MINISTRY OF HEALTH OF UKRAINE
DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY
Department of Pediatric Dentistry

"APPROVED"
Vice-rector
on Scientific and Pedagogical work
Assoc prof. I.I. Solonynko
_____
"05" 07 2022

STUDY PROGRAM
of the educational discipline

Pediatric Dental Surgery
4 course

Preparing of specialists of the second (master's) level of higher education
Educational qualification "Master of Dentistry"
Professional qualification "Dentist"
in the field of knowledge 22 "Health"
specialty 221 "Dentistry"

"Approved"
on methodical meeting of
Department of Pediatric Dentistry
Protocol №7
from "15"June 2022
Head of Department
_____
Assoc.prof. Kolesnichenko O.V.

"Approved"
of profiled methodical commission
of dental disciplines
Protocol № 2
from "21" June 2022
Head of methodical commission
_____
Professor Vares Y. E.

Lviv-2022

DEVELOPED AND IMPORTED

Danylo Halytsky National Medical University of Lviv (Lviv) of the Ministry of Health of Ukraine

PROGRAM DEVELOPERS:

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

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O.O.Sovyak, Assist. Professor of the Department of Pediatric Dentistry

INTRODUCTION

Study program of the discipline
"**Pediatric Dental Surgery**"
in accordance with the Standard of Higher Education of the second (master's) level
Knowledge 22 "Health"
specialty _221 "Dentistry"

COURSE DESCRIPTIONS
(annotation)

Pediatric Dental Surgery is a discipline that allows students to master certain dental manipulations used in the clinic to remove temporary and permanent teeth, treatment of jaw periostitis from temporary and permanent teeth on the phantoms.

Thus acquired special (professional) competencies students will further use in the process of working directly with patients. On the phantoms of the skull, students master the technique of performing extraoral and intraoral anesthesia, as well as practice the skills of typical and atypical removal of temporary and permanent teeth, conduct suturing of the alveolar socket after tooth extraction in the development of bleeding. On models of jaws master technique of opening of subperiosteal abscesses with localization on an alveolar process and a palate.

Description of the plan for the discipline

Structure of the discipline	Amount of credits, hours, from them				Year of study semester	Type of control
	Total	Auditory		Self-work		
		Lectures (hours)	Practical classes (hours)			
Name of the discipline: **Pediatric Dental Surgery**	90 hours.	6	38	46	4nd course (8th semester)	Diff. test.
ECTS	3					

The subject of study of the discipline **"Pediatric Dental Surgery"**:

- equipment of surgery profile room, basic dental instruments and rules of work with them, providing aseptic and antiseptic during surgical reception, disinfection and sterilization of dental instruments and equipment;
- features of the structure of the jaw bones and soft tissues in children;

Interdisciplinary Relations

"Pediatric Dental Surgery" as an academic discipline:

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

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

c) is based on the study of the students of the disciplines of dental profile: pediatric therapeutic dentistry, orthodontics and integrates with these disciplines;

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

e) form an idea of the need for prevention of dental diseases.

1. The purpose and objectives of the discipline

1.1. The **purpose** of studying the discipline "**Pediatric Dental Surgury**" is to master technique of performing dental manipulations used in the clinic for the removal of temporary and permanent teeth, the treatment of jaw periostitis from temporary and permanent teeth on the phantom

1.2. **The main tasks** of studying the discipline "**Pediatric Surgical Dentistry**" are:

-preparation of students to work in the surgical and dental office by studying dental equipment, modern dental materials and tools, rules for working with them; disinfection and sterilization of dental instruments;

- Phantom acquisition of surgical and dental manipulation techniques.

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

In accordance with the Standard of Higher Education the discipline provides for the students to acquire competencies:

integral:

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

common:

1. Ability to think abstractly, analyze and synthesize; the ability to learn and to be modernly trained.
2. Knowledge and understanding of the subject area and understanding of the profession.
3. Ability to apply knowledge in practical situations.
4. Ability to communicate in the state language both verbally and in writing. Ability to speak a second language.
5. Skills of using information and communication technologies.
6. Ability to search, process and analyze information from various sources.
7. Ability to adapt and act in a new situation; the ability to work autonomously.
8. Ability to identify, pose and solve problems.
9. Ability to choose a communication strategy.
10. Ability to work as a team.
11. Skills of interpersonal interaction.
12. Ability to act on the basis of ethical considerations (motives).
13. Skills for safe operation.
14. Ability to evaluate and ensure the quality of work performed.
15. Striving to preserve the environment.
16. Ability to act socially responsible and civilly conscious.

special (specialty, subject):

1. Recognize the moral and ethical and professional rules of pediatric dentistry.
2. To understand the moral and ontological principles of the medical specialist and the rules of professional subordination in the clinic of pediatric dentistry.
3. To learn to promote healthy psychological microclimate in the team; to learn the basics of legal norms of the relationship of pediatric dentist → patient (child).
4. Demonstrate **on the phantoms** the ability to use basic dental tools, materials and use dental equipment in pediatric dentistry:
5.Demonstrate **on the phantoms** of performing dental manipulations in the treatment of teeth in children:

• Infraorbital anesthesia (extra and intraoral methods).
• Tuberal anesthesia.
• Palatal anesthesia.
• Incisival anesthesia.
• Mandibular anesthesia.
• Torus anesthesia.
• Mental anesthesia (extra and intraoral methods).
• Extraction of temporary teeth.
• Extraction of permanent teeth.
• Stop bleeding after tooth extraction by suturing the alveolar socket.
• incision of abscess abrasion.
• incision of the subperiosteal abscess
• Opening of abscess of soft tissues.

6. To distinguish features of application of principles of asepsis and antiseptic in the clinic of pediatric therapeutic dentistry:
- to study the modern requirements for sterilization of instruments in the clinic of pediatric dentistry;
- to realize the importance of adhering to the rules of aseptic and antiseptic at the pediatric dental reception;
- master the standards of control over the efficiency of sterilization;
- Determine methods of preventing conditions for the spread of infection in childcare facilities.

Detailing competencies according to the NRC descriptors in the form of the Competence Matrix

Competence Matrix

№	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
	General competencies				
1.	Ability to think abstractly, analyze and synthesize; the ability to learn and to be modernly trained	Know the current trends of the industry and the indicators that characterize them	Be able to analyze professional information, make sound decisions, acquire modern knowledge	Install the appropriate ones links to achieve goals.	Be responsible for the timely acquisition of modern knowledge.
2.	Knowledge and understanding of the subject area and understanding of the profession.	To know features of professional activity of the dentist.	Be able to perform professional activities that require updating and integration of knowledge.	To formulate a communication strategy in professional activity.	Be responsible for continuous professional development with a high level of autonomy.
3.	Ability to apply knowledge in practical situations.	Know the methods of implementing knowledge in solving practical problems.	Be able to use professional knowledge to solve practical problems.	Connect with subjects of practical activity.	Be responsible for the validity of the decisions made.
4.	Ability to communicate in the state language both verbally and in writing. Ability to speak a second language.	Know the official language, including professional orientation. Speak a foreign language at a level sufficient for professional communication.	Be able to use the state language and foreign language for professional activity and communication.	To formulate a communication strategy in professional activity.	Be responsible for continuous professional development with a high level of autonomy.
5.	Use of information and communication technologies.	To have modern knowledge in the field of information and communication technologies used in professional activity.	Be able to use information and communication technologies in the professional field, which requires updating and integration of knowledge.	To use information and communication technologies in professional activity	Be responsible for the continuous development of professional knowledge and skills.
6.	Ability to search, process and analyze information from various sources.	To have the necessary knowledge in the field of information technology used in professional activity	Be able to use information technology in the professional field to find, process and analyze new information from various sources.	To use information technologies in professional activity	Be responsible for the continuous development of professional knowledge and skills.
7.	Ability to adapt and act in a new situation; the ability to work autonomously.	Know the methods of implementing knowledge in solving practical problems	Be able to use professional knowledge to adapt and act in a new situation.	Connect with subjects of practical activity.	Be responsible for the quality of performing professional tasks in a new situation.
8	Ability to identify, set and solve problems.	To know the methods of realizing knowledge in identifying, setting and solving problems of professional activity	Be able to use professional knowledge to identify, pose and solve professional problems.	To connect with subjects of practice with for the purpose of identification, staging and resolution problems of professional activity .	Be responsible for the validity of the decisions taken problems of professional activity.
9	Ability to choose	To know the methods of	To be able to use knowledge to	To formulate a communication	To be responsible for continuous

	communication strategy.	implementing knowledge in the choice of communication strategy with patients and colleagues.	choose a strategy for communicating with patients and colleagues.	strategy in professional activity.	professional development with a high level of autonomy
10	The ability to work as a team.	To know the ways of teamwork while working as a team	To be able to use knowledge to choose a strategy for teamwork	To formulate a communication strategy in professional activity.	To be responsible for continuous professional development
11	Skills between personal interaction.	To know the ways of interpersonal interaction when communicating with colleagues and patients.	To be able to use knowledge to choose the strategy of communication during interpersonal interaction.	To formulate a communication strategy in professional activity.	To be responsible for continuous professional development with a high level of autonomy.
12	Ability to act on the basis of ethical considerations (motives).	To know the moral and ethical principles of the medical specialist and the rules of professional subordination.	To apply in practice the moral and ethical principles of a medical specialist and the rules of professional subordination.	To observe in the course of professional activity the moral and ethical principles of the medical specialist and the rules of professional subordination.	To take personal responsibility for observing the moral and ethical principles of the medical specialist and the rules of professional subordination.
13	To safe practice skills.	Ability to assess the level of danger when performing professional tasks.	To be able to perform professional activities in compliance with safety rules.	To provide quality professional performance compliance with safety rules.	To be personally responsible for adhering to safety rules when performing professional tasks
14	Ability to evaluate and ensure the quality of work performed.	Ability to evaluate and ensure quality when performing professional tasks.	To know the methods of evaluating performance indicators.	To be able to provide quality professional performance work.	To make connections to ensure quality work.
15	The desire to preserve the environment.	Ability to assess the state of the environment.	To be able to analyze environmental performance.	To provide quality professional performance tasks in the environment.	To be personally responsible for adhering to environmental rules when performing professional tasks
16	Ability to act socially responsible and civilly conscious.	To know your social and public rights and responsibilities.	Develop your civic consciousness, be able to act on it.	Ability to convey your social and social position.	To be responsible for your civic position and activities
	Special (professional competences)				
.	To recognize the ethical and professional rules of pediatric dentist activity.	To know the basic provisions of the Dentist's Code of Ethics	To be used in practical activities Dental Code of Ethics	To observe when communicating with patients and colleagues provisions Ethical the Dentist Code	To take personal responsibility for the practical implementation of the provisions Dental Code of Ethics
2.	To understand the moral and ontological principles of the medical specialist and the rules of professional subordination in the clinic of pediatric dentistry.	To know the moral and ontological principles of the medical specialist and the rules of professional subordination in the clinic of pediatric dentistry.	To use in practice the moral and deontological principles of a medical specialist and the rules of professional subordination in the clinic of pediatric dentistry.	To adhere to the professional practice of moral and ontological principles of the medical specialist and rules of professional subordination in the clinic of pediatric dentistry.	To be personally responsible for the observance of the morally and ontological principles of the medical specialist and the rules of professional subordination in the pediatric dentistry clinic.
.	To learn to promote a healthy psychological microclimate in	Know the current legal norms of the relationship “pediatric dentist	To use in practice the legal norms of the relationship “pediatric dentist →	Keep up with your professional activities	Take personal responsibility for compliance with the applicable legal

	the team; learn the legal norms of the relationship of the pediatric dentist → patient (child).	→ patient (child)".	patient (child)". Be able to form a healthy psychological microclimate in the team	in force legal norms of the relationship "pediatric dentist → patient (child)". Support healthy psychological microclimate in the team	norms of the relationship "pediatric dentist → patient (child)".
4.	Demonstrate on the phantoms the ability to use basic dental tools, materials and use dental equipment in pediatric dentistry: - to get acquainted with the structure of the children's dental office, department, clinic; - to master dental equipment of children's dental clinic; - to study the basic dental instruments used at children's dental reception; - to study the classification of dental filling materials, materials for root fillings used in children; - determine the basic requirements for dental materials, their properties and indications for use in children.	To know the equipment of the dental office, the basic dental tools, composition, properties and indications for the use of dental materials used are taught in the pediatric therapeutic dentistry clinic	To be able to use the equipment of the dental office, the basic dental tools and dental materials used are taught in the pediatric therapeutic dentistry clinic	Engage with junior medical staff at use dental equipment the main dentist's office and a dentist materials, used in the clinic of pediatric therapeutic dentistry	To be personally responsible for the correct use of dental office equipment, basic dental instruments and dental supplies used are taught in the Pediatric Therapeutic Clinic +
5.	Demonstrate on the phantoms of performing dental manipulations in the treatment of teeth in children: - preparation of carious cavities of different classes in temporary and permanent teeth, taking into account the type of filling material; - filling of carious cavities of different classes in temporary and permanent teeth with different filling materials; - perform the final processing of fillings of all types of materials used in pediatric dental treatment; - to perform imposition and	To know the algorithms of performing on phantoms of dental manipulations of preparation and filling of carious cavities of different classes in temporary and permanent teeth, techniques of endodontic interventions in temporary and permanent teeth at different stages of their development.	To be able to perform dental manipulations on phantoms on the preparation and filling of carious cavities of different classes in temporary and permanent teeth, the technique of endodontic interventions in temporary and permanent teeth at different stages of their development.	To communicate and interact with colleagues and the teacher while performing dental phantom manipulations of preparation and filling of carious cavities of different classes in temporary and permanent teeth, techniques of endodontic interventions in temporary and permanent teeth at different stages of their development.	To be personally responsible for correctness of preparation and filling of carious cavities of different classes in temporary and permanent teeth on the phantoms of dental manipulations, techniques of endodontic interventions in temporary and permanent teeth at different stages of their development

	removal of temporary fillings and tight joints in the treatment of caries, pulpitis, periodontitis in children; - perform overlays of medical and isolation pads in temporary and permanent teeth in children; - perform instrumental and medical treatment of the root canals of temporary and permanent teeth, taking into account the stage of development; - to fill the root canals of temporary and permanent teeth with different materials, taking into account the stage of development.				
6.	Distinguish features of application of principles in aseptics and antiseptics in the clinic of pediatric therapeutic dentistry: - to study the modern requirements for sterilization of instruments in the clinic of pediatric dentistry; - to realize the importance of adhering to the rules of aseptic and antiseptic at the pediatric dental reception; - master the standards of control over the efficiency of sterilization; - Determine methods of preventing conditions for the spread of infection in childcare facilities.	To know the basic principles aseptics and antiseptics in the pediatric therapeutic dentistry clinic, modern methods of disinfection and sterilization of dental equipment and instruments.	To be able to organize disinfection and sterilization of dental equipment and instruments; to monitor the efficiency of sterilization.	To understand the importance of adhering to the rules of aseptic and antiseptic at the pediatric dental reception.	To determine methods for preventing the spread of infection in childcare facilities. Take personal responsibility for compliance with aseptic and antiseptic standards at pediatric dental care.

Learning outcomes:

Integrative end programmatic learning outcomes facilitated by the Pediatric Surgical Dentistry course:

1. Demonstrate mastery of morally deontological principles of a medical specialist and principles of professional subordination in the pediatric dentistry clinic.
2. Demonstrate the performing an anesthesia for removing teeth in children on the phantoms.
3. Select and demonstrate the ability to use basic dental tools and use it in pediatric dentistry when on phantoms:

- removal of primary and permanent teeth;
- opening of periosteal abscesses on the upper and lower jaws

4. Distinguish features of application of principles of asepsis and antiseptic in the clinic of pediatric dentistry.

Learning outcomes for the discipline.

As a result of studying the discipline ***"Pediatric Dental Surgery"*** the student should know:

• Anatomical and physiological features of the structure of soft tissues and jaws.
• Features of innervation of the maxillofacial area (MFA).
• Features of the location of the saline orifice and the exit of the neurovascular bundles on the bones, depending on the age of the child.
• Indications and contraindications to the local types of anesthesia of the tissues of the(MFR) (application, infiltration, conductor).
• Modern local painkillers, their choice, ways of determining the tolerability of anesthetics.
• The algorithm of conducting anesthesia in children of all ages.
• Local and general complications of anesthesia, their prevention and treatment.
• Indications for surgical intervention in MFR in children using general anesthesia.
• Anatomical features of the structure of primary and permanent teeth, jaws, their innervation and vascularization.
• The timing of physiological tooth changes in children.
• Impressions and contraindications for primary teeth removal in children.
• Indications and contraindications for permanent teeth extraction in children.
• Surgical tools for teeth removal in children.
• Steps of extraction of teeth.
• Features of the method of extraction of primary and permanent teeth.
• Local complications during and after tooth extraction, prevention and treatment.
• Features of teeth extraction in children with diseases of the cardiovascular and endocrine systems, as well as with diseases of the blood system.
• Features of structure and development of jaws and jaw soft tissues in children of all ages and their effect on the course of inflammatory processes.
• Clinical course of acute and chronic periostitis of odontogenic and non-odontogenic origin.
• Clinical and laboratory criteria for the differential diagnosis of acute and chronic periostitis.
• Laboratory examination and interpretation of the results of a study of a child with jaw periostitis.
• Methods of anesthesia for performing periostotomy.
• Principles of surgical treatment of jaw periostitis.
• Principles of medical treatment of jaw periostitis.
• Indications and methods of physiotherapy treatment of jaw periostitis.
• Prevention of complications.
• Features of structure, development, vascularization and innervation of jaw bones and surrounding soft jaws in children of all ages.
• Etiology and pathogenesis of an acute osteomyelitis.
• Clinical course of acute osteomyelitis of odontogenic and non-odontogenic origin.
• Criteria for the diagnosis and differential diagnosis of acute bone inflammatory processes.
• X-ray signs in osteomyelitis of the jaws.
• Methods of laboratory examination of a child with jaw osteomyelitis.
• Complex treatment of osteomyelitis of the jaws of different genesis and course.
• Features of surgical treatment of acute jaw osteomyelitis.
• Complications for acute osteomyelitis and their prevention.
• Etiology and pathogenesis of chronic osteomyelitis.
• Clinical course of chronic osteomyelitis of odontogenic and non-odontogenic origin.
• Criteria for the diagnosis and differential diagnosis of chronic bone inflammatory processes.
• X-ray signs in osteomyelitis of the jaws.
• Methods of laboratory examination of a child with jaw osteomyelitis.
• Complex treatment of osteomyelitis of the jaws of different genesis and course.
• Features of surgical treatment of chronic osteomyelitis of the jaws.
• Complications of chronic osteomyelitis and their prevention.
• Features of the structure of the lymphatic system in children.
• Topographic-anatomical distribution of groups of lymph nodes of MFR
• Features of the course of inflammatory processes of soft tissues in children.
• Definition of terms "lymphadenitis", "periadenitis", "adenoflegmon".
• Classification of MFR lymphadenitis by etiological factor, depth of location, anatomic-topographic location, clinical course.
• Examination methods for a child with acute and chronic thyroid lymphadenitis.
• Clinical manifestations of various forms of MFR lymphadenitis.
• Features of clinical manifestations of diseases with which differential diagnosis of lymphadenitis is carried out.
• Normal peripheral blood composition in children of all ages and changes in lymphadenitis.
• Additional methods of diagnosis of lymph nodes in children.
• General provisions for the surgical treatment of MFR adeno-abscesses and incision line depending on their location.
• Phases of wound healing after opening of the adeno abscess.
• Principles of drug therapy for acute and chronic lymphadenitis.

• Physiotherapy methods for the treatment of acute and chronic MFR lymphadenitis.
• Topographic and anatomical areas of the face, their borders and connections.
• Features of the course of inflammatory processes of soft tissues in children.
• Definition of terms "inflammatory infiltrate", "edema", "abscess", "phlegmon", "adenoabscess", "adenoflegmon".
• Classification of abscesses and phlegmon of the MFR gland by pathogen penetration, depth of location, anatomic-topographic location around the jaws.
• Use of additional research methods and indications for their conduct.
• The normal composition of peripheral blood in children of all ages and changes in abscess and phlegmon.
• Clinical manifestations of superficial and deep abscesses and phlegmon of MFR.
• Clinical manifestations of diseases with which differential diagnosis of abscesses and phlegmon are carried out.
• Complications of abscesses and phlegmon of different localization.
• General provisions of surgical treatment of abscesses and phlegmon of MFR. Abscess opening lines and phlegmon depending on their location. Types of drainage.
• Phases of the wound process, their characteristics, preparations used in different phases.
• Principles of drug therapy for abscesses and phlegmon.
• Physiotherapy treatment for abscesses and phlegmon.
• Features of the anatomical and functional structure of the TMJ depending on the child's age.
• Definition of the terms "arthritis", "contracture", "ankylosis", "secondary deforming osteoarthritis".
• The main etiological factors for the occurrence of acute and chronic diseases of the TMJ.
• The main clinical manifestations of acute and chronic arthritis, secondary deformable osteoarthritis, ankylosis.
• Basic and additional methods of examination of a child with diseases of the TMJ.
• X-ray picture of the TMJ is normal, and its changes in acute and chronic diseases.
• Treatment tactics for acute and chronic diseases of the TMJ.
• Groups of medicines used in the treatment of acute and chronic inflammatory processes of the TMJ, the mechanism of their action.
• Physiotherapy methods for the treatment of TMJ diseases.
• Principles of surgery for deforming osteoarthritis and ankylosis.
• Complications of TMJ diseases and their prevention.
• Topographic anatomy and location of the excretory ducts of the large and small salivary glands.
• Classification of inflammatory diseases of the salivary glands in children.
• Etiological factors leading to inflammatory diseases of the salivary glands in children and methods of their prevention.
• Clinical manifestations and differential diagnosis of acute and chronic inflammatory diseases of the salivary glands in children.
• Clinical manifestations of diseases with which differential diagnosis of inflammatory diseases of salivary glands.
• Examination methods for patients with salivary gland diseases.
• Principles of treatment and rehabilitation of patients with acute and chronic inflammatory diseases of the salivary glands.
• Topographic and anatomical areas of the face, their borders and connections.
• Features of the course of furuncles, carbuncles with localization in the MFR.
• Definition of terms "furuncles", "carbuncles", "furunculosis".
• Classification of furuncles, carbuncles of MFR.
• Clinical manifestations of furuncles and carbuncles of MFR.
• The normal composition of peripheral blood in children of all ages and changes in its indicators in case of presence furuncles, carbuncles of the MFR.
• General provisions for the surgical treatment of Furuncles and carbuncles of the MFR, the incision line depending on their location.
• Principles of drug therapy of furuncles, carbuncles of thyroid
• Application of physiotherapy methods of treatment of furuncles, mechanism of their action and purpose depending on the course of the process.
• Complications of furuncles, carbuncles of MFR and their prevention.
As a result of studying the discipline "Pediatric Dental Surgery" the student should be able to:
• To conduct a clinical examination of the patient. Determine the indications and contraindications to the type of anesthesia required surgery.
• To choose a method of local anesthesia according to the age of the child and the required surgery.
• To be able to carry out an anesthetic allergy test and evaluate its result.
• To have the technique of performing injection anesthesia, taking into account the age of the child and the type of surgery.
•To carry out preventative measures and treatment of complications that may occur during and after anesthesia.
•To conduct a clinical examination of the patient. Determine the indications and contraindications for tooth extraction.
• Select a surgical instruments to remove a tooth according to its anatomical structure.
• Provide guidance to the child's parents after the tooth removal surgery.
• Prepare a plan for preliminary preparation for tooth extraction in children with comorbid somatic diseases.
• Select instruments and stop bleeding that occurred during and after tooth extraction.
• Carry out preventative measures and treatment of local complications that occur during and after tooth extraction.
• Examine the child with jaw disease.
• Prescribe and interpret the results of a radiological examination of a patient with chronic and acute periostitis.
• To appoint and evaluate the results of laboratory tests of a child with acute periostitis.
• Plan a treatment for a child with acute and chronic jaw periostitis.
• Determine indications for endodontic treatment or removal "causative" tooth in case of odontogenic periostitis.
• Determine the type of anesthesia for surgery in a child with periostitis. To conduct a conduction and infiltration anesthesia.
• Perform the tooth extraction and periostotomy, cell drainage.
• Prescribe drug therapy as indicated.
• Develop a plan for rehabilitation of a child with acute and chronic jaw periostitis.
• Diagnose acute odontogenic osteomyelitis of the jaws.
• Diagnose acute hematogenous osteomyelitis of the jaws.

• Carry out differential diagnosis of acute osteomyelitis of the jaws with periostitis, abscesses, phlegmon of the respective localizations, Ewing sarcoma.
• Evaluate the results of laboratory and radiological examinations for osteomyelitis of the jaws.
• Prescribe a complex of therapeutic measures for acute osteomyelitis.
• Determine therapeutic tactics for acute hematogenous osteomyelitis of the jaws.
• Choose the method of analgesia in the treatment of acute osteomyelitis.
• Perform causative tooth removal and jaw periostotomy in the treatment of acute osteomyelitis.
• Diagnose chronic odontogenic osteomyelitis of the jaws.
• Carry out differential diagnosis of exacerbation of chronic jaw osteomyelitis with periostitis, abscesses, phlegmon of appropriate localization, Ewing sarcoma.
• Perform differential diagnosis of chronic odontogenic osteomyelitis of the jaws in children with tumors and tumor-like neoplasms of odontogenic and osteogenic origin.
• Evaluate the results of laboratory and radiological examinations for osteomyelitis of the jaws.
• Prescribe a set of therapeutic measures for chronic osteomyelitis.
• Choose a method of analgesia in the treatment of chronic osteomyelitis.
• Perform causative tooth removal and jaw periostotomy in the treatment of chronic osteomyelitis.
• Examine the main groups of lymph nodes in children.
• Detect signs of inflammation of the lymph node.
• Decrypt additional research methods (blood, urine, ultrasound).
• Diagnose acute serous and acute purulent lymphadenitis.
• Diagnose chronic hyperplastic lymphadenitis.
• Diagnose chronic purulent lymphadenitis.
• Perform differential diagnosis of acute serous and acute purulent lymphadenitis with each other.
• Perform differential diagnosis of chronic forms of lymphadenitis among themselves, with tumors, neoplasms, or metastases of the malignant tumor.
• To prescribe comprehensive treatment for a child with acute lymphadenitis.
• Choose a treatment strategy for chronic hyperplastic lymphadenitis.
• Examine the child with an abscess and phlegmon.
• Prescribe and analyze the results of blood and urine testing of children at different ages and depending on the course of the inflammatory process.
• Perform differential diagnosis of superficial and deep abscesses and phlegmon of MFR.
• To choose surgical tactics for the treatment of abscesses and phlegmon of MFR of different localization.
• To open the surface of abscesses with localization within one area, to establish and replace the drainage.
• To prescribe complex medical therapy for children with abscesses and phlegmons of MFR.
• Choose drugs for topical treatment of abscesses and phlegmon based on the phase of the wound process.
• Prescribe physiotherapy treatments depending on the phase of the wound process.
• Conduct a clinical examination of a child with a disease of the TMJ (survey, examination, palpation, determine the volume of movements).
• Assign additional survey methods and interpret their data (orthopantomogram, MRI, CT, 3DKT).
• Carry out differential diagnosis of acute and chronic inflammatory diseases of the TMJ.
• Determine therapeutic tactics for acute and chronic inflammatory diseases of the TMJ, depending on the age of the child.
• Determine therapeutic tactics for bone ankylosis.
• Be able to examine a child who has signs of salivary gland disease.
• Be able to diagnose the presence of an inflammatory process in the salivary gland (epidemic, viral, bacterial sialadenitis; parenchymatous and interstitial sialadenitis, calculous submaxylitis).
• Differential diagnosis between acute and chronic sialadenitis, etc. inflammatory diseases of this area, as well as tumors, tumors of neoplasms of this localization.
• Be able to interpret the results of additional methods of diagnosis in diseases of the salivary glands (laboratory parameters of blood, saliva; ultrasound; sialography).
• To prescribe the scheme of treatment for acute diseases of the salivary glands (epidemic, viral, bacterial sialadenitis).
• Assign a treatment regimen for chronic salivary gland diseases (parenchymal and interstitial sialadenitis, calculous submaxylitis).
• To carry out preventive medical measures for chronic diseases of the salivary glands.
• Carry out a child examination and diagnose furuncles of MFR and carbuncles in children.
• Carry out differential diagnosis between boils and carbuncles of thyroid.
• Perform differential diagnosis between abscess (phlegmon) and boils (carbuncle) of the MFR.
• Assign additional survey methods and evaluate their results.
• Choose treatment conditions, surgical tactics, method of anesthesia.
• Prescribe medication for children with furuncles and carbuncles of thyroid.
• Prescribe physiotherapy methods for the treatment of furuncles and carbuncles, depending on the clinical course.
• Prevent complications of furuncles and carbuncles.

2. Information volume of the discipline
It is given **90 semester hours, or 3 ECTS credits** for the study of the discipline
The program of the discipline is structured by topics:
Theme№1. Anatomical and physiological features of the development and structure of tissues and organs of the maxillofacial area in children. Anesthesia for maxillofacial area surgery in children in ambulatory and hospital. Operation of extraction of primary and permanent teeth.
Theme № 2. Odontogenic and non-odontogenic periostitis of the jaws in children. Clinic, diagnostics, differential diagnosis. Surgical treatment. Complications, their treatment and prevention.
Theme № 3. Acute odontogenic osteomyelitis of the jaws in children. Acute non-odontogenic osteomyelitis of the jaws in children. Chronic osteomyelitis of the jaws in children.

Theme № 4. Odontogenic, neodontogenic abscesses and phlegmons of the thyroid gland. Classification, clinic and diagnosis depending on the location of the inflammatory focus. Differential diagnosis. Surgical treatment and its complications. General provisions of complex treatment.

Theme № 5. Inflammatory odontogenic cysts of the jaws from temporary and permanent teeth. Clinical course, diagnosis, differential diagnosis. Methods of treatment.

Theme № 6. Acute and chronic, odontogenic and neodontogenic lymphadenitis of MFA. Complications and their prevention.

Theme № 7. Acute (epidemic and non-epidemic mumps, calculous and non-calculous submaxillitis), chronic (parenchymal and interstitial submaxilitis) diseases of the salivary glands in children. Clinic, diagnosis, treatment and prevention of salivary gland diseases in children.

Theme № 8. Acute and chronic inflammatory diseases of the temporomandibular joint (TMJ) in children. Secondary deforming arthrosis (SDA), ankylosis. Causes of development, diagnosis, differential diagnosis, clinical course. Principles and stages of surgical and medical treatment. Rehabilitation of such patients.

Theme № 9. Traumatic injuries of the soft tissues. Burns and frostbites. Traumatic injuries of the bones and teeth in children. Clinic, diagnosis, treatment.

Theme № 10. Boils and carbuncles MFA. Classification, diagnosis, differential diagnosis, treatment. Complications and their prevention. Summary lesson. Differentiated test

3. The structure of the discipline

(3 credits, 90 hours: 6 hours of lectures, 38 hours of practical lessons / 46 hours of self-work)

Theme	**Hours**		
	whole	**Including**	
		Practical lessons	**Self-work**
Theme №1. Anatomical and physiological features of the development and structure of tissues and organs of the maxillofacial area in children. Anesthesia for maxillofacial area surgery in children in ambulatory and hospital.Operation of extraction of primary and permanent teeth.	10	4	6
Theme №2. Odontogenic and non-odontogenic periostitis of the jaws in children.	8	4	4
Theme № 3**:** Acute odontogenic osteomyelitis of the jaws in children. Acute non-odontogenic osteomyelitis of the jaws in children. Chronic osteomyelitis of the jaws in children.	8	4	4
Theme № 4: Acute inflammatory diseases of temporomandibular joint (TMJ) in children. Chronic inflammatory diseases of TMJ in children.	10	4	6
Theme № 5: Odontogenic inflammatory jaw cysts of primary and permanent teeth. Acute and chronic, odontogenic and non-odontogenic lymphadenitis of the maxillofacial area.	8	4	4
Theme № 6: Odontogenic and non-odontogenic abscesses of the maxillofacial area. Odontogenic and non-odontogenic phlegmones of the maxillofacial area.	8	4	4
Theme № 7: Furuncles and carbuncle of the maxillofacial area. Specific inflammatory diseases: actynomycosis, tuberculosis, syphilis, AIDS and HIV infection: manifestation in the oral cavity.	8	4	4
Theme № 8: Acute diseases of the salivary glands in children: epidemic parotitis, non-epidemic parotitis, calculous and non-calculous submaxillitis. Chronic diseases of the salivary glands in children.	8	4	4
Theme № 9 Traumatic injuries of the soft tissues. Burns and frostbites.	9	3	6
Theme № 10 Summary lesson. Differentiated test.	7	3	4
Whole	84	38	46

4.Theme of lectures

№	**Theme**	Hours
1	Anatomical and physiological features of development and structure of tissues and organs of the maxillofacial area in children. Local and general anesthesia in children. Indications and contraindication for tooth extraction in children, technique of its conduction, tools. Peculiarities of extraction of primary and permanent teeth in children, prevention of its complications.	2

2	Inflammatory processes of the maxillo-facial area in children. Acute and chronic periostitis. Acute and chronic osteomyelitis. Inflammatory cysts of the jaws from primary and permanent teeth. Inflammatory processes of the soft tissues of the maxillo-facial area in children (abscesses, phlegmons, lymphadenitis). Specific inflammatory diseases.	2
3	Causes of child injuries and its prevention. Diagnosis, clinical manifestation of injuries of the soft tissues of the maxillofacial area in children. Principles of the plastic surgery which are used for surgical processing of wounds. Treatment and consequences of the traumatic injuries of the soft tissues of face in children.	2
	Whole	6

5. Seminar lessons

№	Themes	Hours
1	***No seminars***	

6. Laboratory lessons

№	Theme	Hours
1	***No laboratory lessons***	

7. There are no individual work

8. Self-work

№	Theme	Hours	Type of controle
1.	Paint schemes - pictures innervation and vascularization teeth of the upper and lower jaw.	4	Current
2.	Make a table of indications and contraindications to general anesthesia	4	Current
3.	Write prescriptions for local anesthetics for children of all ages	4	Current
4.	To make the scheme of differential diagnosis of odontogenic acute inflammatory processes of MFA at children (periostitis, osteomyelitis, abscess, phlegmon, lymphadenitis)	4	Current
5.	To make the scheme of differential diagnosis of odontogenic chronic inflammatory processes of MFA at children (periostitis, osteomyelitis, abscess, phlegmon, lymphadenitis)	4	Current
6.	Draw diagrams of rational autopsies in the head and neck in the presence of inflammatory processes in soft tissues.	4	Current
7.	Draw a diagram of cytotomy and cystectomy operations	4	Current
8.	Write prescriptions for medications used in the treatment of inflammatory processes in children.	4	Current
9.	Draw a diagram of the topographic location of the major salivary glands, the location of their excretory ducts	4	Current
10.	To chart dif. diagnose diseases TMJ with other diseases	4	Current
11.	To make a table of diagnostic symptoms and treatments of major diseases of joints (arthritis, arthrosis).	4	Current
12.	To chart the necessary resuscitation in emergency conditions (anaphylactic shock, collapse, dizziness).	2	Current
	Whole	**46**	

9. Methods of studing.

The types of educational activities of students according to the curriculum are: a) lectures; b) practical classes; c) the independent work of students (IWS), in organizations of which a significant role is played by consulted teachers. Thematic plans of

lectures, workshops ensure the implementation of the IWS in the educational process of all those that are part of the content of modules.

Topics of lectures reveal problematic issues in relevant sections of pediatric dental surgery.

Practical classes for 4-year study are conducted by the timetable. The duration of practical training is 4 academic hours (240 min)

The methodology of practical training in the discipline "Pediatric Dental Surgery" (4 years 8 semesters) provides:

1. Control of the student's self-work in preparation for the lesson of the current practical theme by checking the student's written performance in the *Workbook* of the relevant tasks - ***20 minutes***.
2. Test control (level α – 2) of the initial level of knowledge and determining the degree of readiness of students for the lesson - **20 minutes**, analysis of tests and justification of correct answers - **20 minutes.**
3. Individual *oral questioning* of students, clarification of individual questions of the topic of the current class, answers to students' questions - ***40 minutes***.
4. During the ***40 minutes***, the students independently during the undergo certain dental manipulations on the phantoms/
5. Control of the *final level* of students' knowledge - ***40 minutes***. It is carried out in the form of solving test problems (*level α-3*), individual oral questioning, solving situational problems.

At the end of the practical lesson, the teacher summarizes its results, gives students the tasks for independent work, points to the nodal questions of the next topic and offers a list of recommended literature for independent study.

For the implementation of the above in the first class, each student is provided with a **detailed work plan during the study of the discipline**, as well as the conditions for its completion. This plan includes:

- a list of theoretical knowledge of the discipline to be acquired by the student;
- a list of practical skills that each student must complete while studying chapter 1 and algorithms for their implementation;
- "Workbook" for independent work of the student self-work in preparation for practical classes, in which it is necessary to complete 5-6 tasks in writing for each topic.

Self-work of students provides:

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

10. Methods of control

Control of knowledge of discipline is in the form of: current control, which is carried out at each practical lesson and allows to identify the level of mastering of individual elements of the training material. During assessment of mastering of each topic for the current educational activity of the student grades on a 4-point (traditional) scale are given taking into account the approved evaluation criteria for the respective discipline. This takes into account all types of work provided by the curriculum. The student must receive a grade on each topic. Forms of assessment of current educational activities are standardized and include control of theoretical and practical training.

Traded at the end of the semester, the scores are converted into points.

The maximum number of points that a student can collect for current educational activity per semester for admission to the exam is 120 points.

The minimum number of points that a student must collect for current educational activity per semester for admission to the differential test is 72 points.

Methods of evaluation of current educational activity:

Conversion of a traditional 4-point scale into a multi-score (maximum 120 points) - the conversion of the total grade of the current performance - is made only after the current lesson that precedes the fifferential test. Conversion is performed by the following algorithm:

- calculates the average mark of the student on the traditional 4-point scale, obtained during the current classes (up to a hundredth grade);
- to obtain a convertible multivariate total assessment of current performance, the average score obtained on the traditional 4-point scale must be multiplied by a factor of 24. The exception is the case when the average on the traditional 4-point scale is 2 points. In this case, the student receives 0 points on a multi-scale;
- the average grade of current achievement is calculated on the total number of lessons, and not on actually attended by the student.

The minimum converted amount of points of current achievement for the discipline "Pediatric Dental Surgery" is **72 points**.

Differential test score is scored in points (traditional 4-point score is not given). The maximum score for test is 80 points. The minimum number of points for the exam under which control is considered to be passed is 50 points.

The maximum number of points per course is 200 points.

Criteria

Marks:

- "**excellent**" – (81-100% current test) gets a student who fully possesses theoretical educational material on a subject, can use the acquired knowledge to answer a question, substantiate his / her answer; mastered the practical skills provided by the topic of the lesson; solves test tasks from the topic and explains the progress of their solving;
- "**good**" - (71-80% current test) a student who has full theoretical knowledge of the topic can use the knowledge gained to answer the question, but with some difficulty substantiates his answer; acquired the practical skills foreseen by the relevant occupation; can unlink test tasks from a topic and explain how they are solved;
- "**satisfactory**" - (61-70 % current test) is obtained by a student who does not have sufficient theoretical teaching material on the topic, with difficulty uses the obtained knowledge, cannot substantiate his / her answer; has not sufficiently mastered the practical skills provided by the relevant occupation; Difficult to solve test tasks on a topic;

- "**unsatisfactory**" - (less 60% current test) is obtained by a student who does not possess theoretical teaching material on the topic, cannot use the acquired knowledge to answer the question and substantiate his / her answer; has not mastered all the practical skills foreseen by the relevant occupation; cannot and does not resolve test tasks from a topic.

Tupe of **final control – Differentiated test.**

Calculating the number of points is based on student evaluations received by traditional scale while learning subjects by calculating the arithmetic mean (AM), rounded to two decimal places. The resulting value is converted into points by multi-scale as follows:

$$X=\frac{AM\times 120}{5}$$

For convenience, a table converting 200-point scale:

Conversion of the average score for current activity in multimark scale for courses, finishing with differentiated test

4- points scale	200- points scale		4- points scale	200- points scale		4- points scale	200- points scale		4- points scale	200- points scale
5	120		4,45	107		3,91	94		3,37	81
4,65	119		4,41	106		3,87	93		3,33	80
4,91	118		4,37	105		3,83	92		3,29	79
4,87	117		4,33	104		3,79	91		3,25	78
4,83	116		4,29	103		3,74	90		3,2	77
4,79	115		4,25	102		3,7	89		3,16	76
4,75	114		4,2	101		3,66	88		3,12	75
4,7	113		4,16	100		3,62	87		3,08	74
4,66	112		4,12	99		3,58	86		3,04	73
4,62	111		4,08	98		3,54	85		3	72
4,58	110		4,04	97		3,49	84			
4,54	109		3,99	96		3,45	83		Less 3	Not enough
4,5	108		3,95	95		3,41	82			

Differentiated test is a form of final control of the student's acquisition of theoretical and practical material from a separate academic discipline for the semester, which is conducted as a control measure. A student is considered to be admitted to the test in the discipline, if he has attended all enrolled in the subject curriculum, completed all types of work envisaged in the curriculum of this discipline and in its study during the academic year scored a minimum of 72 points, not less than 72 points points).

The differentiated test is conducted in writing during the current plan according to the schedule. The test form should be standardized and include control of theoretical and practical training. The Differentiated test includes 80 test tasks.

The maximum number of points that a student can get in the exam is 80.

The **minimum number of points** that a student can get in the exam - at least 50.

The number of points for the current control and exam, which is accrued to students, is converted into a 4-point scale as follows:

Points of disciplines	**Score 4-point scale**
From 170 to 200 points	**"5"**
From 140 to 169 points	**"4"**
From 139 points to a minimum the number of points that should dial student	**"3"**
Less the minimum number of points	

Methodical support (educational content (synopsis or extended plan of lectures), plans of practical (seminar classes, tasks for laboratory works, independent work, questions, tasks or cases for current and final control of knowledge and skills of students, complex control work, post-certification monitoring of acquired knowledge and skills in the discipline)

Methodical support of discipline

1. Texts of lectures on the discipline
2. Methodical development of practical classes for teachers - according to the number of topics.
3. Sets of test tasks (to control the initial and final level of knowledge) - according to the number of topics.
4. Methodical developments for the organization of independent work of students in preparation for practical classes - according to the number of topics.
5. Workbook for students.
6. Algorithms for performing dental manipulations on phantoms.
7. List of theoretical questions (60 questions) to the differentiated test in the discipline of "Pediatric Surgical Dentistry".
8. List of practical skills (20 skills) for the differential test in the discipline of "Pediatric Surgical Dentistry".
9. 80 test tasks (in 6 versions) to the differentiated test in the discipline of "Pediatric Surgical Dentistry".