

**EDUCATIONAL COMPONENT SYLLABUS
PEDIATRIC THERAPEUTIC DENTISTRY**

Specialty: **221 Dentistry**
Educational and professional program: **Dentistry**
Component code in the educational program: **OK 35**
Level of higher education: **second (master's)**
Form of education: **full-time (full-time)**
Year of study: **4**
Semester(s): **VII (fall), VIII (spring)**
Type of educational component: **mandatory**
Academic year: **2027 -2028**

Volume: **4ECTS credits (120 hours)**
Training sessions: **lectures , practical classes , consultations**
Final control: **exam**
Prerequisites : **anatomy, physiology, histology, pharmacology, therapeutic dentistry**

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

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

email :a.o. hryhorova @ knmu . edu . u.a

Educational component page in the KhNMU Distance Learning System (Moodle):

<https://distance.knmu.edu.ua/course/view.php?id=4787>

DESCRIPTION OF THE EDUCATIONAL COMPONENT

Pediatric therapeutic dentistry studies methods of examining patients, diagnosing therapeutic dental diseases, their treatment and prevention in a pediatric therapeutic dentistry clinic.

COURSE OBJECTIVE: to enable students to master diagnostic techniques and dental manipulations for the treatment of caries and its complications in primary and permanent teeth at various stages of their development, periodontal diseases and oral mucosa.

LEARNING OUTCOMES: *(in a language understandable to applicants)*

know: issues of etiology and pathogenesis of major dental diseases.

be able:

1. Analyze the results of a patient examination in a pediatric therapeutic dentistry clinic.
2. Determine the nature and principles of treatment of diseases in pediatric therapeutic dentistry.
3. Identify the leading symptoms and syndromes in pediatric therapeutic dentistry.
4. Identify various clinical variants and complications of the most common diseases in the pediatric therapeutic dentistry clinic.
5. Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in the pediatric therapeutic dentistry clinic.
6. Diagnose emergencies in a pediatric therapeutic dentistry clinic.
7. Provide necessary emergency care in emergencies in the pediatric therapeutic dentistry clinic.
8. To substantiate and formulate a preliminary clinical diagnosis in a pediatric therapeutic dentistry clinic.
9. Plan an examination of a dental patient, interpret the results of laboratory and instrumental examinations.
10. Conduct differential diagnostics in the pediatric therapeutic dentistry clinic:
11. To conduct primary and secondary prevention of the most common diseases in the pediatric therapeutic dentistry clinic.
12. Make a final diagnosis of major diseases in the pediatric therapeutic dentistry clinic.

CONTENT OF THE EDUCATIONAL COMPONENT

of lecture topics (10 hours):

1. Dental caries in children. Etiology and pathogenesis of caries. Classification. Clinic, diagnostics and treatment of caries of primary and permanent teeth in children.

2. Non-carious dental lesions in children. Etiology and pathogenesis of non-carious lesions. Classification. Clinic, diagnostics and treatment of non-carious lesions of primary and permanent teeth in children.
3. Anatomy and physiology of the pulp of primary and permanent teeth in children. Etiology and pathogenesis of pulpitis. Classification. Clinic, diagnosis and differential diagnosis of pulpitis in children.
4. Treatment of pulpitis of primary and permanent teeth in children.
5. Anatomical and histological structure and functions of the periodontium in different age periods in children. Etiology and pathogenesis of periodontitis. Classification. Clinic, diagnosis and differential diagnosis of periodontitis in children. Acute trauma of primary and permanent teeth in children.

List of topics of practical / laboratory classes / seminars (70 hours):

1. The main stages of development of temporary and permanent teeth. The timing of laying, mineralization, eruption and formation of temporary and permanent teeth in children.
2. Caries of primary teeth in children. Patterns of clinical manifestations and course. Diagnosis, differential diagnosis.
3. Treatment of caries of primary teeth in children. Modern approaches to the treatment of caries of primary teeth.
4. Caries of permanent teeth in children. Regularities of clinical manifestations and course. Diagnostics, differential diagnostics.
5. Treatment of caries of permanent teeth in children. Modern approaches to treatment. General treatment of caries: planning, methods. Errors and complications in the treatment of caries in children of different ages. Their prevention and elimination.
6. Non-carious lesions of hard dental tissues in children: hypoplasia, fluorosis. Etiology, clinical features, diagnostics, differential diagnostics, treatment, prevention.
7. Hereditary malformations of the hard tissues of the teeth: amelogenesis imperfecta , dentinogenesis imperfecta , dysplasia Stanton-Kapdepona . Clinic, diagnostics, tactics of a pediatric dentist.
8. Control lesson.
9. Pulpitis of primary teeth in children. Pulpitis of permanent teeth in children. Diagnosis, differential diagnosis. Choice of treatment method for pulpitis of primary and permanent teeth in children depending on the form of pulpitis and stage of tooth development.
10. Treatment of pulpitis of primary teeth in children. Devital amputation and extirpation of the pulp. Treatment of pulpitis of permanent teeth in children. Conservative method. Vital amputation and extirpation of the pulp.
11. Treatment of pulpitis of permanent teeth in children. Devital methods. Errors and complications in the treatment of pulpitis of primary and permanent teeth in children. Their prevention and elimination.
12. Periodontitis of primary teeth in children. Treatment of periodontitis of primary teeth in children. Choice of treatment method. Features of endodontic Interventions . Prognosis. Radiological diagnostics of caries and its complications in children.
13. Periodontitis of permanent teeth in children. Treatment of periodontitis of permanent teeth in children. Choice of treatment method. Features of endodontic interventions in permanent teeth with unformed roots. Prognosis.
14. Differential diagnosis of caries, pulpitis and periodontitis in primary and permanent teeth in children. Errors and complications in the diagnosis and treatment of periodontitis of primary and permanent teeth in children, their prevention and elimination. Acute trauma of primary and permanent teeth in children. Causes, clinical features, diagnostics. Treatment tactics.
15. **Final lesson**

List of topics for student independent work (40 hours)

1. Preparation for practical, seminar classes (theoretical, development of practical skills, abilities).
2. Technique of aesthetic restoration of permanent teeth in children using modern composite materials. Optical properties of permanent teeth in children and adolescents.
3. Restoration of temporary teeth in children using standard metal crowns and celluloid caps.
4. Application of modern endodontic techniques in the treatment of caries complications in primary and permanent teeth in children. Machine and manual techniques, ultrasonic and laser treatment of root canals.
5. Filling the root canals of permanent teeth in children using heated and thermoplastic gutta-percha.

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: lecture, exercises and practical work, solving situational tasks and cases, standardized patient method

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 multiple-point grade (70 – 120 points) in accordance with Table 1 of the Assessment Instructions (see above). The arithmetic average of the PND for both semesters constitutes **the total learning activity (GNA)** .

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 exam score is from 50 to 80 points.

Discipline grade (OD). $OD = ZND + IZ + exam$.

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 lectures and 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 for 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
- *other department requirements*

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. Kaskova L. F. "Prevention of Dental Diseases", Kyiv, Magnoliya, 2025y., 360p.
4. Kaskova L. F., Vashchenko I.Yu., "Dental diseases prevention.", Kyiv, Magnoliya, 2025y., 250p.

Head of the Department of Pediatric Dentistry
and implantology

Alina GRIGOROVA