

**Discussed and approved  
at the methodological meeting  
of the Department of Pediatrics No 1  
Protocol No. 1 of " 30 " 08 2023.  
Head of Department**

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**SYLLABUS FOR THE ACADEMIC DISCIPLINE**

**"Paediatrics and Neonatology"**

<b>1. General information</b>	
<b>Name of the faculty</b>	Medical faculty No.1
<b>Educational program</b>	22 "Healthcare", 222 "Medicine", second level of higher education (master's degree), full-time education
<b>Academic year</b>	2023/2024
<b>Name of discipline, code</b>	222 «Medicine»
<b>Department (name, address, telephone number, e-mail)</b>	Department of Pediatrics № 1, 79059, Lviv, Pylypa Orlyka str, 4, phone/fax: +38 (032) 2938250; <a href="mailto:kaf_pediatrics_1@meduniv.lviv.ua">kaf_pediatrics_1@meduniv.lviv.ua</a>
<b>Head of the department (contact e-mail)</b>	Prof. Nyankovsky S.L. :+38(032)2917851; <a href="mailto:nianksl@gmail.com">nianksl@gmail.com</a>
<b>Studying year</b>	4-th
<b>Semester</b>	8
<b>Type of discipline / module</b>	an obligatory component of the educational and professional training program
<b>Teachers</b>	Voznyak Andriy, Ph.D., Associate Professor <a href="mailto:likar.voznjak@gmail.com">likar.voznjak@gmail.com</a> Tutusa Andriy, Assistant of Professor <a href="mailto:a.tytusa@gmail.com">a.tytusa@gmail.com</a>
<b>Erasmus yes\no</b>	No
<b>The person responsible for the syllabus</b>	Voznyak Andriy, Ph.D., Associate Professor <a href="mailto:likar.voznjak@gmail.com">likar.voznjak@gmail.com</a>
<b>Number of credits ECTS</b>	4
<b>Number of hours (lectures/ practical classes/ independent work of students)</b>	120 (10 - lectures/ 51 - practical classes/ 59 - independent work)
<b>Language of study</b>	English
<b>Information about consultations</b>	According to the schedule during the academic year
<b>Address, telephone number and work regulations of the clinical base</b>	"Lviv City Children's Clinical Hospital " tel: +380322931888

### **2. Short annotation to the course**

The discipline of Pediatrics is an obligatory component of the educational and professional training program. 4th year students study a variety of somatic diseases in children, consolidate their knowledge gained during classes at the Department of Propaedeutics of Pediatrics, improve the methodology of physical examination of a child. They master basic skills of taking anamnesis, conduct the examination, systemize the symptoms in syndromes, plan examination of a sick child, interpret laboratory and instrumental tests, carry out a differential diagnosis of the most common pediatric diseases with typical course, make preliminary clinical diagnosis, setup of therapeutic approaches, prescribe treatment with drug dosages, develop emergency medical care plans, solve clinical cases, train practical skills on mannequins and at the bed of a sick child, construct medical records.

### **3. The purpose and objectives of the course**

**1. The objective** describes a relationship between the program and content of the entire educational program.

The purpose of teaching the educational discipline "Pediatrics" is development of the ability to use knowledge, skills to solve typical problems in the children's health field, the use of which is foreseen by defined list of syndromes and symptoms of diseases, emergency conditions, physiological conditions, and diseases requiring special tactics of patient management; laboratory and instrumental examinations, medical manipulations.

**2. Learning objectives** - provides information on the main objectives of the discipline

Learning objectives - provides information on the main objectives of the discipline. The objectives - of the course is to develop students' knowledge of the etiology, pathogenesis, clinical manifestations, diagnosis,

principles of treatment of the most common somatic diseases in children.

As a result of studying the discipline of "pediatrics" the student should know: subject area - etiology, pathogenesis, classification, clinical symptoms, diagnosis, treatment and prevention of the most common diseases of young and old children and understand the subject area and professional responsibility.

As a result of studying the discipline of "pediatrics" the student should be able to:

- Collect and analyze patient complaint data, medical history, life history according to established algorithms and evaluate the results of physical examination in the most common diseases of young and older children (SC1; PLR1) (SC - Special Competency, PLR - Program Learning Results)
- Identify the principal clinical symptom or syndrome. Make the preliminary and clinical diagnoses as well as differential diagnosis (SC3; PLR3);
- Make the plan of investigation (laboratory, instrumental) of a sick child, interpret their results (SC2; PLR2);
- Determine the necessary mode of work and rest in the treatment of the most common endocrine and hematological diseases in children. (SC4; PLR4)
- Assign the appropriate therapeutic nutrition in the treatment of the most common somatic diseases in children (SC5; PLR5)
- Determine the principles of treatment (SC6; PLR6)
- Define the tactics of emergency medical care based on the diagnosis of emergency of the most common somatic diseases of children (SC7; PLR7)
- Provide emergency medical care based on an emergency diagnosis (SC8; PLR8)
- Perform medical manipulations (SC10; PLR10)
- Implement a complex of anti-epidemic and preventive measures within the primary health care. (SC11; PLR11)
- Form dispensary groups of patients with most common somatic problems of children. (SC12; PLR12)
- Work with the medical records (SC13; PLR13)

The student should have the ability to:

- Abstract thinking (GC 1)
- Learn and master current knowledge (GC 2)
- Apply knowledge in practical situations (GC 3)
- Adapt and act in a new situation (GC 5)
- Make a substantiated decision (GC 6)
- Communicate in the English language (both verbal and in writing) (GC 9)

The student should demonstrate:

- Certainty and perseverance on the tasks and responsibilities (GC 12)
- Ability to act socially responsibly and consciously (GC 13)
- Ability to act according to ethical considerations (motives) (GC14)

The student should have the skills:

- Use of information and communication technologies (GC11)

**3. Competences and learning results**, the formation of which is facilitated by studying of the discipline (general and special competencies):

According to the standard of higher education, discipline provides students with competences:

Integral competence - an ability to solve complex problems in the field of professional medical activity, conduct original research and carry out research and innovative activity in the field of health care based on the deep rethinking of the existing and creation of a new holistic theoretical or practical knowledge and/or professional practice.

*General:*

- GC1 The ability to abstract thinking, analysis, and synthesis; Ability to learn and be modernly trained.
- GC2 Ability to learn and master modern knowledge
- GC3 Ability to apply knowledge in practical situations
- GC4 Knowledge and understanding of subject area and understanding of business professional activity
- GC5 The ability to adapt and act in a new situation
- GC6 Ability to make an appropriate decision
- GC7 Ability to work in a team
- GC8 Interpersonal skills interaction
- GC9 Ability to communicate in the State language both orally and in writing.
- GC10 Ability to communicate using foreign language
- GC11 Skills in using information and communication technologies
- GC12 Certainty and perseverance on the tasks and responsibilities
- GC13 The ability to act socially responsibly and deliberately
- GC14 The ability to act based on ethical considerations

*Special (Professional):*

- SC1 Skills of inquiry and clinical examination of the patient.
- SC2 Ability to determine the required list of laboratory and instrumental studies and assess their results.
- SC3 The ability to establish preliminary and clinical diagnoses.
- SC4 Ability to determine the necessary mode of training, work and recreation of healthy children and in the course of treatment of diseases.
- SC5 Ability to determine an appropriate diet for healthy children and in the course of the treatment of diseases
- SC6 Ability to determine an appropriate diet for the principles and character of treatment of diseases.
- SC7 The ability to diagnose emergency conditions
- SC8 Ability to determine the tactics of emergency medical care.
- SC9 Skills of emergency medical care
- SC10 The skills of performing medical manipulations
- SC11 The ability to carry out hygienic and preventive measures
- SC12 Ability to determine the tactics for patients, who need medical follow-up
- SC13 The ability to fill in medical documents
- SC14 The ability to assess environmental, social, economic, and biological influences on health of the individual, family, population

#### **4. Prerequisites of the course**

Information on the disciplines, basic knowledge and learning results required for successful study and acquisition of competencies in this discipline is indicated.

- Medical Biology
- Medical informatics
- Normal and Pathological Anatomy
- Normal and Pathological Physiology
- Histology, Cytology and Embryology
- Biological and bioorganic chemistry
- Microbiology, virology, and immunology
- Pharmacology
- Hygiene and Ecology
- Propaedeutic Pediatrics
- Nursing practice
- Radiology

#### **5. Program learning results (PLR)**

PLR1 - Collecting of patient complaints, medical history, life history (of the child, mother, or care givers

etc.).

Use knowledge about the anatomical features of organs and systems of the child's body depending on age  
 PLR2 - Evaluate information about the diagnosis in the hospital, using a standard procedure, using the analysis of the results of clinical examination of the child, and based on the results of laboratory and instrumental studies

PLR3 - Be able to establish preliminary and final diagnoses

PLR4 - To determine the necessary treatment of the disease in the hospital, after discharge, the necessity for follow-up supervision

PLR5 - Determine the type of treatment (etiologic, pathogenetic, symptomatic) of the disease

PLR7 - Determine the strategies of emergency medical care, under any circumstances

PLR8 - Determining the strategies of emergency medical care.

PLR9 - Provide emergency medical care

PLR10 - Perform medical manipulations

PLR11 - Demonstrate the ability to conduct sanitary and hygienic as well as preventive measures

PLR12 - To determine the strategies of managing children who require dispensary supervision

PRN13 - Ability to work with medical records

PRN14 - Ability to assess the impact of the environment, socioeconomic status and biological determinants on the individual, family, population health

**List of learning results**

<b>Learning results code</b>	<b>The scope of the learning results</b>	<b>Reference to the code of the competence matrix</b>
The code is created by filling in the syllabus (category: Kn- Knowledge, Sk- Skill, C-competences, AR - autonomy and responsibility)	The learning outcomes define what the student must know, understand and be able to perform, after completing the course of study. The learning outcomes are based on the set learning objectives. For crediting the discipline, it is necessary to certify that each learning outcome has been achieved.	Symbol for the Programme Learning Outcome code in the Higher Education Standard
Kn-1  Sk-1  C-1  AR-1	To know the specific characteristics of the child's at different age periods, to know the methods and standard schemes of description, collection of genealogical information, preparation of the birth report, physical examination, stages of examination of psychomotor and physical development of the child. To be able to talk to a child-and/or her parents (guardians), based on algorithms and standards. Use the principles of communication with the parents of children. Using standard techniques to carry out physical examination of a patient. Be able to examine psychomotor and physical development of the child. Able to assess the quality of care and feeding of infants and nutrition of children. Be able to conduct a comprehensive assessment of child health. Communicate effectively with patient and/or his parents (care givers). Transfer information about the child health to the relevant medical documentation. Be responsible for qualitative collection of information obtained during conversation with patient, survey, examination, palpation, percussion of organs and systems, timely assessment of the child's health condition, psychomotor and physical development of the child and for taking appropriate measures.	PLR1
Kn-2	Know the standard methods of laboratory and instrumental examinations	PLR2

Sk- 2 C-2 AR -2	<p>Know how to perform a laboratory and instrumental examination of a patient using standard techniques, analyze the results of laboratory and instrumental investigations and evaluate the diagnosis of the patient on this basis</p> <p>Formulate and communicate to the patient and / or his/her parents (guardians), physicians about the required list of laboratory and instrumental examinations</p> <p>Be responsible for the decision-making process regarding the evaluation of laboratory and instrumental results</p>	
Kn - 3 Sk- 3 C - 3 AR - 3	<p>Know the algorithm for disease diagnosis; algorithms for identifying leading symptoms or syndromes; initial and clinical diagnoses; methods.</p> <p>Be able to make an informed decision about the identification of a leading clinical symptom or syndrome; be able to make an initial and clinical diagnosis.</p> <p>Based on regulatory documents, maintain medical documentation of the patient (outpatient/inpatient chart, etc.).</p> <p>Be responsible for making informed decisions and actions regarding the correctness of the established initial and clinical diagnosis, in compliance with ethical and legal standards</p>	PLR3
Kn - 4 Sk - 4 C - 4 AR -4	<p>Know the algorithms and standard schemes for determining the regimen of education, work and leisure activities for healthy children and for medical treatment, based on the initial and clinical diagnosis</p> <p>Be able to determine the necessary regime for education, work and rest for healthy children and, based on the initial and clinical diagnosis, to make an informed decision about the treatment of the disease</p> <p>Formulate and communicate to the patient and / or their parents (guardians) and caregivers opinions on the necessary regime of education, work and leisure time for healthy children and in the treatment of the disease</p> <p>Be responsible for ensuring that the education, work and leisure regime is appropriate for healthy children and for the treatment of illnesses</p>	PLR4
Kn - 5 Sk - 5 C - 5 AR - 5	<p>Have specialized knowledge of algorithms and standard schemes for the prescribing of nutrition for healthy children and in the treatment of diseases</p> <p>Be able to identify the nature of the food intake for healthy children, and on the basis of the initial and clinical diagnosis, the nature of the food intake for treatment of diseases</p> <p>Formulate and convey to the patient and / or their parents (guardians), professionals, opinions on the nutrition of healthy children and in the treatment of diseases</p> <p>Be responsible for ensuring that food for healthy children and for treating illnesses is appropriately determined</p>	PLR5
Kn - 6 Sk - 6 C - 6 AR - 6	<p>Have specialized knowledge of algorithms and standard treatment regimens</p> <p>Be able to determine the peculiarities of nutrition of healthy children and those who in process of treatment according to preliminary and clinical diagnoses</p> <p>Formulate and communicate to the patient and / or their parents (guardians), professionals own findings on the principles and nature of treatment</p> <p>Be responsible for deciding on the principles and nature of</p>	PLR6

	treatment	
Kn - 7 Sk - 7 C - 7 AR - 7	<p>Know the standard procedures for examining children in non-emergency situations (at home, on the street, in health care facilities) in the context of lack of information.</p> <p>Be able to assess the child's condition and identify the underlying clinical syndrome (or the severity of the injury/casualty) in the context of lack of information, using standard methods, by making an informed decision</p> <p>Use appropriate ethical and legal standards to make an informed decision about the assessment of the severity of the child's condition, the diagnosis and the organisation of appropriate medical treatment depending on the condition, and to fill in the relevant medical documentation.</p> <p>Be responsible for the timeliness and effectiveness of medical procedures for the diagnosis of non-critical conditions.</p>	PLR7
Kn - 8 Sk - 8 C - 8 AR - 8	<p>Know the legal framework for the provision of emergency medical care, in particular the Law of Ukraine "On Emergency Medical Care". Have specialist knowledge of children's illnesses; principles of emergency medical care.</p> <p>Be able to identify the principles and tactics of emergency medical care; carry out organizational and diagnostic procedures for treatment and life-saving treatment.</p> <p>Formulate and communicate to the patient or their legal representative the need for non-emergency care and obtain approval for medical treatment.</p> <p>Be responsible for the correctness of the determination of the emergency condition, its degree of severity and the tactics for emergency medical treatment.</p>	PLR8
Kn - 9 Sk - 9 C - 9 AR - 9	<p>Awareness of algorithms for emergency medical care in children's emergencies</p> <p>Know how to provide emergency medical care in an emergency</p> <p>Explain the need for and procedure for emergency treatment.</p> <p>Be responsible for the timeliness and quality of emergency medical care</p>	PLR9
Kn - 10 Sk - 10 C - 10 AR - 10	<p>Have specialized knowledge of medical manipulation algorithms</p> <p>Be able to perform medical manipulation</p> <p>Provide evidence to the patient and parent(s), caregiver(s), physician(s) about the need for medical manipulation</p> <p>Be responsible for the quality of medical treatment</p>	PLR10
Kn - 11 Sk - 11 C - 11 AR - 11	<p>Know the system of hygienic and prophylactic measures among the enrolled population. To know the principles of organization of dispensary treatment of different groups of children subject to dispensary treatment.</p> <p>Know how to form groups of children to be treated. Know how to create a plan for the treatment of different groups.</p> <p>On the basis of the results of the examination and analysis of children's health status, the environment, know the principles of submitting analytical information to local management bodies and health care; on the basis of the measures of elimination of adverse effects on children's health.</p> <p>To be responsible for the timely and proper implementation of measures to assess the health status of children, to improve the health of certain contingents, to improve the environment</p>	PLR11
Kn - 12	To know the relevant ethical and legal standards for the examination of the population; examination tactics and principles	PLR12

Sk - 12	of primary and secondary prophylaxis	
C - 12	Know how to assess the health status of patients and adherents; arrange for follow-up examinations	
AR - 12	Organize outpatient observation of patients (secondary prevention of diseases) and healthy persons who are subject to dispensary supervision (primary prevention of diseases).	
Kn - 13	Be responsible for the quality of the organization of dispensary supervision of certain contingents	
Sk - 13	Be aware of the official document management system in the doctor's work, including modern computer technology	PLR13
C - 13	Be able to identify the source and location of required information depending on its type; be able to process information and analyse it	
AR - 13	Gain the required information from a given source and make appropriate conclusions on the basis of this analysis	
	Be responsible for the completeness and quality of the analysis of information and conclusions on the basis of this analysis	
Kn - 14	Know the socioeconomic and biologic determinants that affect children's health; types and methods of prevention to prevent the negative impact of socioeconomic factors on children's health	PLR14
Sk - 14	Know how to assess the link and impact of socio-economic and biologic factors on the health of the individual and the family. Be able to plan prophylactic measures to prevent the negative impact of socio-economic factors on the health of the child population and its particular groups.	
C - 14	Formulate conclusions on the health status of the child population, based on data on the relationship to environmental factors, socio-economic and biologic determinants.	
AR - 14	To be responsible for making immediate conclusions on the health status of the child population based on data on the negative impact of environmental, socio-economic and biological determinants, for making immediate suggestions for appropriate preventive measures.	

#### 6. Format and scope of the course

Type of activity	Number of hours	Number of groups
Lectures (full-time lesson)	10	1-4 foreigners
Workshops (full-time lesson)	51	1-4 foreigners
Self-studying (full-time lesson)	59	1-4 foreigners

#### 7. Topic and contents of the course

Code of the classes	Topic	Content of the studying	Learning results code	Teacher
L1 (lecture 1)	Acute respiratory infections in children. Acute bronchitis in children. COVID-19 in children. Pneumonia in children.	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	GC1; C-1, AR-1; GC2; GC3; GC4	Associate Professor. Voznyak A.V.
L2 (lecture 2)	Bronchial asthma in children. Drug allergy. Basics of emergency care	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	GC1; C-1, AR-1; GC2;	Associate Professor. Voznyak A.V.



			GC3; GC4	
L3 (lecture 3)	Inflammatory and non-inflammatory heart disease in children. Acute rheumatic fever in children.	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	GC1; C-1, AR-1; GC2; GC3; GC4	Associate Professor. Voznyak A.V.
L4 (lecture 4)	Functional and organic diseases of the digestive system in children.	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	GC1; C-1, AR-1; GC2; GC3; GC4	Associate Professor. Voznyak A.V.
L5 (lecture 5)	Diseases of the urinary system in children	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	GC1; C-1, AR-1; GC2; GC3; GC4	Associate Professor. Voznyak A.V.
W-1 (workshop 1)	Protein and energy deficiency in young children. Rickets. Hypervitaminosis "D"	Basis concepts of rational nutrition of healthy and sick infants. Definition, classification, clinical features, treatment and prevention of protein-energy deficiency in children. Etiology, pathogenesis, clinical manifestations, diagnosis, prevention hypervitaminosis D, emergency care and prognosis	PLR 1-6 PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-2 (workshop 2)	The most common congenital heart defects in children	The etiology of the most common congenital heart defects in children. Classification of heart disease, hemodynamics in the most common congenital heart defects in children. Diagnosis of the most common congenital heart defects in children. Doctor's tactics and prognosis of the most common congenital heart defects in children. Treatment of heart failure. Secondary prevention of infective endocarditis	PLR 1-9; PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-3 (workshop 3)	Acute bronchitis in children. Acute respiratory disease COVID-19 in children. Pneumonia in children	Definitions, etiology, pathogenesis, clinical manifestations, diagnosis, treatment, and prevention of acute nasopharyngitis, acute pharyngitis, acute laryngopharyngitis, acute tracheitis in children. Emergency care for acute laryngeal stenosis (croup), hyperthermia syndrome and seizures. Definition, etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prevention of acute bronchitis, acute obstructive bronchitis, acute bronchiolitis in children.	PLR 1-6; PLR 9-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-4	Atopic march in	Definition, etiology,	PLR 1-9;	Associate

(workshop 4)	children. Food allergy. Allergic rhinitis in children	pathogenesis, clinical manifestations, diagnosis, treatment, prevention of urticaria in children. Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prevention of atopic dermatitis in children, prognosis. Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prevention of allergic rhinitis in children, prognosis. Atopic March.	PLR 11-14	Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-5 (workshop 5)	Bronchial asthma in children	Definition. Risk factors and pathophysiological mechanisms of asthma. Classification, clinic manifestations, diagnosis, treatment and prevention of asthma in children, prognosis. Emergency care for asthma status	PLR 1-9; PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-6 (workshop 6)	Inflammatory and non-inflammatory heart disease in children. Cardiac arrhythmias and conduction disorders in children	Carditis and cardiomyopathies in children: definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prognosis.	PLR 1-9; PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-7 (workshop 7)	Acute rheumatic fever in children	Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment, primary and secondary prevention, prognosis.	PLR 1-9; PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-8 (workshop 8)	Juvenile idiopathic arthritis and reactive arthritis in children	Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment, primary and secondary prevention, prognosis of juvenile rheumatoid arthritis, systemic lupus erythematosus, systemic dermatomyositis, systemic scleroderma, systemic vasculitis.	PLR 1-9; PLR 11-13	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-9 (workshop 9)	Functional gastrointestinal disorders in children.	Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment and prevention of functional dyspepsia, abdominal pain, gastroesophageal reflux, duodeno-gastric reflex. Definition, etiology, pathogenesis, clinical features,	PLR 1-9; PLR 11-13	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,

		diagnosis and treatment of irritable bowel syndrome, functional constipation. The clinic, diagnosis, treatment and prevention of dysfunction of the gallbladder and sphincter of Oddi.		
W-10 (workshop 10)	Organic diseases of digestive system in children	Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prevention of organic diseases (esophagitis, gastritis, duodenitis, gastric ulcer and 12 duodenal ulcer). Definition, etiology, pathogenesis, clinical features, diagnosis and treatment of irritable bowel syndrome, ulcerative colitis, Crohn's disease, prognosis.	PLR 1-5; PLR 9;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-11 (workshop 11)	Urinary tract infections in children	Definition, classification of urinary tract infections in children, differential diagnosis of lower and upper urinary tract. Etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prevention and prognosis of cystitis in children. Definition, etiology, pathogenesis, classification, clinical features, diagnosis, treatment, prevention and prognosis of pyelonephritis in children.	PLR 1-6; PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-12 (workshop 12)	Glomerulonephritis in children. Metabolic nephropathies in children. Acute and chronic renal failure in children.	Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prevention and prognosis of glomerulonephritis (acute and chronic) in children. Definition, classification, etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prevention and prognosis metabolic nephropathies in children. Acute and chronic renal failure: risk factors, etiology, pathogenesis, disease stage, symptoms, diagnosis, treatment, prevention, prognosis.	PLR 1-6; PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
W-13 (workshop 13)	Discussion of medical records.	Ability to issue in an appropriate way a medical history of an inpatient	PLR 1-6; PLR 11-13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,

SS1 (self-studying 1-13)	Preparation for practical classes	Ability to prepare for lessons	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS2 (self-studying 2)	Principles of feeding children during the first year of life	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS3 (self-studying 3)	Principles of feeding children during the first year of life	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS4 (self-studying 4)	Spasmophilia: clinical forms, diagnosis and treatment	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS5 (self-studying 5)	Acute respiratory infections in children. Croup in children. Bronchiolitis	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS6 (self-studying 6)	Congenital anomalies and chronic diseases of the respiratory system in children	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS7 (self-studying 7)	Drug allergy in children	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor

				Tutusa Andriy,
SS8 (self-studying 8)	Kawasaki disease: causes, symptoms, diagnosis and management	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS9 (self-studying 9)	Metabolic nephropathies in children	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS10 (self-studying 10)	Tubulopathies, interstitial nephritis, hereditary nephritis	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,
SS11 (self-studying 11)	Writing of medical record	Ability to issue in an appropriate way a medical history of an inpatient	PLR 1-9; PLR 13;	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy,

The following teaching methods are used to develop skills:

- verbal/oral (lecture, explanation, story);
- visual (observation, illustration, demonstration);
- practical (near the patient's tub, work in the admission department, departments of functional diagnostics, rehabilitation, manipulation, on simulators, etc.);
- explanatory-illustrative or information-receptive, which involves the presentation of ready-made information by the teacher and its assimilation by students.

### **8. Verification of learning results**

Regular control is carried out during the training sessions and is intended to verify the students' mastery of the educational material (it is necessary to describe the forms of the regular control during the training sessions). Forms of assessment of in-service training activities must be standardized and include the control of theoretical and practical training. The final grade for the in-service training is awarded on a 4-th grade (national) scale

The practical sessions in the Pediatrics module are structured and involve a comprehensive assessment of all types of learning activities (teaching assignments) that students undertake during the practical session:

- The student answers the tests (tests for the topic of the class, format A, not less than 10 pieces).
- Answers standardized questions, knowledge of which is necessary for understanding the current topic.
- Demonstrates knowledge and skill of the practical skills according to the topic of the practical exercise
- Solves a situational case study on the topic of the lesson

### ***Criteria for evaluation of educational activities***

**Excellent ("5")** – the student answered correctly 90-100% of the A format test (from the database "Step-2"). Correctly, clearly, logically corresponds to all standardized questions of the current topic. Closely binds theory with practice and demonstrates the correct implementation of practical skills. Fluent in interpretation of the laboratory test results, adepts at prescribing appropriate examination methods. Makes differential diagnosis. Solves clinical case with higher level of difficulty and knows how to compile the material.

**Good ("4")** - the student answered correctly 70-89% of the of A format test (from the database "Step-2"). Correctly and essentially responds to all standardized questions of the current topic. Demonstrates knowledge of practical skills. Correctly uses theoretical knowledge in solving practical problems, conducts a differential diagnosis. Capable to solve easy and medium complexity clinical cases. Possesses all necessary practical skills and techniques to perform their uses, more than the required minimum.

**Satisfactory ("3")** - the student answered correctly 50-69% of the A format test (from the database "Step-2"). Incomplete, with the help of additional questions answers all the standardized questions on the current topic. Cannot independently makes a clear logical answer. While the student is answering and demonstrating practical skills, he makes mistakes. Can solve only the easiest situational tasks. Has knowledge of only the minimum methods of investigations.

**Unsatisfactory ("2")** - the student answered correctly 50% of the test of A format. Does not know the material of the current topic, cannot build a logical response, does not respond to additional questions, and does not understand the content of the material. Makes significant, gross mistakes when answering and demonstrating practical skills. Evaluation of the students' independent work for preparation for the practical classes is carried out during the current control of the topic at the appropriate workshop.

#### Current control

Learning results code	Code of the type of the classes	Verifying learning outcomes method	Enrollment criteria
Kn-1-14, Sk-1-14; C – 1-14 AR -1-14	L 1-6 W 1-17 SS -1-22	<p>The lecture material is tested in the practical sessions according to the topics.</p> <p>The final control is carried out at each practical session.</p> <p>The initial stage - the answers to the tests. In the first practical session tests verify the knowledge of pediatrics in the disciplines of prerequisites.</p> <p>The main phase of the practicum involves working in the clinic environment with the patient. The control of this stage is carried out by means of the test by the test taker (skills and abilities of the student in work with the sick child, documentation, interpretation of the results of the examinations, etc.).</p> <p>Final stage - solving a typical situational problem; summing up of the previous stages; familiarization with the evaluations; assignment for the next session.</p>	<p>"5" - correct, clear logical answer to all standardized questions of the current topic; correct performance of practical skills of mastering the methods of examination of the patient; brief interpretation of survey results; differential diagnosis.</p> <p>"4" - correctly and essentially answers all standardized questions of the current topic; demonstrates performance/knowledge of practical skills; differential diagnosis.</p> <p>"3" - incompletely, with the help of additional questions, answers all standardized questions of the current topic; cannot independently build a clear, logical answer; makes mistakes when answering and demonstrating practical skills.</p> <p>"2" - does not know the material of the current topic, can not formulate a logical answer, does not answer additional questions, does not understand the content of the material;</p>

		Self-study is performed by the student independently outside the classroom. It is evaluated on a summative basis.	makes significant, gross mistakes when answering and demonstrating practical skills.  IW is assessed, in addition to taking into account in current classes, when it is performed or not at the end of each semester
Kn-1-14, Sk- 1-6; 11-14, C-1,3,5,12 AR-1-3,6-1 4	IW	Defense of Medical records - takes place during the last lesson after checking the compliance of writing history with the requirements in the form of an individual interview by the teacher and includes an obligatory individual discussion.	The medical record is written and defended without mistakes - grade "excellent"; insignificant mistakes in writing, which after the remarks are corrected by the student independently - a grade "good"; significant errors in writing and defense, or inability to justify their opinion grade "satisfactory"; the story is written with gross mistakes, without compliance and not defended - the grade is "unsatisfactory".

#### Final control

<b>General evaluation system</b>	Participation in the work during the semester - 100% on a 200-point scale	
<b>Rating scales</b>	traditional 4-point scale, multi-point (200-point) scale, ECTS rating scale	
<b>Admission to final control</b>	The student attended all practical (laboratory, seminar) classes and received at least 120 points for current performance	
<b>Type of final control</b>	<b>Methods of final control</b>	<b>Enrollment criteria</b>
<b>Credit</b>	All topics for current control submitted. Grades from the 4-point scale are converted into points on a multi-point (200-point) scale in accordance with the provision "Criteria, rules and procedures for evaluating the results of student learning activities"	The maximum number of points is 200. The minimum number of points is 120

The calculation of points is carried out based on the student's grades according to the 4-th grads (national) scale during the study of the discipline, by calculating the arithmetic mean (AM) rounded up to two decimal places. Resulting value is converted into points according to multipoint scale as follows:  $X = (CA \times 200) : 5$

#### 9. Course policy

It is based on the full implementation of the curriculum of the course (attending lectures and workshops, working academic debts up, performing independent tasks), academic integrity, lack of plagiarism.

Observance of academic integrity by students:

- Independent performance of educational tasks, tasks of current and final control of results;
- Links to sources of information in the case of the use of ideas, developments, statements, information;
- Observance of the legislation on copyright and related rights.
- Providing reliable information about the results of their own (scientific, creative) activities, used research methods and sources of information.

#### 10. References

##### Main sources

1. Nelson textbook of Pediatrics 21st Edition by Robert M. Kliegman, Joseph W. St Geme III, et al. Philadelphia: Elsevier, 2020.

2. Marcadante K., Kliegman R.M., Behrman R.E., Jenson H.B. Nelson Essentials of Pediatrics, 8 ed., Saunders, 2018.- 832 p.
3. Pediatric Secrets / 6th ed. by Polin R.A., Ditmar M.F. / Mosby, 2015.- 752 p.
4. Frank G., Zaoutis L., Catalozzi M., Zaoutis L.B., Shah S.S. The Philadelphia guide: inpatient pediatrics / LWW, 2019.- 608 p.

#### **Additional sources**

1. Park M, Salamat M. Park's pediatric cardiology for practitioners. 7th ed. Amsterdam: Elsevier; 2020. 690 p.
  2. Petty RE, Laxer R, Lindsley C, et al. Textbook of pediatric rheumatology. 8th ed. Amsterdam: Elsevier; 2020. 768 p.
  3. Pediatric allergy: principles and practice. 4 ed. Leung D, Akdis C, Bacharier L (eds).Amsterdam: Elsevier; 2020. 440 p.
  4. Pediatric nephrology. 8th ed. Emma F, Goldstein SL, Bagga A, et al (eds). New York (NY): Springer; 2022. 2500 p.
- Waseem M. Pediatric pneumonia [Internet]. New York (NY): Medscape, LCC; 2020; [updated Jun 05, 2020; cited 2022 May 16]; [39 p]. <https://emedicine.medscape.com/article/967822-overview>
5. COVID-19: special considerations in children. Bethesda (MD): NIH; 2022; [updated: August 8, 2022; cited August 15, 2022];
  6. Global strategy for asthma management and prevention [Internet]. Fontana (WI): GINA, 2022; [updated 2022; cited 2022 Aug 17]. Available from: <https://ginasthma.org/gina-reports/>

### **11. Equipment, logistics and software of the discipline / course**

- Training program of the discipline
- Plans of lectures, practical classes, and independent work of students
- Methodical instructions for practical training for students
- Methodical instructions for practical training for teachers
- Methodical materials that provide independent work of the student
- MCQs and cases for practical classes
- Clinical cases for practical classes

### **12. Additional information**

Materials related to the educational and organizational process (thematic plan, schedule of classes, schedules of consultations and work up of missed classes) are available on the website of the department:

<https://new.meduniv.lviv.ua/kafedry/kafedra-pediatrici-1/>

Educational and methodical materials (topic guidelines) for preparation for practical classes, independent work, self-control, abstracts of lectures are available on the MISA platform in the section "Department of Pediatrics №1 on the website of LNMU named after Danylo Halytsky:

<http://misa.meduniv.lviv.ua/course/view.php?id=341>

The work plan of the student scientific group with the lists of student scientific society members are posted at the beginning of the academic year on the website of the department..

<https://new.meduniv.lviv.ua/kafedry/kafedra-pediatrici-1/>

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Head of the Department Nyankovsky S.L. the Doctor of Science, Professor \_\_\_\_\_