National Pirogov Memorial Medical University, Vinnytsya

APPROVE
Higher Educational Institution
Vice-Rector for Scientific and
Academic Work
_____ Inna ANDRUSHKO
"29" 08 2025

"AGREED"
Head of the Department Pediatrics №1
_____ ass. prof. of HEI Tetiana CHEKOTUN
"28" 08 2025

SYLLABUS
of academic discipline
«PEDIATRICS»

Specialty	222 Medicine
Educational level	the second (master`s) level
Educational programme	EPP Medicine, 2022
Academic year	2025-2026
Department	Pediatrics №1
Lecturer	ass. prof. O. Mazulov
Contact information	pediatrics1@vnmu.edu.ua, Khmelnytske highway, 108
Syllabus compiler	ass. prof. Valentyna Antonets

1. Status and structure of the discipline

Discipline status	Compulsory
Discipline code in EPP/ discipline place in EPP	CC 29, discipline of professional training
Course / semester	4rd year (VII-VIII semester)
The amount of discipline (the total number of hours / number of credits ECTS)	120 hours / 4,0 credits ECTS
Number of content modules	6 modules
The structure of the discipline	Lectures - 8 hours Practical classes 62 hours Independent work 50 hours
Language of study	English
Form of study	Full-time (or remote by order)

2. **Description of the discipline**

Short annotation of the course, relevance.

The program of the discipline «Pediatrics» is made in accordance with the order of preparation of applicants for the second (master's) level of education in higher medical educational institutions in accordance with the requirements of the credit transfer system of the ECTS educational process. The main focus of the program is to gain knowledge in the mandatory discipline of professional training "Pediatrics", the study of which is necessary for successful professional activity. The subject area of the program is the most common diseases of childhood, the program focuses on knowledge of etiology, pathogenesis, classification, diagnostic criteria and principles of treatment of basic disease of children early ages, respiratory systems, digestive and urinary systems, allergic and cardiorheumatological diseases, practical skills and abilities: to collect anamnesis and conduct an objective examination of a sick child; to establish the preliminary clinical diagnosis and according to it to make the plan of additional inspections of the patient; interpret laboratory and instrumental research data; to carry out differential diagnosis of the most widespread diseases of children's age at their typical course; determine treatment; provide emergency medical care in the most frequent emergencies; fill in medical records.

Prerequisites. For successful mastering of discipline «Pediatrics», the student needs the knowledge received in the course of studying of the following general and professional disciplines: medical biology and genetics, medical and biological physics, medical chemistry, biological and bioorganic chemistry, normal physiology, normal anatomy, pathological physiology, microbiology, virology and immunology, propaedeutic pediatrics, pharmacology.

The purpose of the course and its significance for professional activities.

The purpose of teaching the discipline «Pediatrics» is to form the ability to apply the acquired knowledge, skills, abilities to solve typical problems of a pediatrician in the field of health in the relevant position, the scope of which is provided by certain lists of syndromes and symptoms of childhood diseases. special tactics of patient management, emergencies, laboratory and instrumental research.

Postrequisites.

In the process of studying the discipline, a student acquires knowledge, which is necessary for successful mastering of professional training disciplines, namely: pediatrics, neonatology, pediatric’s surgery, pediatric infectious diseases, medical geneticsand other clinical disciplines,

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. To determine the etiological and pathogenetic mechanisms of childhood diseases.

2. Analyze typical clinical signs.

3. Make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of the disease;

4. Carry out differential diagnosis and make a preliminary diagnosis in the typical course of childhood diseases;

5. Demonstrate mastery of the principles of treatment, rehabilitation and prevention of diseases;

6. Provide emergency care in case of major emergencies;

7. Assess the prognosis of the disease;

8. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in pediatrics;

9. Keep medical records.

4. **Content and logistic of the discipline**

Module 1 («The most common somatic diseases in children»)	7-8 semester 120 hours / 4,0 credits	Lectures № 1-4 Practical classes № 1-29 Topics for self-study № 1-4

The course includes 29 topics, which are divided into 6 content modules, and summary lesson for the practical skills and defense of case history.

Content module №1. Diseases of children early age

Topic 1. Rickets in children. Etiology, pathogenesis, diagnostic.

Topic 2. Rickets in children. Treatment, prevention.

Topic 3. Malabsorption syndrome in early age children.

Topic 4. Functional gastrointestinal disorders in early age children.

Topic 5. Failure to thrive in early age children. Etiology, pathogenesis, classification, diagnostic.

Topic 6. Failure to thrive in early age children. Treatment, prevention.

Content module №2. Diseases of the respiratory system in children

Topic 7. Acute respiratory viral infections in children. Hyperthermia syndrome.

Topic 8. Acute obstructive laryngitis (croup) and convulsions.

Topic 9. Bronchitis in children. Etiology, pathogenesis, classification, diagnostic.

Topic 10. Bronchitis in children. Treatment, prevention. Bronchiolitis. Virus-induced wheezing.

Topic 11. Pneumonia in children. Etiology, pathogenesis, classification, diagnostic.

Topic 12. Pneumonia in children. Treatment, prevention.

Content module №3. Allergic diseases in children

Topic 13. Atopic marsh. Bronchial asthma in children. Etiology, pathogenesis, classification, diagnostic.

Topic 14. Bronchial asthma in children. Treatment, prevention.

Topic 15. Allergic rhinitis in children. Hives. Anaphylaxis. Anaphylactic shock

Topic 16. Atopic dermatitis.

Content module №4. Pediatric cardiorheumatology

Topic 17. Carditis and cardiomyopathy in children. Heart failure. Consultation in context of incurable disease.
in children.

Topic 18. The most common congenital heart anomalies (atrial septal defects, ventricular septal defects, patent ductus arteriosus, coarctation of the aorta).

Topic 19. The most common congenital heart anomalies (tetralogy of Fallot). Emergency aid for acute heart failure and “tet spells”.

Topic 20. Heart rhythm and conduction disorders.

Topic 21. Juvenile idiopathic and reactive arthritis in children.

Content module №5. Diseases of the digestive systemin children

Topic 22. Gastroesophageal reflux disease in children.

Topic 23. Functional diseases gastrointestinal tract in older children. Functional dyspepsia. Irritable bowel syndrome. Functional disorders of billiary tract. Topic 24. Functional and organic diseases of intestine in older children.

Topic 25. Peptic ulcer of the stomach and duodenum in children.

Content module №6. Diseases of the urinary system in children

Topic 26. Urinary tract infections in children. Etiology, pathogenesis, classification, diagnostic, treatment, prevention

Topic 27. Glomerulonephritis in children. Etiology, pathogenesis, classification, diagnostic,

Topic 28. Glomerulonephritis in children. Treatment, prevention.

Topic 29. Chronic kidney disease (CKD). Chronic renal failure in children. Organization of palliative care for children with incurable disease.

Summary lesson for the practical skills.

Defense of case history.

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

The topics of the lecture course reveal the problematic issues of pediatrics in relation to those diseases that are studied in the module 1.

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

1. Examination and report of the thematic patient;
2. Solving situational and emergency tasks;
3. Consideration of test tasks;
4. Interpretation of the results of laboratory and instrumental examinations;

The form of training is full-time, but within the terms established by the legislation in the conditions of the situation which has developed with COVID-19, the form of training can be changed to distance.

The student's independent work provides preparation for practical classes (improving the skills of physical examination of the patient, mastering the skills of interpreting the results of laboratory tests, instrumental research for relevant pathologies of childhood), study of the topics not included to the list of the auditory classes of topic. The student's independent work is assessed during the final control in the form of an exam in the discipline of «Pediatrics».

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 website of the department.

The route for obtaining materials: Department Pediatrics №1 / for students / Full-time education / Medicine / 4 course / Educational materials / or through the link https://www.vnmu.edu.ua/ department Pediatrics №1. Access to the materials is carried out through the student's corporate account s000XXX@vnmu.edu.ua.

5. Forms and methods of monitoring academic performance

Current control in practical studies	Methods: individual oral examination, solving common situational problems, control of practical skills during the patient's examination and interpretation of the results of laboratory tests, tests with the choice of the correct answer, defence of case history.
Intermediate control	Enrolled if the student has mastered the section of Module 1 in full, as evidenced by the current assessment of each practical lesson for the semester, and has attended a course of lectures.
Final control - Exam	Methods: mastering the discipline "Pediatrics" is carried out in the form of an exam after the 8th semester during the semester session, in response to two situational tasks and test control (according to the Regulation of the Academic process in National Pirogov Memorial Medical University, Vinnytsya (link https://www.vnmu.edu.ua/General information).
Learning success diagnostic tools	Theoretical questions, tests, clinical situational tasks, demonstration of practical skills, evaluation of laboratory and instrumental research results.

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).

Continuous assessment	On a four point system of traditional assessments: 5 «excellent», 4 «good», 3 «satisfactory», 2 «unsatisfactory»
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	Exam grade: 71-80 points - "excellent" 61-70 points - "good" 50-60 points - "satisfactory" Less than 50 points - "unsatisfactory" / did not pass
Discipline assessments:	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
170-179,99	**B**	good	
160-169,99	**C**		
141-159,99	**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

Criteria for student knowledge assessment

Assessment of oral / written response during the current assessment

The grade **"excellent"** is given for the work in which the student correctly answered all the questions according to the topic. The answers are deep, meaningful and specific. The student must know the features of the clinical manifestations of the most common diseases in children, the general principles of diagnosis, the principles of their treatment.

The grade **"good"** is given for the work in which the student correctly answered 75% of the questions and showed a fairly substantial knowledge of those issues that reflect the main sections of the curriculum. The student must know the features of the clinical manifestations of the most common diseases in children, the general principles of diagnosis, the principles of their treatment.

The grade **"satisfactory**" is given for the work in which the student correctly answered 50% of the questions. The answers are incomplete, mostly limited to a simple list of components, features, without the slightest detail. The student must have a minimum of theoretical and practical knowledge of the most common diseases in children.

The grade **"unsatisfactory"** is given for work in which the student did not give any correct answer or gave only an approximate answer to two questions. The student does not have the required minimum knowledge of the most common diseases in children.

Assessment of the oral / written response to the situational task during the current assessment

The grade **"excellent"** is given to a student who has correctly diagnosed according to the classification, is able to clearly explane the diagnosis, competently draws up a plan of examination, prescribes treatment for the patient, writing a dose of drugs.

The grade **"good"** is given to a student which allows inaccuracies in the diagnosis and explanation of diagnosis, writing a plan for examination and treatment of the patient, indicating the dose of drugs.

The grade **"satisfactory"** is given to a student who makes significant inaccuracies or errors in diagnosis and explanation of diagnosis, describes the plan of examination and treatment of disease, not a specific for patient, makes mistakes in the dosage of drugs.

The grade "unsatisfactory" is given to the student who incorrectly established the diagnosis and its explanation, incorrectly wrote the examination and treatment of the patient in general, did not specify the dose of drugs.

Assessment of practical skills during the current assessment

The grade **"excellent"** is given to a student who knows the course and sequence of physical examination of the patient, makes a clear conclusion on the results of additional examinations, demonstrates knowledge of the reference values of laboratory parameters, interprets the results of instrumental examinations, correctly formulates conclusions.

The grade **"good"** is given to a student who makes inaccuracies in the methodology of physical examination (collection of complaints, medical history), preliminary diagnosis, examination plan, interpretation of laboratory and instrumental examinations, but is able to identify errors.

The grade **"satisfactory"** is given to a student who knows the basics of the practical skills, but has difficulty collecting complaints, medical history, physical examination, has no knowledge of the sequence of practical skills, can not fully interpret the results of additional investigation, makes mistakes in making the survey plan.

The grade **"unsatisfactory"** is given to a student who does not have the methodology of practical skills, violates the order of performance, does not know the reference values of indicators, does not know how to interpret the results of instrumental surveys, does not have the principles of the survey.

Evaluation of testing during the current assessment

The grade **"excellent"** is given to the student who at carrying out test control is allowed no more than 10% of incorrect answers (volume of correct answers 90-100%).

The grade **"good"** is given to a student who makes no more than 20% of mistakes during the test. (volume of correct answers 80-89%).

The grade **"satisfactory"** is given to a student who makes mistakes in no more than 40% of test tasks (the amount of correct answers is 60,5-79%).

The grade **"unsatisfactory"** is given to a student who correctly solves less than 60% of the test tasks in a test survey.

Evaluation of the defense of case history during the current assessment

The grade **"excellent"** is given to the student who clearly substantiates the patient's diagnosis taking into account complaints, anamnesis data, results of objective examination, makes a differential diagnosis with different nosologies, demonstrates knowledge of examination and treatment of the patient, indicates groups of drugs, doses, route and frequency of administration, provides clear recommendations after discharge from the hospital.

The grade "good" is given to a student who admits inaccuracies in substantiating the patient's diagnosis, but quickly corrects his answers with clarifying questions, makes a differential diagnosis with different disease, but makes minimal mistakes, demonstrates knowledge of examination and treatment of the patient, indicates groups of drugs, doses, route and frequency of administration, provides recommendations after discharge from the hospital.

The grade **"satisfactory"** is given to a student who substantiates the diagnosis in full, without taking into account all criteria, makes significant errors in the differential diagnosis, does not have the principles of examination and treatment of the patient, makes mistakes in calculating doses, routes, frequency of administration, no can provide recommendations after discharge.

The grade **"unsatisfactory"** is given to a student who does not provide an answer to any question concerning the patient's medical history (diagnosis, explanation, differential diagnosis, examination, treatment, recommendations after discharge).

Assessment of oral / written answer during the final control (exam)

The grade **"excellent"** is given to a student who competently and in full, logical sequence provides answers to questions of situational problems. During the answer demonstrates knowledge of etiology, pathogenesis, diagnostic criteria, knows the principles of treatment, prevention of pathology of children of different ages, provides clear correct answers to additional questions.

The grade **"good"** is given to a student who has good theoretical material and in a logical sequence provides answers to situational problems, but allows minor inaccuracies in explanation the diagnosis, assessment of diagnostic criteria, principles of treatment, prevention, which quickly corrects when answering the examiner's questions.

The grade **"satisfactory"** is given to a student who demonstrates knowledge of basic concepts when answering questions, admits significant inaccuracies in explanation of the diagnosis, evaluating diagnostic criteria, principles of treatment, prevention and has difficulty answering the examiner's specific questions.

The grade **"unsatisfactory"** is given to the student who does not know the answer to any of the questions of situational tasks, makes gross mistakes when answering questions, does not have basic knowledge, does not answer additional clarifying questions of the examiner.

Evaluation of testing during the final control (exam)

The grade **"excellent"** is given to the student who at carrying out test control is allowed no more than 10% of incorrect answers (volume of correct answers 90-100%).

The grade **"good"** is given to a student who makes no more than 20% of mistakes during the test. (volume of correct answers 80-89%).

The grade **"satisfactory"** is given to a student who makes mistakes in no more than 40% of test tasks (the amount of correct answers is 60,5-79%).

The calculation of individual points is carried out on the basis of the Regulation of the Academic process in VNMU named after M.I. Pirogov (link https://www.vnmu.edu.ua/General information).

12 points - added to the assessment of the discipline for a student who won a prize at the interuniversity competitions in the discipline or a prize at the Ukrainian competition of student research reports or a prize at the interuniversity / international scientific conference with the published work;

11 points - are added to the assessment of the discipline for a student who won the first prize at the intra-university Olympiad in the discipline or the first place at the student scientific conference with the published work, or participated in the Ukrainian competition of student research papers;

10 points - are added to the assessment of the discipline for a student who won a prize (II-III) at the intra-university Olympiad in the discipline or at the student scientific conference with the availability of printed work; or for participation (without a prize place) in interuniversity competitions in the discipline or a prize place in an interuniversity / international scientific conference with the availability of published work.

9 points - are added to the assessment of the discipline for a student who participated (without a prize) in the intra-university Olympiad in the discipline or student scientific conference with the presence of published work

8 points - are added to the assessment of the discipline for a student who actively participated in the student scientific group, published a paper with results of scientific and practical research, but did not personally participate in the student scientific conference, prepared a poster report.

7. Policy of discipline / course

The student has the right to receive high-quality educational services, access to contemporary scientific and educational information, qualified advisory assistance 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 VNMU, safety techniques in practical classes.

Requirements for preparation for practical classes. Student should be present at the practical lesson on time, theoretically prepared according to the topic.

A student should come to class on time, without delay. A student who is more than 15 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, change of shoes). Students who do not have a work uniform are not allowed to practice. In the first lesson, the teacher introduces students to the rules of conduct in practical classes, in the hospital.

When discussing theoretical issues, students should demonstrate tolerance, courtesy and respect for their colleagues and the teacher. Follow the principles and rules of medical ethics and deontology in practical classes.

Usage of mobile phones and other electronic devices. The use of mobile phones and other electronic devices in class is allowed only during online testing.

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.vnmu.edu.ua/General information)/ 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.vnmu.edu.ua/General information) at the time of work out schedule (published on the website of the department https://www.vnmu.edu.ua/ department Pediatrics №1) to the teacher on duty or to the teacher of academic group during the working hours. To complete the missed classes, the student must take a test and answer questions in writing or orally. Assimilation of the missed topic of the lecture is checked during the final control.

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.vnmu.edu.ua/General information). To the final control allowed students who do not have missed practical classes and lectures and received an average traditional grade of at least "3".

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/General information).

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/General information)

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 Teams and Google Meet. 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 Pediatrics №1 / to Students or https://www.vnmu.edu.ua/Department of Pediatrics №1 / News).

Feedback from teachers is via chat on Microsoft Teams, messengers (Viber, Telegram, WhatsApp) or e-mail (at the teacher's choice) during working hours.

1. **Educational resources.**
   Educational and methodological support of the discipline is published on the website of the department (https://www.vnmu.edu.ua/ en/ department of Pediatrics №1 / for students). Consultations are held twice a week according to the schedule.

2. **The timetable and distribution of groups** with assigned teachers are published on the web page of the department ((https://www.vnmu.edu.ua /en/ department Pediatrics №1 / for students).
3. Questions to the intermediate and final semester control (credit) of the discipline are published on the web page of the department (https://www.vnmu.edu.ua / en/ department Pediatrics №1 / for students).

The syllabus of the discipline " Pediatrics" was discussed and approved at the meeting of the department Pediatrics №1 (record № 1, August 28, 2025)

в/о Head of the department _____ (signature) ass. prof. of HEI Tetiana CHEKOTUN

Responsible for the academic discipline _____ (signature) ass. prof. Valentyna ANTONETS