lectures	Number of hours
1	Dental caries in children. Etiology and pathogenesis of caries. Classification. Clinic, diagnosis and treatment of caries of temporary and permanent teeth in children. Non-carious lesions of hard dental tissues in children: hypoplasia, fluorosis. Hereditary malformations of the hard tissues of the teeth: amelogenesis imperfecta, dentinogenesis, Stanton-Kapdepon dysplasia. Etiology, clinic, diagnosis, differential diagnosis, treatment, prevention.	2
2	Anatomy and physiology of the pulp of temporary and permanent teeth in children. Etiology and pathogenesis of pulpitis. Classification. Clinic, diagnosis and differential diagnosis.	2
3	Treatment of pulpitis of temporary and permanent teeth in children.	2
	In total	6

4. Thematic plan of practical classes in children's therapeutic dentistry , 7th semester

No	Topics	Hours
1	The main stages of the development of temporary and permanent teeth. Periods of establishment, mineralization, eruption and formation of temporary and permanent teeth in children. Determination of factors influencing the processes of tooth development in children.	3
2	Caries of temporary teeth in children. Patterns of clinical manifestations and course. Diagnosis, differential diagnosis, treatment. Peculiarities of preparation and filling of carious cavities, choice of filling materials.	3
3	Caries of permanent teeth in children. Patterns of clinical manifestations and course. Diagnosis, differential diagnosis, treatment Preparation and filling of carious cavities in various forms of caries. Selection of sealing materials. General treatment of caries: planning, methods.	3
4	Errors and complications in the treatment of caries in children of different ages. Their prevention and elimination.	3
5	Non-carious lesions of hard dental tissues in children: hypoplasia, fluorosis. Etiology, clinic, diagnosis, differential diagnosis, treatment, prevention. Hereditary malformations of the hard tissues of the teeth: amelogenesis imperfecta, dentinogenesis, Stanton-Kapdepon dysplasia. Clinic, diagnosis, tactics of a pediatric dentist.	3
6	Pulpitis of temporary teeth in children. Regularities of the clinical course in children of different ages. Clinic, diagnosis, differential diagnosis, treatment. The choice of treatment method for pulpitis in temporary teeth in children depends on the form of pulpitis and the stage of tooth development.	3
7	Pulpitis of permanent teeth in children. Patterns of clinical manifestations in children of different ages. Clinic, diagnosis, differential diagnosis . The choice of treatment method for pulpitis in permanent teeth in children depends on the form of pulpitis and the stage of tooth development. Conservative method. Indications, execution method, efficiency control, prognosis.	3
8	Treatment of pulpitis of permanent teeth in children. Vital and devital amputation and pulp extirpation. Indications, method of execution, choice of filling materials for root fillings.	3
9	Errors and complications in the treatment of pulpitis of temporary and permanent teeth in children. Their prevention and elimination.	3
10	Periodontitis of temporary teeth in children. Patterns of clinical course. Diagnosis, X-ray and differential diagnosis, treatment. Choice of treatment method. Peculiarities of endodontic interventions in temporary teeth. Forecast. Diff. Balance.	3
In total		30

5. Thematic plan of students' independent work, 7th semester

No	Subject of classes	Hours	Types of control
1	Independent and other study of topics that are not included in the classroom lesson plan, topics 1-4		
	1. Modern views on the mechanism of dental caries development. Development of a film about the etiopathogenesis of caries using modern computer programs.	10	Presentation film and me
	2. Restoration of temporary teeth in children using standard metal crowns and celluloid caps	3	Abstract, presentation
	3. Aesthetic restoration of permanent teeth in children using modern composite materials. Optical properties of permanent teeth in children and adolescents	3	Abstract, presentation
	4. Application of modern endodontic techniques in the treatment of caries complications in temporary and permanent teeth in children. Machine and manual techniques, ultrasonic and laser treatment of root canals	4	Abstract, presentation
2	Preparation for Dyfzalik	4	Question for credit
	In total	24	

7. Individual tasks (histories of diseases, forensic medical acts, acts toxicological studies, course and diploma, master's theses) **no provided for**

8. Thematic plan of lectures on children's therapeutic dentistry 8 SEMESTER

No	Topic of lectures	Hours
1	Anatomical and histological structure and functions of the periodontium in children at different age periods. Etiology and pathogenesis of periodontitis. Classification. Clinic, diagnosis and differential diagnosis of periodontal disease in children.	2
2	Periodontal treatment of temporary and permanent teeth in children.	2
	In total	4

9. Thematic plan of practical classes in children's therapeutic dentistry , 8th semester

No	Topic	Hours
1	Periodontitis of temporary teeth in children. The effect of periodontitis of a temporary tooth on the beginning of a permanent tooth	3
2	X-ray diagnosis of dental caries and its complications in children. Limits of conservative treatment temporary teeth with periodontitis.	3
3	Choice of treatment method for periodontitis of temporary teeth. Peculiarities of endodontic interventions during treatment periodontitis in temporary teeth. Forecast.	3
4	Errors and complications in endodontic treatment temporary teeth in children. Their prevention and elimination	3
5	Periodontitis of permanent teeth in children. Regularities clinical course. Diagnostics, X-ray and differential diagnosis.	3
6	Peculiarities of endodontic interventions in permanent teeth with an unformed root. Forecast.	3
7	Peculiarities of endodontic interventions in permanent teeth with a formed root. Forecast.	3
8	Traumatic lesions of temporary teeth in children. Causes, clinic, diagnosis	3
9	Features of treatment traumatic lesions of temporary teeth in children	3
10	Traumatic lesions of permanent teeth in children. Causes, clinic, diagnosis	3
11	Features of treatment of permanent traumatic lesions teeth in children.	3
12	Protection of medical history	3
13	Test	4
	In total	40

10. Thematic plan of students' independent work , 8th semester

No	Subject of classes	Hours	Types of control
1	Independent and other processing of topics that are not included in the classroom lesson plan, topics 1-2	6	
	1. Filling of root canals of permanent teeth in children using heated and thermoplasticized gutta-percha.	3	Abstract, presentation
	2. Application of Prorut MTA materials, bioceramics in endodontic interventions in permanent teeth with an unformed root.	3	Abstract, presentation

2	Writing medical history	6	
3	Preparation for Dyfzalik	4	Question for credit
	In total	16	

LIST OF THEORETICAL QUESTIONS

to prepare students for the examination in the discipline "Children's therapeutic dentistry" MODULE: " Caries, non-carious lesions, complications of caries of temporary and permanent teeth in children: diagnosis, treatment "
Content module #1. *Damage to the hard tissues of temporary and permanent teeth in children:*

caries, enamel hypoplasia, fluorosis, hereditary malformations: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment."

1. Tooth development. Sources of tooth tissue development in embryogenesis. Mechanism of formation of dentin and enamel.
2. Stages of development of temporary teeth.
3. Stages of development of permanent teeth.
4. Timing of eruption and formation of roots of temporary teeth. Signs of physiological teething.
5. Timing of eruption and root formation of permanent teeth.
6. X-ray stages of formation of the root of a permanent tooth. Their characteristics.
7. Types of root resorption of temporary teeth according to T. F. Vinogradova. Their X-ray characteristics.
8. Anatomical structure of temporary teeth. Histological structure of hard tissues of temporary teeth.
9. Anatomical structure of permanent teeth in children. Anatomical and histological features of the structure of permanent teeth with an unformed root.
10. Stages of carious cavity preparation. Preparation tools and their selection. Peculiarities of preparation of carious cavities of classes I-U in temporary and permanent teeth depending on the type of filling material.
11. Preparation and filling of carious cavities of the I class in temporary and permanent teeth in children.
12. Preparation and filling of carious cavities of the II class in temporary and permanent teeth in children. Restoring the contact point.
13. Preparation and filling of carious cavities of the III class in temporary and permanent teeth in children.
14. Preparation and filling of IV class carious cavities in temporary and permanent teeth in children.
15. Preparation and filling of V class carious cavities in temporary and permanent teeth in children.
16. Classification of sealing materials. Selection of dental materials for the treatment of caries in permanent teeth in children.

17. Zinc-phosphate, silicate and silico-phosphate cements. Composition, main physicochemical properties, indications for use in temporary and permanent teeth. Cooking and sealing techniques.
18. Silver amalgam. Composition, main physicochemical properties, indications for use in temporary and permanent teeth. Cooking and sealing techniques.
19. Glass ionomer cements. Composition, main physicochemical properties, indications for use in temporary and permanent teeth in children. Cooking and sealing techniques.
20. Composite materials of chemical hardening. Types, main physicochemical properties, indications for use in temporary and permanent teeth in children. Cooking and sealing techniques.
21. Photopolymer composite materials. Types, main physicochemical properties, indications for use in temporary and permanent teeth in children. Filling technique. Stages of filling permanent teeth in children.
22. Compomers. Basic physical and chemical properties, indications for use in temporary and permanent teeth in children. Cooking and sealing techniques.
23. Etiology and pathogenesis of dental caries. General and local cariogenic factors.
24. Dental plaque. Its structure, formation mechanisms, impact on tooth enamel.
25. Tooth enamel. Its age-related features, the relationship between enamel structure and clinical manifestations of dental caries in children.
26. Mechanism of enamel demineralization. Pathomorphological changes in enamel with acute initial caries.
27. Pathomorphological changes in dentin caused by carious lesions.
28. Classification of dental caries. Evaluation of the activity of the carious process in children according to T. F. Vinogradova.
29. Clinic, diagnosis and differential diagnosis of caries of temporary teeth at the stage of root formation.
30. Clinic, diagnosis and differential diagnosis of caries of temporary teeth at the stage of the formed root.
31. Clinic, diagnosis and differential diagnosis of caries of temporary teeth at the stage of root resorption.
32. Impregnation method of caries treatment of temporary teeth. Indications, method of execution. Mechanism of action of silver nitrate on hard tissues of teeth.
33. Treatment of caries of temporary teeth by preparation and filling. Modern techniques of preparation of temporary teeth (including ART-methodology, method of chemical-mechanical removal of carious dentin).
34. Modern filling materials used in the treatment of caries of temporary teeth. Their choice depends on the stage of tooth development.
35. Clinic, diagnosis and differential diagnosis of caries of permanent teeth at the stage of an unformed root.
36. Clinic, diagnosis, differential diagnosis and treatment of acute initial caries of permanent teeth in children. Clinic, diagnosis and differential diagnosis and treatment of superficial caries of permanent teeth in children.
37. Clinic, diagnosis and differential diagnosis and treatment of medium caries of permanent teeth in children.

38. Clinic, diagnosis and differential diagnosis and treatment of deep caries of permanent teeth in children.
39. Medical and insulating pads used in the treatment of dental caries in children. Types, properties, indications for use.
40. Differential diagnosis of caries and its complications in permanent teeth in children.
41. Treatment of acute initial caries of permanent teeth in children (remineralizing therapy, deep fluoridation). Methodology, medicinal products, mechanism of their action. Performance criteria.
42. The choice of filling materials in the treatment of caries of permanent teeth in children in different age periods.
43. Treatment of acute deep caries in temporary and permanent teeth in children. Methodology, choice of drugs, mechanism of their action.
44. Decompensated form of dental caries in children. Causes of development, diagnosis, tactics of a pediatric dentist. Treatment plan.
45. General treatment of dental caries in children. Indications for use, characteristics of the drugs used.
46. Preventive filling in the treatment of caries of permanent teeth in children. Methodology and dental materials used.
47. Errors and complications in the treatment of dental caries in children. Their prevention and elimination.
48. Classification of non-carious lesions of teeth according to M. I. Groshikov, T. F. Vinogradova.
49. Systemic enamel hypoplasia. Reasons for development. Clinic, diagnosis, differential diagnosis, treatment.
50. Local enamel hypoplasia. Reasons for development. Clinic, diagnosis, differential diagnosis, treatment and prevention.
51. Fluorosis. Reasons for development. Classification of fluorosis. Characteristics of the main clinical forms of fluorosis. Treatment and prevention.
52. Hereditary defects in the development of hard tissues of the teeth: imperfect amelogenesis, imperfect dentinogenesis, Stainton-Kapdepon syndrome. Clinic, diagnosis, treatment tactics.
53. Differential diagnosis of initial forms of caries, hypoplasia and fluorosis of permanent teeth in children.

Content module #2. " *Pulpitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention*".

1. Development and anatomical and histological structure of the tooth pulp.
2. Morpho-functional features of the pulp structure of temporary and permanent teeth depending on the stage of tooth development.
3. Classification of pulpitis. Patterns of the course of pulpitis of temporary and permanent teeth depending on the stage of tooth development.
4. Etiology and pathogenesis of pulpitis in children.
5. Features of the course of acute forms of pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, principles of treatment.
6. Chronic fibrous pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, treatment.

7. Chronic gangrenous pulpitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
8. Basic methods of treatment of pulpitis in children. The choice of the method of treatment of pulpitis in temporary and permanent teeth.
9. Devital amputation in the treatment of pulpitis of temporary teeth in children. Indications, method of execution. Mechanism of action of paraformaldehyde paste. Characteristics and mechanism of action of the means used to cover the root pulp.
10. Devital extirpation in the treatment of pulpitis of temporary teeth in children. Indications, method of execution. Selection of material for root filling.
11. Pulp hyperemia of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
12. Acute limited pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
13. Acute diffuse pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
14. Acute purulent pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
15. Acute traumatic pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
16. Chronic fibrous pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
17. Chronic hypertrophic pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
18. Chronic gangrenous pulpitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
19. Pulpitis complicated by periodontitis in children. Clinic, diagnosis, differential diagnosis, treatment.
20. Biological method of treatment of pulpitis of permanent teeth in children. Indications, method of execution, used medicinal products.
21. Vital amputation in the treatment of pulpitis of permanent teeth in children. Indications, execution method, efficiency criteria. Groups of drugs used in the method.
22. The method of welcome extirpation in the treatment of pulpitis of permanent teeth in children. Indications, method of execution, choice of means and method of pulp analgesia.
23. Devital amputation in the treatment of pulpitis of permanent teeth with an unformed root in children. Indications, method of execution. The choice of devitalizing agents, the mechanism of their action.
24. Devital extirpation, in the treatment of pulpitis of permanent teeth in children. Indications, method of execution. Selection of materials for root filling depending on the stage of root formation.
25. Errors and complications in the treatment of pulpitis of temporary teeth in children. Their prevention and elimination.
26. Errors and complications in the treatment of pulpitis of permanent teeth in children. Their prevention and elimination.

Content module #3. *Periodontitis of temporary and permanent teeth in children: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention. Acute dental injury in children"*

1. Development, structure and functions of the periodontium. The structure of the periodontium in temporary and permanent teeth with an unformed root.
2. Growth zone. Its structure, X-ray characteristics. Differential diagnosis with chronic periodontitis.
3. Etiology and pathogenesis of periodontitis of temporary and permanent teeth in children.
4. Classification of periodontitis. Patterns of the course of periodontitis depending on the period of development of temporary and permanent teeth.
5. Chronic granulating periodontitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, choice of treatment method.
6. Exacerbation of chronic granulating periodontitis of temporary teeth in children. Clinic, diagnosis, differential diagnosis, choice of treatment method.
7. Complications of chronic periodontitis of a temporary tooth, their radiological characteristics.
8. Acute serous periodontitis of permanent teeth in children. Etiology, clinic, diagnosis, differential diagnosis, treatment.
9. Acute purulent periodontitis of permanent teeth in children. Etiology, clinic, diagnosis, differential diagnosis, treatment.
10. Acute toxic periodontitis. Causes of occurrence. Clinic, diagnosis, differential diagnosis, treatment.
11. Exacerbation of chronic periodontitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
12. Chronic granulating periodontitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
13. Chronic granulomatous periodontitis of permanent teeth in children. Clinic, diagnosis, differential diagnosis, treatment.
14. Chronic periodontitis in permanent teeth with incomplete root formation. Clinic, diagnosis, differential diagnosis and principles of treatment.
15. X-ray diagnosis and differential diagnosis of periodontitis of temporary and permanent teeth in children.
16. Differential diagnosis of caries and its complications in children in permanent teeth with an unformed root.
17. The choice of the method of treatment of periodontitis of temporary teeth in children. Indications and contraindications to the conservative method of treatment.
18. Treatment of chronic periodontitis of temporary teeth in children. Peculiarities of endodontic technique in temporary teeth.
19. Treatment of exacerbation of chronic periodontitis in temporary teeth.
20. Modern endodontic tools. Its types, purpose, rules of use.
21. Modern endodontic techniques of instrumental treatment of root canals (standard, crowdown, step-back, balanced forces). Peculiarities of endodontic interventions in permanent teeth with an unformed root.
22. Characteristics of means for medicinal treatment of root canals in the treatment of periodontitis. Indications for their selection. Mechanism of action.

23. Treatment of chronic periodontitis in permanent teeth with incomplete root formation. Methodology, efficiency control, forecast.
24. Classification of materials for root fillings. The main requirements for them. Indications for selection in the clinic of children's therapeutic dentistry.
25. Endodontic sealants and gutta-percha. Types, properties, indications for use. Peculiarities of filling root canals in permanent teeth with an unformed root in children.
26. The method of using calcium hydroxide preparations in the treatment of chronic periodontitis in permanent teeth with incomplete root formation.
27. Treatment of exacerbation of chronic periodontitis of permanent teeth in children.
28. Errors and complications in the treatment of periodontitis of temporary teeth in children. Their prevention and elimination.
29. Errors and complications in the treatment of periodontitis of permanent teeth in children. Their prevention and elimination.
30. Classification of traumatic dental injuries (according to WHO).
31. Trauma of temporary teeth in children. Clinic, diagnosis, treatment tactics. Complications after trauma to temporary teeth.
32. Uncomplicated fracture of the crown part of a permanent tooth within enamel and dentin. Clinic, diagnosis, treatment tactics.
33. Complicated fracture of the crown part of a permanent tooth with exposure of the pulp. Clinic, diagnosis, treatment tactics.
34. Fracture of the root of a permanent tooth. Clinic, diagnosis, treatment tactics.
35. Concussion, subluxation, dislocation of a permanent tooth. Clinic, diagnosis, treatment tactics.

11. TEACHING METHODS

The educational process is organized on a credit-transfer basis

system

Types of educational activities of students according to the curriculum are:

- a) lectures;
- b) practical classes;
- c) independent work of students (SRS);
- d) individual tasks (IDRS)

Thematic plans of lectures, practical classes, SRS and IDRS ensure the implementation in the educational process of all topics included in the educational discipline "Pediatric Therapeutic Dentistry" * (4th year of study).

The topics **of the lecture course (5 topics)** reveal the most important problematic issues of the relevant sections of the discipline "Children's therapeutic dentistry".

The duration of **practical classes** is **3 academic hours (135 min.) at 7 semester and 3 academic hours (135 min.) in the 8th semester.**

Practical classes are conducted according to the tape principle, are held in classrooms (phantom classrooms) and clinical offices of the department

Methods of organizing practical classes in the educational discipline "Children's therapeutic dentistry" (*4th year of study, 7th semester*) provides for:

1. Control of the student's SRS during preparation for the topic of the current practical lesson by checking the student's written performance in "Work notebooks" of relevant tasks - **15 minutes**.

2. Test control (*level $\alpha-2$*) initial level of knowledge and determining the degree of readiness of students for the lesson - **10 minutes** .

3. Individual oral survey of students, clarification of individual questions of the topic of the current lesson, answers to students' questions - **30 minutes** .

4. For **55 minutes, during** the reception of the patient, students independently work out certain dental manipulations related to the treatment of caries and its complications in temporary and permanent teeth in children. The teacher monitors the work of the students, gives explanations, emphasizes features of dental interventions in teeth whose roots are not formed or resorbed.

5. Control of the final level of students' knowledge - **15 minutes** . It is conducted in the form of solving test tasks (*level $\alpha-3$*), individual oral survey, solving situational problems.

Methods of organizing practical classes in the educational discipline "Children's therapeutic dentistry" (*4th year of study, 8th semester*) provides

Control of the student's S.S during preparation for the topic of the current practical lesson by checking the student's written performance in "Work notebooks" of relevant tasks - **15 minutes**.

1. Test control (*level $\alpha-2$*) initial level of knowledge and determination of students' readiness for class - **20 minutes** .

2. Individual oral survey of students, clarification of individual questions of the topic of the current lesson, answers to students' questions - **30 minutes** .

3. For **55 minutes, during the reception of the patient**, students independently work out certain dental manipulations related to the treatment of caries and its complications in temporary and permanent teeth in children. The teacher monitors the work of the students, gives explanations, emphasizes features dental interventions in teeth whose roots are not formed or dissolve

5. Control of the final level of students' knowledge - **15 minutes** . It is held in in the [REDACTED] form solution of test tasks (*level $\alpha-3$*), individual oral surveys, solving situational problems.

At the end of the practical lesson, the teacher summarizes it, gives the students tasks for independent work, points out key questions of the next topic and offers a list of recommended literature for independent study .

To implement the above, at the first lesson, each student is given a detailed **work plan during the study of the discipline** , as well as the conditions for its implementation are provided. This plan includes:

- a list of theoretical knowledge of the discipline that the student must master;
- the list of practical skills that each student must perform during the study of Module 1 and the algorithms for their implementation;

"Workbook" for the student's independent work (SRS) in preparation for practical classes, in which 5-6 tasks for each topic should be completed in writing.

Independent work of students (S.S) involves:

- preparation for practical classes;
- independent study of topics that are not part of the classroom lesson plan, but are controlled and evaluated by the teacher during the final control;
- individual research work (IDRS), participation in the work of a scientific student group, scientific and practical student conferences, etc.;
- writing medical history.

12. Control methods

Control of knowledge on the study of the discipline is carried out in the form of:

current control , which is carried out at each practical session and gives it will be possible to reveal the level of assimilation of individual elements of the educational material. During the evaluation of the mastery of each topic for the current

educational activity, the student is given grades on a 4-point (traditional) scale, taking into account the approved evaluation criteria for the relevant discipline. At the same time, all types of work provided by the educational program are taken into account. The student must receive a grade in each topic. Forms of assessment of current educational activities are standardized and include control of theoretical and practical training.

At the end of the semester, the grades given according to the traditional scale are converted into points.

Methods of evaluating current educational activities:

Theoretical knowledge:

1. Individual oral survey of theoretical material or theoretical interview.
2. Written theoretical control.

Practical skills and abilities:

1. Individual control of practical skills and their results.

Methods of controlling learning of topics. Theoretical knowledge:

1. Individual oral survey.
2. Written solution of test tasks or computer test control.
3. Written theoretical control.

Practical skills and abilities:

1. Individual control of practical skills and their results. *Theoretical knowledge:*
 1. Written solution of test tasks of the 2nd level or computer test control.
2. Individual oral survey.

Practical skills and abilities:

1. Individual control of practical skills and their results.

Price criteria :

- **"excellent"** - awarded by a student who has full knowledge of the theoretical learning material on the topic, can use the acquired knowledge to answer questions, and justifies his answer; mastered the practical skills provided by the subject of the lesson; solves test tasks on the topic and explains the course of their solution;
- **"good"** - is awarded to a student who fully masters the theoretical educational material on the topic, can use the acquired knowledge to answer questions, but with some difficulties justifies his answer; mastered the practical skills provided for by the relevant class; can solve test tasks on the topic and explain the process of solving them;

- **"satisfactory"** - received by a student who does not have sufficient knowledge of the theoretical learning material on the topic, has difficulty using the acquired knowledge, cannot justify his answer; did not sufficiently master the practical skills provided for in the relevant class; solves test tasks on the topic with difficulty;
- **"unsatisfactory"** - received by a student who does not have theoretical educational material on the topic, cannot use the acquired knowledge to answer questions and justify his answer; did not master all the practical skills provided for in the relevant class; cannot solve and explain the solution of test tasks on the topic.

For disciplines, the form of final control is a test :

The maximum number of points that a student can score for the current one educational activity per semester for admission to the exam is 120 points. *The minimum number of points* that a student must score for the current term educational activity per semester for admission to the exam is 72 points.

The number of points is calculated based on the received points a student of grades according to the traditional scale during the study of the discipline, For convenience, a calculation table is provided on a 120 -point scale:

Recalculation of the average grade for the current activity into a multi-point scale for disciplines ending with a diploma

The average score of the current academic performance on a traditional 4-point scale	Points for current performance after GPA conversion
2.00	0
2.05	49
2.10	50
2.15	52
2.20	53
2.25	54
2.30	55
2.35	56
2.40	58
2.45	59
2.50	60
2.55	61
2.60	62
2.65	64
2.70	65
2.75	66
2.80	67
2.85	69

2.90	70
2.95	71
3.00	72
3.05	73
3.10	74
3.15	75
3.20	77
3.25	78
3.30	79
3.35	80
3.40	82
3.45	83
3.50	84
3.55	85
3.60	86
3.65	87
3.70	89
3.75	90
3.80	92
3.85	93
3.90	94
3.95	95
4.00	96
4.05	97
4.10	98
4.15	99
4.20	101
4.25	102
4.30	103
4.35	104
4.40	106
4.45	107
4.50	108
4.55	109
4.60	110
4.65	111
4.70	113
4.75	114
4.80	115
4.85	116
4.90	118

4.95	119
5.00	120

Independent work of students is evaluated during the current control of the topic in the corresponding session.

The maximum number of points that a student can score when taking the exam differential is 80.

The minimum number of points when compiling a differential score is 50.

The grade for the Difzal ik corresponds to the scale:

grade "5" - 80-71 points

grade "4" - 70-61 points

grade "3" - 60-50 points

The grade for the discipline consists of the sum of the points for the current performance and the exam. The obtained points correspond to the fixed rating scale according to the "Instructions for evaluating exams and differential credits", adopted by the decision of the Department of Dentistry of the International Academy of Ecology and Medicine, Protocol No. 1 dated August 30, 2017.

Rating scale: national and ECTS

The sum of points for all types of educational activities	Evaluation on a national scale	
	for an exam, course project (work), practice	for credit
180-200 A	perfectly	counted
160-179 B	fine	
150-159 C		
130-149 D	satisfactorily	
122-129 E		
FX	unsatisfactory with the possibility of reassembly	not counted with the possibility of retaking
F	unsatisfactory with mandatory repeated study of the discipline	not enrolled with mandatory repeated study of the discipline

16. RECOMMENDED LITERATURE

Basic literature

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