MINISTRY OF HEALTH OF UKRAINE
LVIV NATIONAL MEDICAL UNIVERSITYNAMED AFTER DANYLO HALYTSKY

DEPARTMENT OF PEDIATRIC DENTISTRY

"APPROVED"
Vice-rector
on Scientific and Pedagogical work
Assoc prof. I.I. Solonynko

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"____" _____ 2023

WORK PROGRAM

MANUFACTURING MEDICAL PRACTICE FROM PEDIATRIC DENTISTRY

individual profile course
"Dental Surgery"
В.Б 2.8
training of specialists of the second (master's) level of higher education,
qualification of educational "Master of Dentistry"
qualification of professional "Dentist"
field of knowledge 22 "Health"
specialty 221 "Dentistry"

Faculty of Dentistry, 5th year

“Approved”
on methodical meeting of
Department of Pediatric Dentistry
Protocol №6
from "31"May 2023
Head of Department

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Assoc.prof. Kolesnichenko O.V.

"Approved"
of profiled methodical commission
of dental disciplines
Protocol № 2
from "16" June 2023
Head of methodical commission

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Professor Vares Y. E.

Lviv 2023

PROGRAM DEVELOPERS:

Ivanchyshyn VV, Candidate of Medical Sciences, Associate Professor of the Department of Pediatric Dentistry

Fur M.B., Candidate of Medical Sciences, Associate Professor of the Department of Pediatric Dentistry

Reviewed by: N. L. Chukhray. Prof., PhD, Head of the Department of Orthodontics

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The working program of studying the discipline **"Industrial medical practice of choice in pediatric dentistry"** (individual profile course in **Dental Surgery**) for students of the 5th year of the dental faculty is made in accordance with the Standard of higher education of Ukraine of the second (master's) level

areas of knowledge 22 Health
specialty 221 Dentistry
educational program of master of dentistry

Description of the discipline (abstract)

Pediatric dentistry is a complex and multi-component specialty, where a specialist acting as a dentist must also think like a pediatrician. The training and activities of such a specialist require a lot of strength, skill, time and energy. Every specialist who works with children should know the features of the antenatal and postnatal periods of development and formation of hard tissues of teeth, jaw bones, soft tissues of the face, as well as how these processes affect the health of the mother and child, various negative factors that can lead to the emergence and development of dental diseases. The pediatric dentist must also know the features of clinical manifestations and patterns of pathological processes in the maxillofacial area in children, as well as methods of treatment and prevention of dental diseases at different ages.

Based on the knowledge gained by students in basic and specialized departments, it is necessary to teach students the features of the clinic, diagnosis and treatment of dental diseases in children of different ages and to prepare a doctor who can work in medical and preventive dental institutions.

Oriented structured plan of industrial medical practice for students of the 5th year of the dental faculty

The structure of production practice	Total		Number of hours		Year of study / semester	type of control
		ECTS credits	Practical	CPC		
"Industrial medical practice of choice in pediatric dentistry" (individual profile course in in Dental Surgery)	105 hours.	3,5	54	51	5 / IX	Differential credit

- **The subject of study of the discipline "Industrial medical practice of choice in pediatric dentistry" (individual profile course in Dental Surgery) are:**
- - methods of examination of children with dental caries and its complications; the importance of additional examination methods for the diagnosis of dental caries and its complications;
- - 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 pediatric therapeutic dentistry; features of filling of carious cavities of different classes in temporary and permanent teeth in children with different filling materials;
- - clinical manifestations, diagnosis, differential diagnosis and treatment of pulpitis of temporary and permanent teeth in children of different ages, the choice of treatment and drugs;
- - clinical manifestations, diagnosis, differential diagnosis and treatment of periodontitis of temporary and permanent teeth in children of different ages, the choice of treatment, drugs and materials for temporary and permanent obstruction of root canals;
- - clinical manifestations, diagnosis, differential diagnosis and treatment of acquired and congenital malformations of dental hard tissues in children of different ages, the concept of a multidisciplinary approach to the treatment of non-carious dental lesions in children;

- - clinical manifestations, diagnosis, differential diagnosis and treatment of traumatic lesions of temporary and permanent teeth in children of different ages;
- - clinical manifestations, diagnosis, differential diagnosis and treatment of periodontal diseases in children of different ages;
- - clinical manifestations, diagnosis, differential diagnosis and treatment of diseases of the oral mucosa in children of different ages; choice of drugs;
- - organizational principles of medical examination of children by a dentist: purpose, tasks, prevention measures in the system of dental medical examination; efficiency control;
- - study of the method of local anesthesia of MFA tissues in children;
- - surgical intervention on the tissues of the thyroid gland in subperiosteal infiltrates and abscesses, in pericoronaritis;
- - typical and atypical removal of temporary and permanent teeth;
- - surgical treatment of traumatic injuries of the soft tissues of the maxillofacial area with various types of injuries;
- - primary care for traumatic injuries of teeth and jaws, dislocations of the lower jaw.

Interdisciplinary links:

"Industrial medical practice of choice in pediatric dentistry" (individual profile course in **Dental Surgery**) as a discipline:

a) is based on previous study by students of human anatomy, histology, embryology and cytology, medical biology, medical chemistry, biological and bioorganic chemistry, microbiology, virology and immunology;

b) is based on the study by students of propaedeutic disciplines of therapeutic profile: propaedeutics of therapeutic dentistry, propaedeutics of pediatric therapeutic dentistry and orthodontics and integrates with these disciplines;

c) lays the foundations for students to study such clinical disciplines as pediatric therapeutic dentistry, therapeutic dentistry and orthodontics;

d) integrates with the following clinical disciplines: pediatric therapeutic dentistry, therapeutic dentistry, orthodontics.

Industrial medical practice (total 9 working days: 5 days - pediatric therapeutic dentistry (30 hours of practical classes), 4 days - pediatric surgical dentistry (24 hours of practical classes); classroom hours are determined by the current regulations on industrial practice) is held at the profile department .

The internship provides students with the acquisition of practical skills according to the educational-professional training program (OPP) and educational-qualification characteristics (OKH), which is controlled by teachers of the profile department. The current educational activity of students is evaluated by the heads of teachers of practice from the institution of higher education.

Differential credit for industrial medical practice in pediatric dentistry takes place on the last day of practice after its completion. The control is carried out by teachers of the Department of Pediatric Dentistry.

The purpose and objectives of the discipline

1.1. The purpose of the "Optional Industrial Practice in Pediatric Dentistry" (individual profile course in **Dental Surgery**) for 5th year students of the Faculty of Dentistry is to master the skills: diagnosis and treatment of caries and its complications, periodontal tissues in children of different ages; clinical manifestations, methods of diagnosis and differential diagnosis, methods of treatment, selection and application of modern dental materials and medicines; diagnosis and treatment of inflammatory diseases of the thyroid gland, the provision of emergency care and is to consolidate practical skills within the goals set by the educational and professional training program for the specialty "Dentistry".

On the basis of the ultimate goals for the differential test, specific goals are formulated in the form of certain skills (actions), target tasks that ensure the achievement of the ultimate goal of the production of medical practice.

1.2. The main tasks of studying the discipline are:

1. Analyze the results of examination of the patient in the clinic of pediatric therapeutic dentistry.
2. Analyze the results of examination of the patient in the clinic of pediatric surgical dentistry.
3. To determine the tactics of management at the dental reception of the child with somatic diseases that require special tactics of the patient.
4. To determine the nature and principles of treatment of diseases in pediatric therapeutic dentistry.
5. Identify the leading syndromes and symptoms in pediatric therapeutic dentistry.
6. Identify the leading syndromes and symptoms in pediatric surgical dentistry.
7. To determine the nature and principles of treatment in the clinic of pediatric surgical dentistry.
8. Use the principles of prevention of dental diseases and their complications in pediatric surgical dentistry.
9. Detect congenital and acquired defects of the maxillofacial area in the clinic of pediatric surgical dentistry.
10. Identify different clinical variants and complications of the most common diseases in the clinic of pediatric therapeutic dentistry.
11. Identify different clinical variants and complications of the most common diseases in the pediatric surgical dentistry clinic.
12. Demonstrate the ability to maintain accounting and reporting documentation in dentistry.
13. 13. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of pediatric therapeutic dentistry.
14. 14. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of pediatric surgical dentistry.
15. Diagnose emergencies in the clinic of pediatric therapeutic dentistry.
16. Diagnose emergencies in the pediatric surgical dentistry clinic.
17. Provide the necessary emergency care in the pediatric surgical dentistry clinic.
18. Provide the necessary emergency care in case of emergency in the clinic of pediatric therapeutic dentistry.
19. To substantiate and formulate the preliminary clinical diagnosis in the clinic of pediatric therapeutic dentistry.
20. To substantiate and formulate the syndrome diagnosis in the clinic of pediatric therapeutic dentistry.
21. To substantiate and formulate a syndrome diagnosis in the clinic of pediatric surgical dentistry.
22. Plan the examination of a dental patient, interpret the results of laboratory and instrumental studies in the most common diseases of the internal organs and their complications.
23. Carry out differential diagnosis of diseases in pediatric therapeutic dentistry.
24. Carry out differential diagnosis of diseases in the clinic of pediatric surgical dentistry.
25. To examine the patient in the clinic of pediatric therapeutic dentistry.
26. Conduct an examination of the patient in the pediatric surgical dentistry clinic.
27. Carry out primary and secondary prevention of the most common dental diseases in children of different ages.
28. To determine the final clinical diagnosis of major diseases in the clinic of pediatric therapeutic dentistry.
29. To determine the final clinical diagnosis of major diseases in the clinic of pediatric surgical dentistry.

1.3. **Competences and learning outcomes**, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

In accordance with the requirements of the Standard, the discipline ensures the acquisition of competencies by students*:*

integral:

Ability to solve complex problems and problems in the field of health care in the specialty "Dentistry" in a professional activity or in the learning process, which involves research and / or innovation and is characterized by uncertainty of conditions and requirements.

common:

1. Ability to abstract thinking, analysis and synthesis.
2. Knowledge and understanding of the subject area and understanding of professional activity.
3. Ability to apply knowledge in practical activities.
4. Ability to communicate in the national language both orally and in writing.
5. Ability to communicate in English.
6. Skills in using information and communication technologies.
7. Ability to search, process and analyze information from various sources.
8. Ability to adapt and act in a new situation.
9. Ability to identify, pose and solve problems.
10. Ability to be critical and self-critical.
11. Ability to work in a team.
12. Efforts to preserve the environment.
13. The ability to act socially responsibly and consciously.
14. The ability to realize one's rights and responsibilities as a member of society, to realize the values of civil society and the need for its sustainable development, the rule of law.
15. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies, to use various types and forms of motor activities for active recreation and leading a healthy lifestyle.

special (professional, subject):

1. Ability to collect medical information about the patient and analyze clinical data.
2. Ability to interpret the results of laboratory and instrumental research.
3. Ability to diagnose: determine preliminary, clinical, final, accompanying diagnosis, emergency conditions.
4. Ability to plan and carry out measures for the prevention of diseases of the organs and tissues of the oral cavity and maxillofacial region.
5. Ability to design the process of providing medical care: to determine the approaches, plan, types and principles of treatment of diseases of the organs and tissues of the oral cavity and maxillofacial area.
6. The ability to determine a rational regimen of work, rest, and diet in patients in the treatment of diseases of the organs and tissues of the oral cavity and maxillofacial area.
7. The ability to determine the management tactics of patients with diseases of the organs and tissues of the oral cavity and maxillofacial region with concomitant somatic diseases.
8. Ability to perform medical and dental manipulations.
9. The ability to treat the main diseases of the organs and tissues of the oral cavity and maxillofacial area.
10. Ability to organize and carry out medical evacuation measures.
11. Ability to determine tactics, methods and provision of emergency medical assistance.
12. Ability to organize and conduct a screening examination in dentistry.
13. The ability to assess the impact of the environment on the state of health of the population (individual, family, population).
14. Ability to maintain normative medical documentation.
15. Processing of state, social and medical information.
16. Ability to organize and carry out rehabilitation measures and care for patients with diseases of the oral cavity and MFA.
17. The ability to legally support one's own professional activity.
18. The ability to provide pre-medical care according to the protocols of tactical medicine

MATRIX OF COMPETENCES

Software competencies	
General competences	
ЗК 1 Ability to abstract thinking, analysis and synthesis.	+

ЗК 2 Ability to communicate in the national language both orally and in writing.	+
ЗК 3 Ability to apply knowledge in practical activities.	+
ЗК 4 Ability to communicate in the national language both orally and in writing.	+
ЗК 5 Ability to communicate in English.	+
ЗК 6 Skills in using information and communication technologies.	+
ЗК 7 Ability to search, process and analyze information from various sources.	+
ЗК 8 Ability to adapt and act in a new situation.	+
ЗК 9 Ability to identify, pose and solve problems.	+
ЗК 10 The ability to be critical and self-critical.	+
ЗК 11 Ability to work in a team.	+
ЗК 12 The desire to preserve the environment.	+
ЗК 13 The ability to act socially responsibly and consciously.	+
ЗК 14 The ability to realize one's rights and responsibilities as a member of society, to be aware of the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.	+
ЗК 15 The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technologies, to use various types and forms of motor activity for active recreation and leading a healthy lifestyle.	+
Professional competences	
ФК 1 Ability to collect medical information about the patient and analyze clinical data.	+

ФК 2 The ability to interpret the results of laboratory and instrumental research.	+
ФК 3 Ability to diagnose: determine preliminary, clinical, final, accompanying diagnosis, emergency conditions.	+
ФК 4 The ability to plan and carry out measures for the prevention of diseases of the organs and tissues of the oral cavity and maxillofacial area.	+
ФК 5 Ability to design the process of providing medical care: to determine the approaches, plan, types and principles of treatment of diseases of the organs and tissues of the oral cavity and maxillofacial area.	+
ФК 6 The ability to determine a rational mode of work, rest, and diet in patients in the treatment of diseases of the organs and tissues of the oral cavity and maxillofacial area.	+
ФК 7 The ability to determine the management tactics of patients with diseases of organs and tissues of the oral cavity and maxillofacial area with concomitant somatic diseases.	+
ФК 8 Ability to perform medical and dental manipulations.	+
ФК 9 The ability to treat the main diseases of the organs and tissues of the oral cavity and maxillofacial area.	+
ФК 10 Ability to organize and carry out medical evacuation measures.	+
ФК 11 Ability to determine tactics, methods and provision of emergency medical assistance.	+
ФК 12 Ability to organize and conduct a screening examination in dentistry.	+
ФК 13 The ability to assess the impact of the environment on the state of health of the population (individual, family, population).	+
ФК 14 Ability to maintain regulatory medical documentation.	+
ФК 15 Processing of state, social and medical information.	+
ФК 16 Ability to organize and carry out rehabilitation measures and care for patients with diseases of the oral cavity and MFA.	+

ФК 17 The ability to legally secure one's own professional activity.	+
ФК 18 The ability to provide pre-medical care according to the protocols of tactical medicine.	+

PROGRAM LEARNING OUTCOMES:

The individual profile course lays the foundation for the further formation of the following program results in accordance with the Standard of Higher Education of Ukraine for the diploma training of specialists of the second (master's) level in the specialty "Dentistry".

ПРН 1. To distinguish and identify leading clinical symptoms and syndromes (adentia, bite anomaly, facial asymmetry, tooth pain, hyperesthesia, defects of the crown part of the tooth, tooth discoloration, facial disproportion, change in the shape of the teeth, fistula course, pathological attrition of the teeth, change in the interalveolar height, dentition deposition, violation of sucking functions, swallowing, pathological mobility of teeth, gum recession, gingival, periodontal, bone pocket); according to standard methods, using the previous data of the patient's history, the data of the patient's examination, knowledge about the person, his organs and systems, establish a probable nosological or syndromic preliminary clinical diagnosis of a dental disease (hyperesthesia, hypoplasia, enamel hyperplasia, fluorosis, erosion of hard tooth tissues, wedge-shaped defect , attrition of teeth, necrosis of hard tissues of the tooth, discoloration, traumatic injuries of teeth, caries, pulpitis, periodontitis, papillitis, gingivitis, localized, generalized) periodontitis, idiopathic periodontal diseases, alveolitis, periostitis, dental injuries.)

ПРН 2. Collect information about the general condition of the patient, evaluate the psychomotor and physical development of the patient, the condition of the organs of the maxillofacial area, based on the results of laboratory and instrumental studies, evaluate information about the diagnosis (analysis of glucose content in the blood, general blood analysis, interpretation of X-ray diagnostics of the skull, dental jaw apparatus, cytological examination of organs and tissues of the maxillofacial apparatus, microbiological examination of oral fluid, smears from the periodontium, functional diagnosis of the condition of the oral cavity (luminescent, rheoperiodontography, stomatoscopy, capillaroscopy, vacuum test, etc.

ПРН 3. Prescribe and analyze additional (mandatory and optional) methods of examination (analysis of glucose content in blood, general blood test, interpretation of X-ray diagnostics of the skull and maxillofacial apparatus, cytological examination of organs and tissues of the maxillofacial apparatus, microbiological examination of oral fluid, swabs from periodontism, functional diagnosis of the condition of the oral cavity (luminescence, rheoperiodontography, stomatoscopy, capillaroscopy, vacuum test, etc.) of patients with diseases of the organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (hyperesthesia, hypoplasia, enamel hyperplasia, fluorosis, erosion of the hard tissues of the tooth, wedge-shaped defect, abrasion of teeth, necrosis of the hard tissues of the tooth, discoloration, traumatic injuries of the teeth, caries, pulpitis, periodontitis, papillitis, gingivitis, localized, generalized), periodontitis (localized, generalized), periodontitis, idiopathic periodontal diseases, alveolitis , periostitis, dental injuries).

ПРН 4. To determine the final clinical diagnosis in compliance with the relevant ethical and legal norms, by making a reasoned decision and logical analysis of the received subjective and objective data of clinical and additional examination, carrying out differential diagnosis under the control of the head physician in the conditions of a medical institution (non-carious lesions of teeth, caries permanent teeth, diseases of the pulp of permanent teeth, periodontitis of permanent teeth, papillitis, gingivitis, periodontitis, traumatic lesions, allergic lesions, alveolitis, pericoronaritis, periostitis, defects of the crown of teeth, partial and complete absence of teeth).

ПРН 5. Diagnose emergency conditions under any circumstances (at home, on the street, in a medical institution), in conditions of emergency, martial law, lack of information and limited time (asphyxia, hypertensive crisis, acute respiratory failure, acute heart failure, fainting, collapse , coma, larynx edema, Quincke's edema, convulsions, shock)

ПРН 6. Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases

ПРН 8. Determine the approach, plan, type and principle of treatment of dental disease by making a reasoned decision according to existing algorithms and standard schemes.

ПРН 10. Determine the tactics of managing a dental patient with somatic pathology (pregnancy, anemia, hemophilia, arterial hypertension, infectious endocarditis, heart disease, heart failure, cardiac arrhythmia,

the presence of a pacemaker, acute psychosis, including alcoholic delirium, epilepsy, bronchial asthma, diabetes diabetes, HIV infection / AIDS, viral hepatitis, diphtheria, tetanus) by making a reasoned decision according to existing algorithms and standard schemes of clinical diagnosis by making a reasoned decision according to existing algorithms and standard schemes.

ПРН 11. To carry out the treatment of the main dental diseases according to the existing algorithms and standard schemes under the control of the head physician in the conditions of a medical institution (non-carious lesions of teeth, caries of permanent teeth, diseases of the pulp of permanent teeth, periodontitis of permanent teeth, papillitis, gingivitis, periodontitis, periodontitis, traumatic lesions, allergic lesions, alveolitis, pericoronaritis, periostitis, defects of the crown part of the teeth, tooth decay and complete absence of teeth).

ПРН 13. Determine the tactics of providing emergency medical aid, using the recommended algorithms, under any circumstances based on the diagnosis of an emergency in limited time (asphyxia, hypertensive crisis, acute respiratory failure, acute heart failure, fainting, collapse, coma, laryngeal edema, Quincke's edema , convulsions, shock)

ПРН 19. To comply with the requirements of ethics, bioethics and deontology in their professional activities.

ПРН 20. To organize the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.

ПРН 21. Perform medical manipulations on the basis of preliminary and/or final clinical diagnosis (hypoplasia, fluorosis, traumatic injuries of teeth, caries, pulpitis, periodontitis, gingivitis, periodontitis (localized, generalized), idiopathic periodontal diseases, dental injuries; non-carious lesions of teeth, caries of permanent teeth, diseases of the pulp of permanent and temporary teeth, periodontitis of permanent teeth, gingivitis, periodontitis, periodontitis, traumatic lesions, allergic lesions,) for different segments of the population and in different conditions (perform artificial respiration, perform indirect heart massage, fix the tongue, perform injections of medicinal substances (intramuscular, subcutaneous, intravenous jet and drip), measure blood pressure).

ПРН 22. Perform medical dental manipulations on the basis of a preliminary and/or final clinical diagnosis (hypoplasia, fluorosis, traumatic injuries of teeth, caries, pulpitis, periodontitis, gingivitis, periodontitis (localized, generalized), idiopathic periodontal diseases, dental injuries; non-carious lesions of teeth, permanent caries of temporary teeth, diseases of the pulp of permanent and temporary teeth, periodontitis of permanent teeth and temporary teeth, traumatic lesions, allergic lesions, removal of dental layers, determination of acid resistance of tooth enamel, diathermocoagulation, pulp extirpation of permanent teeth, electro-odontology, local anesthesia in the treatment of dental diseases by various methods (application, infiltration, conduction), medical treatment of affected areas of the mucous membrane of the oral cavity and periodontium, application and removal of temporary fillings and hermetic bandages in the treatment of caries, pulpitis, periodontitis, application of rubber dam, obturation of root canals of permanent and temporary teeth with various materials, filling of carious cavities of permanent teeth with various filling materials, covering teeth with therapeutic and preventive varnishes, gels, desensitizers, preparation and cleaning of root canals of permanent and temporary teeth, preparation of carious cavities of permanent teeth taking into account the type of filling material, carrying out ligature binding of teeth, carrying out of professional oral hygiene, direct and indirect coating of the pulp).

Learning outcomes:

Integrative final program learning outcomes, the formation of which is facilitated by "Industrial medical practice of choice in pediatric dentistry" (individual profile course in general dentistry) are***:***

1. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of pediatric therapeutic dentistry.
2. Demonstrate the ability to conduct an algorithm for examining children, index assessment of the oral cavity and knowledge of general issues of prevention of dental diseases**:**

- know the purpose, objectives, methods of prevention of dental diseases;
- to study the anatomical and physiological features of the structure of the oral cavity in children of different ages;

- know the periods of development of temporary and permanent teeth, stages of development of the oral mucosa and periodontium in children;
- to conduct a dental examination of the child to determine the dental status, caries indices, hygienic and periodontal indices;
- examine the patient according to WHO methods and analyze the WHO map;
- to carry out the epidemiological analysis of dental morbidity of the population.

3. Demonstrate knowledge of caries resistance, detection of cariogenic situation and professional oral hygiene in children:

- detection of a cariogenic situation in the oral cavity;
- know the structure and biological properties of enamel;
- know and be able to determine the degree of resistance of tooth enamel;
- know the protective mechanisms of the oral cavity and the participation of microflora in the occurrence of major dental diseases;
- know the methods, tools and hygiene items of the oral cavity;
- to recommend methods, means and objects of oral hygiene depending on the dental status;
- to carry out the controlled brushing of teeth at children and professional hygiene of an oral cavity;
- to conduct training in methods of oral hygiene;
- know the forms, methods of sanitary-educational work and use them for hygienic training.

4. Distinguish the features of the application of the principles of prevention of caries and periodontal disease in children depending on age. Master the principles and methods of a comprehensive system of prevention of dental diseases:

- plan and recommend means of endogenous prevention of dental caries for children of different ages;
- plan and recommend means of exogenous prevention of dental caries for children of different ages;
- to carry out remineralizing therapy;
- to carry out non-invasive and invasive sealing of fissures;
- evaluate the effectiveness of caries prevention;
- know the main etiopathogenetic factors of periodontal disease in children of different ages and ways to prevent them;
- to plan measures for the prevention of periodontal disease in children of different ages;
- to appoint means for hygienic care of an oral cavity at diseases of periodontal tissues;
- know the components and organizational principles of a comprehensive system of prevention of dental diseases in children;
- evaluate the effectiveness of a comprehensive prevention system.
- be able to conduct a clinical examination of sick children with odontopathology and periodontal pathology;
- be able to apply special, instrumental and laboratory methods of diagnosis of dental patients, to analyze them;
- be able to restore the anatomical integrity of the teeth with various filling materials in odontopathology;
- demonstrate mastery of the skills of removing dental plaque in different ways;
- to carry out medical treatment of periodontal tissues, oral mucosa;
- be able to apply physical methods in the diagnosis and treatment of dental patients;
- be able to give specific recommendations for oral hygiene;
- to demonstrate mastery of the basic skills of the organization of primary and secondary prevention and medical examination of dental patients.
- to demonstrate mastery of skills of local anesthesia of SHLD tissues in children;

- to carry out surgical intervention on the tissues of the thyroid gland in subperiosteal infiltrates and abscesses, in pericoronaritis;
- have the technique of typical and atypical removal of temporary and permanent teeth;
- to carry out surgical treatment of traumatic injuries of soft tissues of the maxillofacial area with different types of injuries;
- be able to provide primary care for traumatic injuries of teeth and jaws, dislocations of the lower jaw.

THEMATIC PLAN
"Industrial medical practice of choice
in pediatric dentistry "
(individual profile course general dentistry)

№ з/п	Topic	hours
Industrial medical practice in pediatric therapeutic dentistry		
1.	Examination of a dental patient. Filling in medical documentation (outpatient history, recording of dental formula according to the WHO). Determination of indicators of prevalence and intensity of dental caries in children in terms of age and in organized crime groups. Determination of the period of occlusion. Periodontal indices.	6/1
2.	Determining the state of oral hygiene using hygienic indices. Stages of professional oral hygiene in children. Removal of dental layers by various methods. Methods of prevention. Methods of remineralizing therapy in children with gels, varnishes. Deep fluoridation. Sealing of fissures in children. Indications and contraindications. Method of execution.	6/1
3.	Preparation and filling of carious cavities of temporary and permanent teeth. Preparation of carious cavities with different localization, choice of filling material, filling technique. Technique of tooth restoration with the help of modern photopolymer composite materials. Technique of restoration of temporary teeth with the help of standard metal crowns in children and modern photopolymer composite materials.	6/1
4.	Vital amputation and pulp extirpation. Partial and complete removal of pulp. Indications, methods of their carrying out. Endodontic treatment of root canals of temporary and permanent teeth, materials for obturation of root canals at different stages of their formation.	6/1
5.	Determination of physiological and pathological resorption of the roots of temporary and permanent teeth. Analysis of orthopontomogram. Stages of root growth. Limits of endodontic treatment of temporary and permanent teeth. Treatment of children under general anesthesia.	6/1
Industrial medical practice in pediatric surgical dentistry		
6.	General and local anesthesia in children on outpatient surgery: types and methods, indications and contraindications to the choice of methods. Methods of conducting.	6/1
7.	Tooth extraction surgery in children. Indications and contraindications to the removal of temporary and permanent teeth, tools. Features of tooth extraction in children with concomitant somatic diseases. General and local complications during and after tooth extraction, methods of treatment and prevention.	6/1
8.	Acute and chronic inflammatory diseases of the maxillofacial area in children. Anatomical and physiological features of the course of inflammatory processes of the maxillofacial area in children. Clinic, diagnosis, differential diagnosis, treatment.	6/1
9.	Traumatic injuries of teeth and bones of MFA in children. Methods of diagnosis, treatment.	6/1
ECTS credits – 3,5		54 hours

Individual work

№ з/п	Topic	hours
Industrial medical practice in pediatric therapeutic dentistry		
1.	Write in the table the risk factors for caries and periodontal disease. General treatment of dental caries in children: planning, tools and methods.	6
2.	Describe the stages of preparation and filling of carious cavities of temporary and permanent teeth. Tools and aids (cofferdam, dies, blades, etc.)	6
3.	Write down groups of filling materials for permanent and temporary teeth. Filling materials for root fillings in permanent and temporary teeth.	6
4.	Choice of tools for endodontic treatment of root canals of temporary and permanent teeth. Write down the requirements for endodontic instruments in temporary teeth.	6
5.	Schematically draw the types of physiological and pathological resorption of the roots of temporary teeth and the stage of root formation.	6
6.	Make a table of indications and contraindications to the use of anesthesia.	6
7.	Describe complications after tooth extraction surgery (bleeding from the hole, ventricular pain, alveolitis), treatment and prevention.	6
8.	To make the scheme of differential diagnosis of odontogenic acute inflammatory processes of MFA at children (periostitis, osteomyelitis, abscess, phlegmon, lifadenitis).	6
9.	Describe the anatomical and functional features of the structure of soft tissues of the MFA in children, which determine the features of injuries.	3
Total		51

List of questions to the differential test.

1. Epidemiology of major dental diseases in children. Methods of dental examination by the WHO. Prevalence, intensity of dental caries, STI index as the main epidemiological indicators. Their characteristics, interpretation of results.
2. Assessment of the hygienic condition of the oral cavity. The purpose of the study. Hygiene indices Green Vermilion, Silnes Lowe. Methods of determination, interpretation of results.
3. Index assessment of periodontal tissues (PMA, SRI, SBI). Methods of determination, interpretation of results.
4. Homeostasis of tooth hard tissues. Mechanisms of its regulation. The role of saliva and pulp of the tooth in maintaining the mineral composition of the hard tissues of the tooth.
4. Cariogenic situation in the oral cavity. The main components, methods of detection and elimination. The mechanism of enamel demineralization.
5. Means and methods of hygienic care of the oral cavity. Individual, controlled, professional teeth cleaning.
6. Prevention of periodontal diseases. Professional removal of dental layers. Means and methods of individual oral hygiene in periodontal diseases.
7. Hygienic training and education in the system of prevention of dental diseases. Organizational principles and methods of hygienic training and education.
8. The main directions of prevention of dental caries. Endogenous and exogenous prevention, their essence, justification of use.
9. Endogenous prevention of dental caries. Characteristics of groups of drugs used. Drawing up a prevention plan, evaluating the effectiveness.
10. Endogenous prevention of dental caries with fluoride preparations. Indications, dose determination, mechanism of action of fluorine, evaluation of effectiveness.
11. Exogenous prevention of dental caries. Modern means and methods of exogenous prevention of dental caries, evaluation of effectiveness.
12. Sealing of fissures as a method of prevention of caries of masticatory teeth in children. Classification of sealants. Indication. Terms of sealing. Invasive and non-invasive sealing.
13. Comprehensive system of prevention of dental diseases. The main components, stages of implementation.
14. Analysis and evaluation of the effectiveness of primary prevention of dental caries and periodontal disease.
15. Medical examination of children by a dentist as a method of introducing primary prevention of dental diseases. Organizational principles, methods of formation of dispensary groups.
16. Mechanisms of protection of the oral cavity, gingival sulcus. Their role in the prevention of dental caries and periodontal disease in children and adolescents.
17. The role of dental layers in the development of periodontal disease in adolescents. Methods of their detection, elimination and prevention of education.
18. The choice of methods and means for individual hygienic care of the oral cavity depending on the dental status.
19. Planning and prevention of dental caries in children of different ages. The choice of preventive measures, methods of their application.
20. Purpose, methods and means of dental examination. Identification of risk factors for the development of major dental diseases.
21. Periods of development of temporary teeth. Terms of bookmarking and mineralization of temporary teeth. Factors influencing these processes in the antenatal period. Terms and signs of physiological eruption of temporary teeth.
22. Periods of development of temporary teeth. Terms of formation and resorption.
23. Periods of development of permanent teeth. Terms of bookmarking, mineralization and eruption of permanent teeth. Factors influencing these processes in the intramandibular period of tooth development.

24. Anatomical and topographic features of the structure of temporary and permanent unformed teeth. Stages of tooth root development, their radiological characteristics.

25. Etiology and pathogenesis of dental caries in children and adolescents. Classification. The main patterns of caries of temporary and permanent teeth in children.

26. Clinic, diagnosis, differential diagnosis of caries of temporary and permanent teeth at different stages of their development in children.

27. Treatment of caries of temporary and permanent teeth in children. Modern methods of treatment. Sealing materials, their choice.

28. Treatment of caries of permanent teeth with incomplete root formation. Choice of medical and filling materials.

29. Remineralizing therapy of acute initial dental caries in children. Indications, means, methods of carrying out, criteria of efficiency.

30. Decompensated form of dental caries in children. Causes of development. Tactics of a pediatric dentist. Local and general treatment.

31. Systemic and local hypoplasia of the enamel. Causes of development, clinic, differential diagnosis, treatment and prevention.

32. Fluorosis. Causes of development, clinic, diagnosis, differential diagnosis. Tactics of treatment and prevention.

33. Hereditary defects in the development of teeth (Stainton-Capdepon syndrome, imperfect dentino- and amelogenesis). Causes of development, clinic, treatment tactics.

34. Anatomical and physiological features of the pulp of temporary and permanent teeth at different stages of tooth development. Clinic, diagnosis, differential diagnosis of acute and chronic pulpitis of temporary teeth in children.

35. Clinic, diagnosis, differential diagnosis of acute and chronic pulpitis of permanent teeth in children.

36. Acute traumatic pulpitis of temporary and permanent teeth in children. Treatment tactics. Choice of drugs.

37. Clinic, diagnosis, differential diagnosis and treatment of pulpitis complicated by periodontitis in temporary and permanent teeth in children.

38. Biological method of treatment of pulpitis in children. Vital pulp therapy. Indications, methods, modern drugs, the mechanism of their action. Monitoring the effectiveness of treatment.

39. Vital pulpotomy of permanent teeth in children. Indications, method of execution, forecast. Modern methods of anesthesia in the treatment of pulpitis in children, the choice of drugs for local anesthesia.

40. Vital extirpation of the pulp of permanent teeth in children. Indications, methods of performance in children. Features of anesthesia in childhood, the choice of drugs for local anesthesia.

41. Devital pulpotomy in temporary teeth. Indications, methods, choice of devitalizing agents, effectiveness control.

42. Devital extirpation of pulp in temporary and permanent teeth in children. Indications, methods of performance, control of efficiency.

43. Obturation of root canals of temporary and permanent teeth in children in the treatment of pulpitis. The choice of materials for root fillings depending on the stage of tooth development. Techniques of obturation, efficiency control.

44. Anatomical and physiological features of the periodontium of temporary and permanent teeth in children. Growth zone, its structure, participation in tooth root formation. Radiological characteristics of the stages of root formation.

45. Classification of periodontitis. Features of the course of acute and exacerbation of chronic periodontitis of temporary and permanent teeth in children. Differential diagnosis.

46. Clinical and radiological characteristics of chronic forms of periodontitis of temporary and permanent teeth in children. Differential diagnosis.

47. Treatment of acute periodontitis of temporary and permanent teeth in children.

48. Treatment of exacerbation of chronic periodontitis of temporary and permanent teeth in children.

49. Principles of treatment of chronic periodontitis of temporary and permanent teeth in children. Choice of method of treatment of chronic periodontitis of temporary teeth.

50. Treatment of chronic periodontitis of permanent teeth with unformed roots. Methodology, efficiency control, forecast.

51. The choice of root filling in the treatment of periodontitis of temporary and permanent teeth in children. Methods of temporary and permanent obturation of root canals.

52. Classification of traumatic dental lesions in children. Clinic, diagnosis, tactics of treatment of traumatic lesions of temporary teeth. Forecast.

53. Clinic, diagnosis and tactics of treatment of traumatic injuries of permanent teeth in children

54. Anatomical and physiological features of development and structure of tissues of the maxillofacial area.

55. Classification of methods of anesthesia (general, local, their types) of tissues of maxillofacial area (MFA).

56. Features of application and infiltration anesthesia of MFA tissues.

57. Technique of conduction anesthesia on the upper jaw in children of different ages.

58. Technique of conductive anesthesia of the mandible in children of different ages.

59. Anesthetics, which are most often used for local anesthesia of the tissues of the thyroid gland.

60. Local complications during conduction anesthesia, their prevention.

61. General complications during local anesthesia and their prevention.

62. Quincke's edema. Clinical manifestations.

63. Clinical manifestations of anaphylactic shock.

64. Emergency medical care in case of Quincke's edema and anaphylactic shock (intramuscular and intravenous injections; mouth-to-mouth and mouth-to-nose resuscitation; indirect heart massage).

65. Types of general anesthesia and substances used for its implementation. Features of anesthesia in MFA.

66. Indications and contraindications to general anesthesia in the clinic.

67. Indications for general anesthesia in a hospital.

68. Principles of sedative-medical preparation for surgical interventions in MFA. Indications, contraindications.

69. Indications and contraindications to the removal of permanent and temporary teeth.

70. Stages of tooth extraction surgery and features of their conduct.

71. Features of removal of temporary and permanent teeth.

72. Complications during tooth extraction, their prevention and treatment.

73. Complications after tooth extraction, their prevention and treatment.

74. Post-extraction bleeding. Clinic, diagnosis and treatment.

75. Tooth extraction in children with cardiovascular disease.

76. Tooth extraction in children with diabetes.

77. Tooth extraction in children with diseases of the blood system.

78. Etiology, pathogenesis, clinic of acute odontogenic periostitis of the upper jaw.

79. Causes of development, features of diagnosis and treatment of acute odontogenic periostitis of the mandible.

80. Differential diagnosis of acute odontogenic periostitis and osteomyelitis of the jaws.

81. Causes of development and features of the clinical course of chronic periostitis of the jaws.

82. Differential diagnosis of chronic periostitis of the jaws and features of their treatment.

83. Methods of local and general treatment of chronic periostitis of the jaws.

84. Classification and causes of osteomyelitis of the jaws.

85. Theories of osteomyelitis of the jaws; modern view of the nature of osteomyelitis.

86. Diagnosis and clinic of acute odontogenic osteomyelitis of the mandible.

87. Diagnosis and clinic of acute odontogenic osteomyelitis of the upper jaw.

88. Emergency surgical and medical care for children with acute osteomyelitis.

89. Complications and consequences of acute odontogenic osteomyelitis of the jaws.

90. Rehabilitation of patients with acute odontogenic osteomyelitis. Disease prevention.

91. Clinical and radiological forms of chronic odontogenic osteomyelitis.

92. Causes of development, diagnosis, indications for hospitalization of patients with chronic osteomyelitis.

93. Treatment and prevention of chronic osteomyelitis of the jaws.

94. Prognosis and end of the disease in chronic osteomyelitis, rehabilitation of patients with chronic osteomyelitis.

95. Complex treatment of chronic osteomyelitis.

96. Differential diagnosis of chronic osteomyelitis of the jaws.

97. Causes of odontogenic inflammatory cysts of the jaws from permanent and temporary teeth.

98. Clinical and radiological picture of odontogenic inflammatory cysts of the jaws.

99. Diagnosis and differential diagnosis of odontogenic inflammatory cysts of the jaws.

100. X-ray picture of radicular tooth-containing cysts of the jaws from temporary teeth.

101. Differential diagnosis of odontogenic inflammatory cysts of the jaws.

102. Classification of lymphadenitis and the causes of their development.

103. Clinic, diagnosis of acute odontogenic lymphadenitis.

104. Clinic and diagnosis of acute neodontogenic lymphadenitis.

105. Complex treatment of acute serous lymphadenitis.

106. Complex treatment of acute purulent lymphadenitis.

107. Classification, diagnosis and clinic of chronic lymphadenitis MFA.

108. Treatment of chronic lymphadenitis.

109. Differential diagnosis of acute and chronic lymphadenitis.

110. Classification of abscesses and phlegmon of the maxillofacial area and methods of their diagnosis.

111. Clinic and diagnosis of abscesses, phlegmon, located in the upper jaw.

112. Clinic and diagnosis of abscesses, phlegmon, located in the lower jaw.

113. Complex treatment of abscesses and phlegmon MFA.

114. Surgical care for children with abscesses and phlegmons in the outpatient and inpatient settings.

115. Boils MFA. Clinic, diagnosis, treatment.

116. Carbuncles MFA. Clinic, diagnosis, treatment.

117. Complications of boils and carbuncles MFA in children and their prevention.

118. Classification of inflammatory diseases of the salivary glands.

119. Etiology, pathogenesis and clinic of acute mumps.

120. Etiology, pathogenesis and clinic of acute non-epidemic mumps.

121. Treatment of acute mumps.

122. Acute and chronic calculous submaxillitis. Clinic, diagnostics, differential diagnosis.

123. Diagnosis and treatment of calculous submaxillitis.

124. Herzenberg's pseudoparotitis, causes, diagnosis, differential diagnosis and treatment.

125. Chronic parenchymal sialodenitis. Clinical and radiological characteristics and treatment.

126. Differential diagnosis of chronic sialodenitis.

127. Complex treatment of chronic sialodenitis.

128. The prognosis of the disease in chronic inflammatory diseases of the salivary glands.

129. Classification of traumatic injuries of soft tissues of the thyroid gland.

130. Clinical picture of soft tissue wounds of MFA of various origins.

131. Features of the clinical course and principles of treatment of wounds penetrating the oral cavity.

132. Clinical picture and treatment of wounds with soft tissue defects MFA.

133. Features of primary surgical treatment (PST) of MFA wounds.

134. Features of PST and treatment of bitten wounds MFA

135. Indications for hospitalization of children with traumatic soft tissue injuries.

136. Rabies vaccination. Indications for its holding.

137. Indications and principles of tetanus vaccination.

138. Free transplantation of fabrics at traumatic defeats of soft tissues of MFA at children (skin and skin-cartilage flaps).

FORMS OF CONTROL.

Forms of control and assessment system are carried out in accordance with the provisions on the organization of the educational process in Danylo Halytsky LNMU and the requirements of the working program of industrial medical practice for 5th year students of the Faculty of Dentistry.

Grade for practice is determined by the sum of points for student performance of practical skills, which are tested by the teacher of the department (maximum 120 points - minimum 72 points), and points for final control, set during the differential test (maximum 80 points - minimum 50 points)

After completing each section, the student fills out a final report (Appendix 1) on the work performed.

Current evaluation. Teachers of industrial practice analyze the work of students, taking into account their profile (the student should not have absences of practice days), the quality of documentation, the quality of mastering practical skills listed in each section, the application of ethics and deontology in practice.

Criteria for assessing self-mastery of practical skills during the internship in points according to the list specified in the final report in points:

"5" points - receives a student who has written the proposed number of manipulations and thoroughly described them at a sufficiently high theoretical level.

"4" points - receives a student who has written the proposed number of manipulations and provided them with a theoretical description, but made minor mistakes.

"3" points - receives a student who has written the proposed number of manipulations and provided them with a theoretical description, but made significant mistakes.

"2" points - receives a student who has written the proposed number of manipulations and provided them with a theoretical description, but made gross significant errors.

A student who has 100% completed the proposed number of practical skills, presented them in writing, provided reasonable answers and received a minimum of 72 points out of 120 maximum is admitted to the differential test in practice..

Differential credit for industrial medical practice of 5th year students provides demonstration of skills and practical skills from the list for each section and final control (writing 80 test tasks)

The maximum number of points that a student can receive during the final control is 80, at the same time:

The final control is considered credited if the student scored at least 50 points.

Incentive points by the decision of the Academic Council may be added to the number of points in the discipline for students who have scientific publications or won prizes for participation in the Olympiad in the discipline among Ukrainian universities and more.

Conversion of the number of points from the discipline into grades on ECTS scales and 4-point (traditional).

The number of points in the discipline, which is accrued to students, is converted into the ECTS scale as follows:

Rating ECTS	Statistical indicator
A	The best 10% of students
B	The next 25% of students
C	The next 30% of students
D	The next 25% of students
E	The last 10% of students

The number of points from the practice, which is accrued to students, is converted into a 4-point scale thus:

Points in the discipline	Score on a 4-point scale
From 170 to 200 points	«5»
From 140 to 169 points	«4»
From 139 points to the	«3»

minimum number of points that a student must score	
Below the minimum number of points that a student must score	«2»

LIST OF EDUCATIONAL AND METHODOLOGICAL LITERATURE

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1. Терапевтична стоматологія дитячого віку. ***T.1***. «Карієс зубів та його ускладнення» / Л.О. Хоменко, Ю.Б. Чайковський, Н.І. Смоляр [та ін.]; за ред. Л.О. Хоменко – Книга-плюс, 2017. – 432с
2. Терапевтическая стоматология детского возраста: учебник Том 1. / Л. А. Хоменко, [и др.]; под ред. Л. А. Хоменко. – К.: Книга-плюс, 2018. – 395 с.: ил, табл.
3. Хірургічна стоматологія та щелепно-лицева хірургія дитячого віку: підручник/ Харьков Л.В., Яковенко Л.М., Чехова І.Л.; за ред. Л.В.Харькова. – К.: ВСВ "Медицина", 2015, 496 С.
4. Л.В.Харьков, Л.М.Яковенко, Л.О.Хоменко, Н.В.Біденко Осложнения заболеваний в хирургической и терапевтической стоматологии детского возраста/ ООО «Книга-плюс», 2014, 352 С.
5. Харьков Л.В., Яковенко Л.Н., Кава Т.В. «Справочник хирурга-стоматолога», Книга-плюс, 2013, 374 С.
6. Харьков Л.В., Яковенко Л.М., Чехова И.Л. Атлас хирургических стоматологических заболеваний у детей. Киев. «Книга-плюс», «Ничлава».,2012, 501 С.
7. Стоматологічний діагноз (за МКХ-10): навчальний посібник / В. А. Кльомін, П. В. Іщенко, І. В. Борисова [та ін.]. – Київ : Медицина , 2015, 214 С. : іл.

Additional literature:

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2. Детская стоматология: пер. с англ. / Под ред. Р.Велбери, М.Даггала, М.-Т.Хози. – М: ГЭОТАР-Медиа, 2014. – 454 с.
3. Анестезіологія та інтенсивна терапія : [підручник для студентів вищих мед. навч. закладів IV рівня акредитації] / за ред. Ф.С. Глумчера ; Фелікс Семенович Глумчер, Леонард Петрович Чепкий, Людмила Василівна Усенко та ін. - К. : Медицина, 2010. - 336 С.: іл. - Бібліогр.: 335 С.
4. Кононенко Ю.Г., Рожко М.М., Рузін Г.П. – Місцеве знеболення при амбулаторних стоматологічних втручаннях, Івано-Франківськ, «Книга-плюс», 2011, 881 С.
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6. Анатомія людини: підручник: у 3 т. А.С. Головацький, В.Г. Черкасов, М.Р. Сапін та ін. – Вид.3. – Вінниця: Нова книга, 2013, 368 с.
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8. Хоменко Л.О., Кисельникова Л.П., Вознюк В.П. Терапевтична стоматологія дитячого віку. – Київ: Медицина, 2013 р. – 864 с.
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11. Raynomd J. Fonseca. Oral and maxillofacial trauma, Saunders, an imprint of Elsevier Inc, 2013, 153 p.

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3. https://nafplentingminki.files.wordpress.com/2016/06/226.pdf
4. http://dental-area.com/statyi/anatomiya-i-fiziologiya/emal.html
5. http://meduniver.com/Medical/gistologia/87.html