

National Pirogov Memorial Medical University, Vinnytsya

APPROVE
Higher Educational Institution
Vice-Rector for Scientific and
Academic Work and International Links
Inna ANDRUSHKO
« 20 » 08 2024

“ AGREED ”
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of Pediatric Diseases with Patient Care
PhD., prof. of HEI
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« 20 » 08 2024

**SYLLABUS
of academic discipline
"PROPEDEUTICS OF PEDIATRICS"**

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| Specialty | 222 Medicine |
| Educational level | the second (master`s) level |
| Educational programme | EPP Medicine 2022 |
| Academic year | 2024-2025 |
| Department | Propaedeutics of pediatric diseases and care of sick children Propedeutics of Pediatric Diseases with Patient Care |
| Lecturer | Prof., Oleksandr KULESHOV |
| Contact information | <i>child.diseases@vnmnu.edu.ua,</i> <i>Pirogova St. 56 (morphological corps), (0432) 570379</i> |
| Syllabus compiler | Ass-prof., Oliinyk V.S., Ass-prof., Tikholaz O.V. |

Разрыв страницы

1. Status and structure of the discipline

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| Discipline status | Compulsory |
| Discipline code in EPP/discipline place in EPP | CC 26, discipline of general training |
| Course / semester | 3rd year (V-VI semester) |
| The amount of discipline (the total number of hours / number of credits ECTS) | 156 hours /5,2 credits ECTS |
| The structure of the discipline | Lectures - 30 hours Practical classes 72 hours Independent work 54 hours In general: classroom classes - 65.4%, independent extracurricular activities - 34.6% |
| Number of content modules | 3 |
| Language of study | English |
| Form of study | Full-time (<i>or remote full-time by order</i>) |

2. Description of the discipline

Short annotation of the course, relevance.

The subject area of the discipline is mastering the basic rules of objective examination of the child, studying the principles of assessing physical and psychomotor development according to age, acquaintance with the rules of breastfeeding a healthy child, as well as the main anatomical and physiological features of organs. The main task of the course is to teach students the methods of examination of the patient, the formation of a preliminary diagnosis, creating a list of additional laboratory and instrumental research methods, their evaluation. During the analysis of individual diseases, the issues of etiopathogenesis, clinical picture, diagnosis, prevention are covered.

Prerequisites. For successful mastering of discipline the student needs the knowledge received in the course of studying of the following disciplines of general preparation: medical biology; medical and biological physics; biological and bioorganic chemistry; human anatomy; pathological anatomy; normal physiology; pathological physiology; care for sick children.

The purpose of the course and its significance for professional activities. The purpose of the discipline is for students to master the anatomical and functional features of the structure of systems and organs, gaining practical skills to assess physical and psychomotor development, assessment and correction of breastfeeding, objective examination of the child with the development of clinical thinking and application of knowledge in practice at the bedside. ethics and deontology.

Postrequisites. In the process of studying the discipline, a student acquires the knowledge, which is necessary for successful mastering of professional training disciplines, namely: pediatrics, therapy, hematology, cardiology, gastroenterology, nephrology, urology, pulmonology, which involves the

integration of teaching with these disciplines and the application of acquired knowledge, skills and abilities in the process of further education and professional activities.

3. Learning outcomes. After successful study of the discipline the applicant will be able to:

1. Determine the period of childhood, taking into account its main features.
2. Assess the general condition of the child, physical development and psychomotor development.
3. To make schemes of rational feeding and nutrition of healthy children of early age.
4. Conduct an objective examination of the child (examination, palpation, percussion, auscultation).
5. Make a preliminary diagnosis, classify and analyze the typical clinical picture.
6. Make a plan of additional laboratory and instrumental methods of examination and analyze the results.
7. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatrics.
8. Keep medical records.

4. Content and logistic of the discipline

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| Module 1 Child development | 5th semester 20 hours / 0.67 credits | Lectures №№ 1-2 Practical classes № 3-6 Topics for self-study № 1-2, 7 |
| Module 2 Feeding and nutrition of young children | 5th semester 20 hours / 0.67 credits | Lectures № 3-4 Practical classes № 1-3, 5 Topics for self-study № 3, 5 |
| Module 3 Anatomical and physiological features, examination methods and semiotics of the disease in children | 5-6 semester 116 hours/ 3,86 credits | Lectures № 5-15 Practical classes № 1, 3-13, 15-24, 26-30 Topics for self-study № 2, 14, 25, 31, 32 |

The discipline includes 44 topics, which are divided into 3 thematic modules.

Module 1. Child development.

Topic 1. The subject and place of pediatrics, the main stages of development.

Topic 2 Organization of medical and preventive care for children in Ukraine.

Topic 3. Periods of childhood. Methods and features of collecting anamnesis of life and disease in children. Selection of epidemiological, hereditary, allergological, intra- and postnatal anamnesis. Criteria for assessing the general condition of sick children.

Topic 4. Features of the newborn period. Premature baby.

Topic 5. Unconditional reflex activity of a child of the 1st year. Psychomotor development of the child, criteria for its evaluation.

Topic 6. Physical development of children, its indicators, anthropometry. Physical development assessment schedules. Semiotics of physical development disorders in children. Interpretation of standard deviations of physical development indicators.

Topic 7. Preparation for practical classes: theoretical training and development of practical skills.

Module 2. Feeding and nutrition of young children.

Topic 1. Lactation, regulation, disorders. Nutrition of a nursing woman. Natural breastfeeding of children of the 1st year of life, its advantages.

Topic 2. Weaning. Features of its introduction

Topic 3. Features of feeding premature infants. The concept of "free feeding", its forms and indications for use

Topic 4. Artificial feeding. Mixed feeding. Rational nutrition of children from one year to four.

Topic 5. Preparation for practical classes: theoretical training and development of practical skills.

Module 3. Anatomical and physiological features, examination methods and semiotics of the disease in children.

Topic 1. Anatomical and physiological features, research methods, semiotics of lesions of the musculoskeletal system in children.

Topic 2. Vitamins, their importance for child development.

Topic 3. Anatomical and physiological features, methods of examination, semiotics of skin and subcutaneous tissue in children.

Topic 4. Anatomical and physiological features, methods of examination, semiotics of lesions of the nervous system in children. Features of cerebrospinal fluid in children.

Topic 5. Anatomical and physiological features, methods of studying the hematopoietic system (complaints, history of disease, examination, palpation, percussion). Lymph node enlargement syndrome. Features of the erythrocyte system in children. The main clinical manifestations of anemic syndrome.

Topic 6. Features of the leukocyte system in children. Leukocytosis and leukopenia syndrome. Topic 7. Primary hemostasis: mechanism, clinical and laboratory tests. The main clinical manifestations of hemorrhagic vasculitis and Werlhof's disease.

Topic 8. Secondary hemostasis: mechanism, laboratory tests. Classification of hemorrhagic diathesis. The main clinical manifestations of hemophilia.

Topic 9. Module assessment of the hematopoietic system in children

Topic 10. Anatomical and physiological features, methods of examination of the gastrointestinal system in children (complaints, history, examination).

Topic 11. Methods of superficial and deep palpation of the abdomen in children. Percussion and auscultation of the digestive system. Symptoms of gallbladder and pancreas diseases.

Topic 12. Laboratory, functional and biochemical methods of research of the gastrointestinal system.

Topic 13. Semiotics of gastrointestinal lesions in children: functional disorders of the gastrointestinal tract: infantile colic, vomiting syndrome, functional dyspepsia. Differential diagnosis of pylorospasm and pylorostenosis. Chronic gastritis, peptic ulcer disease. Indications for early intervention in children with congenital pathology of the gastrointestinal.

Topic 14. Carbohydrate metabolism in children.

Topic 15. Anatomical and physiological features, methods of research (collection of complaints, history of disease, examination) of the respiratory system in children. Types of hypoxia. Ventilation insufficiency: types. Respiratory failure, its degree.

Topic 16. Palpation and percussion of the respiratory organs in children.

Topic 17. Auscultation of the lungs in children. Laboratory, functional and instrumental methods of research of the respiratory system.

Topic 18. Acute respiratory diseases: etiology, main clinical symptoms. Classification of bronchitis and their main clinical manifestations.

Topic 19. Pneumonia: etiology, classification, basic clinical syndromes.

Topic 20. Module assessment of the respiratory system in children

Topic 21. Anatomical and physiological features, methods of examination of the urinary system (complaints, history, examination, palpation, percussion).

Topic 22. Laboratory methods of research of the urinary system at children. Functional and instrumental methods of studying the urinary system in children.

Topic 23. Cystitis, pyelonephritis: etiology, ways of impression, the main clinical manifestations.

Topic 24. Glomerulonephritis: etiology, main clinical manifestations. Acute and chronic renal failure syndrome.

Topic 25. Water-electrolyte and acid-base metabolism in children.

Topic 26. Module assessment of the urinary system in children

Topic 27. Anatomical and physiological features of cardiovascular system in children. Fetal circulation. Methods of cardiovascular system research: complaints, anamnesis, examination, palpation of the pulse and areas of the heart.

Topic 28. Percussion and auscultation of the heart in children. Differential diagnosis of organic and functional noise. Blood pressure measurement, age features.

Topic 29. Functional tests and instrumental methods of cardiovascular system diseases diagnostic (echocardiography, ECG). Cardiac arrhythmias and conduction: sinus brady-, tachycardia, extrasystole, paroxysmal tachycardia, blockade.

Topic 30. Semiotics of cardiovascular system lesions: congenital heart defects (DMSHP, DMPP, nonunion of the Botalo's duct), determination of adequate physical activity in children with this pathology.

Topic 31. Endocrine system in children. Semiotics of syndromes of hyper- and hypofunction of individual endocrine glands and diseases of the endocrine system in children.

Topic 32. Preparation for practical classes: theoretical training and development of practical skills.

Types of education according to the curriculum are: a) lectures, b) practical classes, c) independent work of students, d) consultations.

The lecture course discovers the problematic issues of the relevant sections of pediatrics.

Topics of the lecture course reveal modern ideas about the semiotics of syndromes of various systems and the most common diseases of childhood, problematic issues of etiology, pathogenesis, clinic, diagnosis, prevention, taking into account the main features according to age. The program of lectures is revised taking into account modern views and on the basis of a systematic view of modern medical trends.

Practical classes provide a theoretical justification of the main issues of the topic and the acquisition of the following practical skills:

1) methods of examination (palpation, percussion, auscultation) of organs and systems of children of different ages in compliance with the principles of ethics and deontology,

2) solving situational problems in interpreting the results of laboratory and instrumental studies in children in normal and in pathology and calculating the diet of healthy children of different ages. In the practical classes, students draw up plans for examining the child, making a preliminary diagnosis with the selection of the leading clinical symptom or syndrome by making an informed decision, using complaints, patient history, objective examination of the child and solve clinically oriented situational problems, principles of early childhood intervention and test tasks.

The student's independent work involves preparation for practical classes and development of practical skills, study of topics for independent extracurricular work, preparation of presentations, tables, processing of scientific literature and writing reviews of the provided topics for individual

work. The control of mastering the topics of independent extracurricular work is carried out on the current and final control of the discipline.

Individual work includes the study of scientific literature, preparation of reviews on the topics provided for presentation at the meetings of the student scientific circle, the implementation of scientific and practical researches, participation in specialized competitions, scientific and practical conferences and organization of students' research works.

Thematic plans of lectures, calendar plans of practical classes, thematic plan of independent extracurricular work, volume and directions of individual work are published on the site of the department.

The route of obtaining materials: Department of Propaedeutics of pediatric diseases and care of sick children / Student / Full-time study / Medicine / 3rd year / Teaching materials / or by link <https://www.vnmu.edu.ua/> Department of Propaedeutics of Pediatric Diseases and care of sick children #. Access to materials is provided from the student's corporate account s000XXX@vnmu.edu.ua.

5. Forms and methods of monitoring academic performance

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| Current control in practical studies | Methods: oral or written survey, testing, electronic survey, solving situational problems, control of practical skills |
| Intermediate control | Methods: current assessment of each practical lesson, and attending a lecture course. |
| Final control of the discipline - differential test | Methods: oral examination and implementation of practical skills (according to the regulations on the organization of the educational process in National Pirogov Memorial Medical University, Vinnytsya (link https://www.vnmu.edu.ua/ General information / Basic documents)) |
| Tools for diagnosing learning success | Theoretical questions, tests, clinically-oriented situational tasks, practical tasks, demonstration of practical skills |

6. Assessment criteria

Knowledge assessment is carried out in accordance with the Regulations of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/General information>)

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| Continuous assessment | According to the four-point system of traditional assessments: 5 "excellent", 4 "good", 3 "satisfactory", 2 "unsatisfactory" |
| Intermediate separation controls | According to the four-point system of traditional assessments |
| Midpoint separation assessment | According to the four-point system of traditional assessments |
| Pass-fail exam (credit) | On a 200-point scale (the arithmetic average grade for the semester is converted into points) Credited: 120 to 200 points Not credited: less than 120 points (See Grading Scale) |
| Final control of the discipline | <i>Sum of points for pre-examination testing (12-20 points) and oral examination (38-60 points)</i> |

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| | Exam grade: 71-80 points - "excellent" 61-70 points - "good" 50-60 points - "satisfactory" Less than 50 points - "unsatisfactory" / did not pass |
| Discipline assessment: | Current academic assessment - from 72 to 120 points (conversion of the average traditional assessment of practical class on a 120-point scale): 60% of the grade for the discipline Final control - from 50 to 80 points: 40% of the grade for the discipline Individual work - from 1 to 12 points From 122 to 200 points in total. |

Discipline Score Scale: National and ECTS

| The sum of grades for all types of educational activities | Score ECTS | Score on a national scale | |
|---|------------|---|--|
| | | For exam, course project (work), practice | for credit test |
| 180-200 | A | excellent | credited |
| 170-179,9 | B | good | |
| 160-169,9 | C | | |
| 141-159,9 | D | satisfactory | |
| 122-140,99 | E | satisfactory | |
| 0-121,99 | FX | unsatisfactory with the possibility of reassembly | is not credited with the possibility of reassembling |
| | F | unsatisfactory with a mandatory reexamination of discipline | is not credited with mandatory reexamination of discipline |

7. Policy of discipline / course

The student has the right to receive high-quality educational services, access to contemporary scientific and educational information, qualified tutoring during the study of discipline and mastering practical skills. The policy of the department during the providing of educational services is a student-centered, based on normative documents of the Ministry of Education and the Ministry of Health of Ukraine, the Statute of the University and the Procedure for the Providing of Educational Services regulated by the main principles of the organization of the educational process in National Pirogov Memorial Medical University, Vinnytsya and the principles of academic integrity (link <https://www.vnmu.edu.ua/General> information).

Adherence to the rules of National Pirogov Memorial Medical University, Vinnytsya, safety techniques in practical classes.

Observance of the rules of the VNMU regulations, safety precautions at practical classes. Instruction on biosafety, safety of handling chemical reagents, burners and instruction on handling during the signal "Air alarm!" is conducted at the first practical lesson by the teacher. The instructed students are registered in the Safety Instruction Journal. A student who has not been instructed is not allowed to perform practical work.

Requirements for preparation for practical classes.

The student should be prepared for a practical lesson, testing tasks for the current topic should be solved in a workbook, diagrams and tables are filled.

A student should come to class on time, without delay. A student who is more than 10 minutes late is not allowed to the practical class and must work it in the prescribed manner.

In practical classes, the student must be dressed in a work uniform (medical gown, hat). Students who do not have a work uniform are not allowed to practice.

The student must follow the rules of safety in practical rooms and at the department.

When discussing theoretical issues, students should demonstrate tolerance, courtesy and respect for their colleagues and the teacher; when performing practical tasks, the workplace should be kept in order and be cleaned after performing practical work.

Usage of mobile phones and other electronic devices.

The use of mobile phones and other electronic devices in the classroom is allowed only during electronic testing or surveys.

Academic integrity. When studying the discipline, the student must be guided by the Code of Academic Integrity and Corporate Ethics of National Pirogov Memorial Medical University, Vinnytsya (link: [https://www.vnmdu.edu.ua/General information/](https://www.vnmdu.edu.ua/General%20information/)Code of Academic Integrity). (In case of violation of the norms of academic integrity during the current and final controls student receives a grade of "2" and must work it out to his teacher in the prescribed manner within two weeks after receiving an unsatisfactory assessment).

Missed classes. Missed classes are working out in the manner prescribed by Regulations of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link [https://www.vnmdu.edu.ua/General information](https://www.vnmdu.edu.ua/General%20information/)) at the time of workout schedule (published on the website of the department <https://www.vnmdu.edu.ua/> department of propaedeutics of pediatric diseases #) to the teacher on duty. To work out missed lesson student must provide a completed workbook protocol on the relevant topic, take a test and answer questions in writing or orally to the topic of the lesson. The reworking of missed lectures is carried out after providing a thesis of lecture material, or writing an abstract, or preparing own presentation on the topic of missed lecture.

The procedure for admission to the discipline final control is given in the Regulations of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmdu.edu.ua/en/general-regulations>). Students who do not have missed practical classes and lectures and received an average traditional grade of at least "3" are allowed to final control.

Additional points. Individual points in the discipline (from 1 to 12) that student can receive for individual work, the amount of which is published on the website of the department in the educational methodical materials of the discipline, the number of points is determined by the results of IRS according to Regulation of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/en/general-regulations>).

Conflict resolution. In case of misunderstandings and complaints to the teacher because of the quality of educational services, knowledge assessment and other conflict situations, student should submit his / her claims to the teacher. If the issue is not resolved, the student has the right to apply to the head of the department according to Complaints Consideration Procedure in National Pirogov Memorial Medical University, Vinnytsya (link <https://www.vnmu.edu.ua/en/general-regulations>).

Politics in terms of remote learning. Distance learning regulated by the Regulations of the elements of remote learning in National Pirogov Memorial Medical University, Vinnytsya

(<https://www.vnmu.edu.ua/> General information). The main training platforms for studying are Microsoft Team and Google Meets. Practical classes and lectures, exercises and consultations during distance learning is published on the website of the department ((<https://www.vnmu.edu.ua/> Department of Propedeutics of Pediatric Diseases with Patient Care/ News). Feedback from teachers is via messengers (Viber, Telegram, WhatsApp) or e-mail (at the teacher's choice) during working hours.

8. **Educational resources.** Educational and methodological support of the discipline is published on the website of the department ((<https://www.vnmu.edu.ua/> Department of Propedeutics of Pediatric Diseases with Patient Care/ for students).
9. **The timetable and distribution of groups with assigned teachers** are published on the web page of the department ((<https://www.vnmu.edu.ua/> Department of Propedeutics of Pediatric Diseases with Patient Care/ for students).
10. Questions to the final semester control (credit) of the discipline are published on the web page of the department ((<https://www.vnmu.edu.ua/> Department of Propedeutics of Pediatric Diseases with Patient Care/ for students).

The syllabus of the discipline " Propedeutics of Pediatric Diseases " was discussed and approved at the meeting of the department Department of Propedeutics of Pediatric Diseases with Patient Care (record № , dated on August « th», 2023)

Responsible for the academic
discipline


(signature)

(full name) Ass-prof., Viktoria OLIINYK

Responsible for the academic
discipline


(signature)

(full name) Ass-prof., Oksana TIKHOLAZ

Head of the department


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(full name) prof. HEI Oleksandr KULESHOV