

EDUCATIONAL COMPONENT SYLLABUS**PROPAEDEUTICS OF PEDIATRIC THERAPEUTIC DENTISTRY**

Specialty: **221 "Dentistry"**

Educational and professional program: **Dentistry**

Component code in the educational program: **OK 23**

Level of higher education: **second (master's)**

Form of education: **full-time (full-time)**

Year of study : **2**

Semester(s): **III(autumn)**

Type of educational component: **mandatory**

Academic year: **2025-2026**

Amount: **3ECTS credits – (90 hours)**

Educational classes: **lectures, practical classes , consultations**

Final control: **diff . credit**

Prerequisites : **anatomy and morphology**

Department/division: **Department of Pediatric Dentistry and Implantology**, 51 Peremohy Ave., 5th floor

Head of the educational component: **Prof. Alina Grigorova** ,

email : ao.hryhorova@knmu.edu.ua

Educational component page in the KNMU Distance Learning System (Moodle):
<https://distance.knmu.edu.ua/course/view.php?id=2686>

DESCRIPTION OF THE EDUCATIONAL COMPONENT

"Propaedeutics of Pediatric Therapeutic Dentistry" is compiled in accordance with the Educational and Professional Program "Dentistry" and the Standard of Higher Education of Ukraine (hereinafter referred to as the Standard), second (master's) level, field of knowledge 22 "Healthcare", specialty 221 "Dentistry".

OBJECTIVE :The main goal of the educational discipline "Propaedeutics of Pediatric Therapeutic Dentistry" is to master the skills of preparing and filling carious cavities of different classes on phantoms, the features of performing endodontic interventions in temporary and permanent teeth at different stages of development. The emphasis is on the features of the structure of temporary teeth and permanent teeth with an unformed root, which determine the features of the technique of performing certain dental manipulations.

LEARNING OUTCOMES:

The ultimate goals of studying the academic discipline "Propaedeutics of Pediatric Therapeutic Dentistry":

1. Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of pediatric therapeutic dentistry.

- recognize the moral, ethical and professional rules of pediatric dentistry;
- understand the moral and deontological principles of a medical specialist and the rules of professional subordination in a pediatric dentistry clinic;
- master the skills of communicating with colleagues, child patients, their parents and relatives, taking into account their psychological state;
- learn to promote a healthy psychological microclimate in the team; learn the legal norms of the relationship between a pediatric dentist → a patient, a child.

2. Demonstrate the performance of dental manipulations on phantoms during dental treatment in children.

Demonstrate on phantoms:

- preparation of carious cavities of primary and permanent teeth, taking into account the type of filling material;
- filling carious cavities of primary and permanent teeth with various filling materials;
- grinding and polishing of fillings made of all types of materials used in pediatric dentistry;
- placement and removal of temporary fillings and hermetic dressings in the treatment of caries, pulpitis, and periodontitis in children;

- impregnation of hard tissues of temporary teeth;
 - application of odontotropic pastes;
 - root canal impregnation;
 - instrumental treatment of canals of temporary and permanent teeth;
 - filling the root canals of temporary and permanent teeth with various materials.
3. Demonstrate on phantoms the ability to use basic dental instruments, materials and use dental equipment in pediatric dentistry.
- get acquainted with the structure of a children's dental office, department, clinic;
 - master the dental equipment of a children's dental clinic;
 - learn the basic dental instruments used in pediatric dentistry;
 - study the classification of dental filling materials, materials for root canal fillings used in children;
 - determine the basic requirements for dental materials, their properties and indications for use in children.
4. To distinguish the features of the application of the principles of asepsis and antiseptics in the clinic of pediatric therapeutic dentistry.
- study modern requirements for sterilization of instruments in a pediatric dentistry clinic;
 - understand the rules of asepsis and antiseptics at a pediatric dental appointment;
 - learn the standards for controlling sterilization efficiency;
 - identify methods for preventing conditions conducive to the spread of infection in childcare facilities.

CONTENT OF THE EDUCATIONAL COMPONENT

List of topics for practical classes (30 hours):

- 1: Organization of work and equipment of a dental office. Universal dental unit, dental tips. Basic dental instruments for therapeutic reception: types, purpose. Manufacturing of phantoms. Disinfection and sterilization of dental equipment and instruments. Manufacturing of phantoms.
- 2: Topographic anatomy of primary teeth at different stages of development. Modeling teeth from plastic and hard materials. Topographic anatomy of permanent teeth at different stages of development. Modeling teeth from plastic and hard materials.
- 3: Preparation of carious cavities of class I, II, III, IV and V in primary and permanent teeth with unformed roots. Selection of instruments.
- 4: Dental cements and amalgams. Filling of carious cavities I, II, III, IV and V in primary and permanent teeth. Technique of filling of carious cavities II class with dental cements and amalgam in primary and permanent teeth. Restoration of the contact point.
- 5: Composite filling materials and compomers . Techniques for filling carious cavities of classes I, II, III, IV and V in primary and permanent teeth.
- 6: Technique of tooth cavity preparation in temporary and permanent teeth with unformed roots. Modern endodontic instruments: types, purpose, selection. Technique of instrumental and medical treatment of root canals in temporary and permanent teeth with unformed roots.
- 7: Filling materials for temporary and permanent root canal obturation. Technique of root canal obturation in primary teeth. Root filling. Technique of root canal obturation in permanent teeth with unformed roots.

List of lecture topics (10 hours):

1. Historical stages of development of pediatric dentistry. Place of pediatric dentistry among dental disciplines and general pediatrics. Main problems, sections of pediatric dentistry. Role of domestic scientists in the development of the discipline.
2. Anatomical-morphological, histological and radiological features of the dentofacial system in children at different age periods.

3. Features of preparation of carious cavities of different classes in primary and permanent teeth in children.
4. Modern filling materials used in pediatric therapeutic dentistry: chemical and light-cured composite materials. Types, properties, application techniques.
5. Endodontic treatment of primary teeth and permanent teeth with unformed roots. Endodontic instruments and techniques. Root canal filling in primary and permanent teeth in children.

List of topics for student independent work (50 hours)

1. Modern concepts of preparation of carious cavities: principles of preparation according to Black, Lukomsky, Mount , preparation for preventive filling. Alternative methods of removal of carious tissues (chemical-mechanical preparation of carious cavities in children, ART-methodology)
2. Modern matrix systems and matrix holders . Technique for restoring the contact point when filling teeth.
3. Finishing of fillings made of various filling materials: selection of tools, accessories, execution technique.
4. Modern photopolymerizers : types, purpose, lamp power control. Protective equipment for the doctor and the patient.
5. Modern materials for permanent root canal obturation in permanent teeth. Calcium-containing , polymer, glass ionomer , zinc oxide-eugenol . Their properties, application techniques.
6. Adhesive systems and their application in dentistry. Types, composition, properties, application technique.

VTS is aimed at deepening and consolidating theoretical knowledge obtained during classroom training and contributes to the formation of professional competencies. The results of VTS are subject to control and are included in the final knowledge control.

Consultations: online, with prior registration on the course page in the Distance Learning System.

Teaching methods: performing exercises and practical work, solving situational problems and cases.

EVALUATION

Current educational activity (PND). Assessment of the success of education seekers is carried out in accordance with the Instructions for assessing the educational activity of higher education seekers at KhNMU (<https://knmu.edu.ua/documents/normatyvni-dokumenty-navchalnogo-proczesu/>). The assessment for a practical or final lesson is from 2 to 5 points. Submitting assignments late for unwarranted reasons entails a reduction in the grade in accordance with the percentage of delay in time from the time of completing the assignment. Assignments are checked within 24 hours. Grades are posted in the electronic journal. Unsatisfactory grades are worked out in accordance with the Regulations on the procedure for working out academic classes by students of KNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_vidprac_zaniat.pdf).

At the end of the semester, the average grade for the semester is converted into a multi-point grade (70 - 120 points) in accordance with Table 1 of the Assessment Instructions (see above). The arithmetic average of the semester GPA constitutes **the total learning activity (GPA)** .

Individual tasks(I) are rated up to 10 points.

Final control. The condition for admission to the exam is to score 70 points on the CIS. The passing score is from 50 to 80 points.

Grade for the discipline (OD) . $OD = ZND + IZ + \text{diff.zalik}$.

Appealing the results of the final control is carried out in accordance with the procedure established at the KhNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_apel_kontrol.pdf).

EDUCATION COMPONENT POLICIES

Recommendations for course work: actively participate in all forms of work in classes, devote 1-2 hours daily to independent work and preparation for classes, ask questions during classes, attend consultations, submit assignments on time, and complete all forms of control.

Attendance at classes. Attendance at practical classes is mandatory. The uniform during offline classes is a white medical gown. If you are more than 5 minutes late, you may not be allowed to attend the class. Missed classes are made up in accordance with the Regulations on the procedure for students of KNMU to complete classes (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_vidprac_zaniat.pdf).

Academic integrity. KhNMU stands on positions of zero tolerance for manifestations of academic dishonesty. Any violations of the principles of academic integrity entail liability in accordance with the procedure established at KNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_ad-1.pdf).

The use of electronic gadgets and artificial intelligence tools is permitted only with the permission of the teacher.

Policy on individuals with special educational needs. Applicants with special educational needs should contact a teacher to develop an individual educational trajectory.

Teacher response time: 24 hours.

Technical requirements for working on the course:

- access to a computer, laptop, tablet or smartphone
- Google account with your own photo
- Google skillsWorkspace (Google)Meet, Docs, Sheets, Slides, Forms) and Moodle

Technical support: ASU (ev.shevtsov@knmu.edu.ua), Google (tehotdelknmu@gmail.com), Moodle (al.korol@knmu.edu.ua)

RECOMMENDED SOURCES

1. Kaskova L. F., Vashchenko I. Yu., Bereghna O. E. Propaedeutics of children therapeutic dentistry. Kyiv, Magnoliya, 2024y. - 200p.
2. Kaskova L. F., Yanko N. V. Preclinical manual of paediatric therapeutic dentistry. Kyiv, Magnoliya, 2025y. - 130p.
3. Nazaryan R. S., Fomenko Yu. V., Shcheblykina N. A., Kolesova T. O. Diseases of the periodontium and oral mucosa in childhood. Methodological guidelines for students, subordinates of the dental faculty. KhNMU, Kharkiv, 2021. - 120p.
4. Kaskova L. F., Vashchenko I. Yu., Bereghna O. E. Propaedeutics of children therapeutic dentistry. Kyiv, Magnoliya, 2024y. - 200p.
5. Kaskova L. F., Yanko N. V. Preclinical manual of paediatric therapeutic dentistry. Kyiv, Magnoliya, 2026y. - 130p.
6. Kaskova L. F. "Prevention of Dental Diseases", Kyiv, Magnoliya, 2025y., 360p.
7. Kaskova L. F., Vashchenko I. Yu., "Dental diseases prevention.", Kyiv, Magnoliya, 2025y., 250p.

Head of the Department of Pediatric Dentistry
and implantology

Alina GRIGOROVA