

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

SYLLABUS FOR THE ACADEMIC DISCIPLINE

"Paediatrics and Neonatology"

1. General information	
Name of the faculty	Medical faculty No.1
Educational program	22 "Healthcare", 222 "Medicine", second level of higher education (master's degree), full-time education
Academic year	2023/2024
Name of discipline, code	222 «Medicine» ,. 26.1
Department (name, address, telephone number, e-mail)	Department of Pediatrics № 1, 79059, Lviv, Pylypa Orlyka str, 4, phone/fax: +38 (032) 2938250; kaf_pediatrics_1@meduniv.lviv.ua
Head of the department (contact e-mail)	Prof. Nyankovsky S.L. :+38(032)2917851; nianksl@gmail.com
Studying year	5-th
Semester	8
Type of discipline / module	an obligatory component of the educational and professional training program
Teachers	Voznyak Andriy, Ph.D., Associate Professor likar.voznjak@gmail.com Tutusa Andriy, Assistant of Professor a.tytusa@gmail.com Furtak Roksolana, Assistant of Professor ljanaf@gmail.com
Erasmus yes/no	No
The person responsible for the syllabus	Voznyak Andriy, Ph.D., Associate Professor likar.voznjak@gmail.com
Number of credits ECTS	3.5
Number of hours (lectures/ practical classes/ independent work of students)	105 (10 - lectures/ 43 - practical classes/ 52 - independent work)
Language of study	English
Information about consultations	According to the schedule during the academic year
Address, telephone number and work regulations of the clinical base	"Lviv City Children's Clinical Hospital " tel: +380322931888

2. Short annotation to the course

Studying the discipline "Pediatrics" the 4th year-students consolidate knowledge gained in the classroom at the department of Propaedeutic Pediatrics and the Department of Pediatrics during the production practice at the children's hospital. They are mastering basic skills of collecting anamnesis, conducting the examination, systemizing the symptoms in syndromes, planning examination of a sick child, interpretation of laboratory and instrumental examinations, carrying out a differential diagnosis most common diseases of the neonatal period, the main pathological conditions of the endocrine and hematopoietic system in children, determination of the preliminary clinical diagnosis, determination of therapeutic tactics, treatment with drug dosages administration, emergency medical care, clinical cases solving, working off practical skills on mannequins and near the bed of a sick child, feeling in the 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 "Paediatrics and Neonatology" 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 "Paediatrics and Neonatology" 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

- Pediatrics for 4th-year medical students
- Practice in a children's hospital

5. Program learning outcomes (PLO)

Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, ability to further professional training with a high level of autonomy **PLO 1**.

2. Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient to solve professional problems in the field of health care **PLO 2**.

3. Identify and identify the leading clinical symptoms and syndromes; according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a preliminary clinical diagnosis of the disease **PLO 4**.

4. Collect complaints, life history and disease, assess the psychomotor and physical development of the patient, the state of organs and systems of the body, based on the results of laboratory and instrumental studies to assess information about the diagnosis, taking into account the patient's age **PLO 5**.

5. Establish a final clinical diagnosis by making an informed decision and analysis of the obtained subjective and objective data of clinical, additional examination, differential diagnosis, adhering to the relevant ethical and legal norms, under the supervision of a physician-manager in a health care institution **PLO 6**.

6. Order and analyze additional (mandatory and optional) examination methods (laboratory, functional and / or instrumental) for differential diagnosis of diseases **PLO 7**.

7. To determine the main clinical syndrome or what causes the severity of patient condition by making an informed decision under various circumstances (at healthcare facility, or outside it), including in conditions of emergency, in the battlefield, in conditions of lack of information and limited time **PLO 8**.

8. To determine the nature and principles of treatment of patients (conservative, operative), taking into account the age of the patient, in a health care facility, outside it and at the stages of medical evacuation, including in the field, on the basis of a preliminary clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision on existing algorithms and standard schemes. If necessary to expand the standard scheme and justify personalized recommendations under the supervision of a physician **PLO 9**.

9. To determine the necessary mode of work, rest and nutrition based on the final clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes **PLO 10**.

11. Assess the general condition of the newborn child by making an informed decision according to existing algorithms and standard schemes, adhering to the relevant ethical and legal standards **PLO 12**.

12. Assess and monitor the child's development, provide recommendations for breastfeeding and nutrition depending on age, organize preventive vaccinations on the calendar **PLO 13**.

13. Define tactics and provide emergency medical care in emergencies for a limited time in accordance with existing clinical protocols and treatment standards **PLO 14**.

14. Perform medical manipulations in a medical institution, at home or at work based on a previous clinical diagnosis and / or indicators of the patient's condition by making an informed decision, adhering to the relevant ethical and legal norms **PLO 17**.

15. Plan and implement a system of anti-epidemic and prophylactic measures for the emergence and spread of diseases among the population **PLO 19**.

16. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information **PLO 21**.

17. Assess the impact of the environment on human health in order to assess the state of morbidity in the population **PLO 23**.

18. Organize the necessary level of personal safety (own and those being cared for) in the event of typical hazardous situations in the individual's field of work **PLO 24**.

19. Clearly and unambiguously communicate knowledge, conclusions and arguments on health issues and related issues to professionals and non-specialists **PLO 25**.

6. List of learning results

Learning results code	The scope of the learning results	Reference to the code of the
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		competence matrix
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.	PLO 1 PLO 2 PLO 5-7 PLO 9 PLO 13 PLO 14
Kn-2 Sk- 2 C-2 AR -2	Know the standard methods of laboratory and instrumental examinations 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 Formulate and communicate to the patient and / or his/her parents (guardians), physicians about the required list of laboratory and instrumental examinations Be responsible for the decision-making process regarding the evaluation of laboratory and instrumental results	PLO 1 PLO 2 PLO 5-7 PLO 9
Kn - 3 Sk- 3 C - 3 AR - 3	Know the algorithm for disease diagnosis; algorithms for identifying leading symptoms or syndromes; initial and clinical diagnoses; methods. 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. Based on regulatory documents, maintain medical documentation of the patient (outpatient/inpatient chart, etc.). 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	PLO 1-2 PLO 5-6
Kn - 4	Know the algorithms and standard schemes for determining the regimen of education, work and leisure activities for healthy	PLO 1-2 PLO 10

Sk - 4	children and for medical treatment, based on the initial and clinical diagnosis	
C - 4	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	
AR - 4	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 Be responsible for ensuring that the education, work and leisure regime is appropriate for healthy children and for the treatment of illnesses	
Kn - 5	Have specialized knowledge of algorithms and standard schemes for the prescribing of nutrition for healthy children and in the treatment of diseases	PLO-1-2 PLO 8 PLO 10
Sk - 5	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	
C - 5	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	
AR - 5	Be responsible for ensuring that food for healthy children and for treating illnesses is appropriately determined	
Kn - 6	Have specialized knowledge of algorithms and standard treatment regimens	PLO 1-2 PLO 8-9
Sk - 6	Be able to determine the peculiarities of nutrition of healthy children and those who in process of treatment according to preliminary and clinical diagnoses	
C - 6	Formulate and communicate to the patient and / or their parents (guardians), professionals own findings on the principles and nature of treatment	
AR - 6	Be responsible for deciding on the principles and nature of treatment	
Kn - 7	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.	PLO 1-2 PLO 5-6 PLO 8-9 PLO 13-14 PLO 17
Sk - 7	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	
C - 7	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.	
AR - 7	Be responsible for the timeliness and effectiveness of medical procedures for the diagnosis of non-critical conditions.	
Kn - 8	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.	PLO 1-2 PLO 5-6 PLO 8-9 PLO 13
Sk - 8	Be able to identify the principles and tactics of emergency medical care; carry out organizational and diagnostic procedures for treatment and life-saving treatment.	
C - 8		

AR - 8	<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>	
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>	<p>PLO 1-2</p> <p>PLO 8-9</p> <p>PLO 13</p>
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>	<p>PLO 1-2</p> <p>PLO 5-6</p> <p>PLO 8</p> <p>PLO 13-14</p> <p>PLO 17</p> <p>PLO 25</p>
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>	<p>PLO 1-2</p>
Kn - 12 Sk - 12 C - 12 AR - 12	<p>To know the relevant ethical and legal standards for the examination of the population; examination tactics and principles of primary and secondary prophylaxis</p> <p>Know how to assess the health status of patients and adherents; arrange for follow-up examinations</p> <p>Organize outpatient observation of patients (secondary prevention of diseases) and healthy persons who are subject to dispensary supervision (primary prevention of diseases).</p> <p>Be responsible for the quality of the organization of dispensary supervision of certain contingents</p>	<p>PLO 4-7</p>
Kn - 13 Sk - 13 C - 13 AR - 13	<p>Be aware of the official document management system in the doctor's work, including modern computer technology</p> <p>Be able to identify the source and location of required information depending on its type; be able to process information and analyse it</p> <p>Gain the required information from a given source and make appropriate conclusions on the basis of this analysis</p> <p>Be responsible for the completeness and quality of the analysis of information and conclusions on the basis of this analysis</p>	<p>PLO 1-2</p> <p>PLO 17</p> <p>PLO 23</p> <p>PLO 25</p> <p>PLO 27</p>
Kn - 14 Sk - 14	<p>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</p> <p>Know how to assess the link and impact of socio-economic and biologic factors on the health of the individual and the family. Be</p>	<p>PLO 1-2</p> <p>PLO 24</p> <p>PLO 25</p> <p>PLO 27</p>

C - 14 AR - 14	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. Formulate conclusions on the health status of the child population, based on data on the relationship to environmental factors, socio-economic and biologic determinants. 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.	
Kn - 15 Sk - 15 C - 15 AR - 15	To know the basic ethical and deontological principles necessary in professional activity. Be able to apply basic ethical considerations (motives) in the performance of professional duties. To comply with the requirements of ethics, bioethics and deontology in their professional activities. Be responsible for compliance with the requirements of ethics, bioethics and deontology in their professional activities.	PLO 4-8 PLO 10
Kn - 16 Sk - 16 C - 16 AR - 16	Know the basic principles of academic and professional integrity Adhere to the principles of academic and professional integrity Use the principles of academic and professional integrity and knowledge of foreign languages Be responsible for compliance with the principles of academic and professional integrity	PLO 1-2

6. Format and scope of the course

Type of activity	Number of hours	Number of groups
Lectures (full-time lesson)	10	1-5 foreigners
Workshops (full-time lesson)	43	1-5 foreigners
Self-studying (full-time lesson)	52	1-5 foreigners

7. Topic and contents of the course

Code of the the classes	Topic	Content of the studying	Learning results code	Teacher
L1 (lecture 1)	Preterm and small for gestational age newborns	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLO 1-2	Associate Professor. Voznyak A.V.
L2 (lecture 2)	Non-infectious pathology of newborns.	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLO 1-2	Associate Professor. Voznyak A.V.
L3 (lecture 3)	Infectious diseases of newborns.	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLO 1-2	Associate Professor. Voznyak A.V.
L4 (lecture 4)	Red blood cells pathology in children.	Definition, etiology, pathogenesis, classification, classification, diagnosis, differential diagnosis, treatment	PLO 1-2	Associate Professor. Voznyak A.V.
L5 (lecture 5)	The endocrinology disease in children.	Definition, etiology, pathogenesis, classification, classification,	PLO 1-2	Associate Professor.

		diagnosis, differential diagnosis, treatment		Voznyak A.V.
W-1 (workshop 1)	Medical care for healthy newborns. Anatomical and physiological peculiarities of preterm newborns. Features of preterm postnatal transition. Danger of COVID-19 for newborns: management and feeding.	Organization of neonatal medical care in Ukraine. Medical care for a healthy newborn. Bioethical issues in modern neonatology. A full-term newborn baby. Care in the maternity hospital. Hospital discharge criteria. The transitional conditions. Doctor's tactics	PLR 1-6 PLR 11-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-2 (workshop 2)	Main clinical problems of preterm and small newborns. Nutrition for preterm and small newborns.	Criteria in determining prematurity. Adaptation features of preterm infants. Etiological factors of prematurity. Anatomical and physiological peculiarities. Classification of the premature infants according to the birth weight and correlation of physical development and gestational age (Ballard score). Principles of preterm infant's nursing. Peculiarities of nutrition of the premature infants.	PLO 4-10 PLO 12 PLO 14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-3 (workshop 3)	Birth asphyxia and neonatal resuscitation.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis. Neonatal primary resuscitation.	PLR 1-6; PLR 9-14	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-4 (workshop 4)	Respiratory disorders in newborns: causes, diagnosis, principles of treatment. Lung diseases in newborns.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis.	PLO 4-10 PLO 12-14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-5 (workshop 5)	Bacterial infections of the newborn. Intrauterine and perinatal infections	Purulent-inflammatory diseases of the skin and subcutaneous tissue, diseases of the umbilical cord,	PLO 4-10 PLO 12-14 PLO 17	Associate Professor. Voznyak Andriy.

	of the fetus and newborn.	umbilical wound and umbilical vessels: classification, etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention, prognosis. Neonatal sepsis: classification, etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention, prognosis. "TORCH" infections in newborns: etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention, prognosis.	PLO 19 PLO 23-25	Assistant of Professor Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-6 (workshop 6)	Hemolytic and hemorrhagic diseases of newborns.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis.	PLO 4-10 PLO 12 PLO 13 PLO 14 PLO 17 PLO 19	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-7 (workshop 7)	Anemias and hemorrhagic diseases in children.	Definition. Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Emergency care for bleeding and hemorrhagic conditions that require treatment. Prevention. Prognosis.	PLO 4-10 PLO 13 PLO 14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-8 (workshop 8)	Leukemia in children. Lymphoma in children.	Etiology. Pathogenesis. Classification. Diagnosis. Differential diagnosis of other hematological diseases and diseases accompanied by hyperplastic syndrome. Treatment. Prognosis.	PLO 4-10 PLO 13 PLO 14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Assistant of Professor Furtak

				Roksolana
W-9 (workshop 9)	Diabetes mellitus in children.	Etiology, pathogenesis, classification, clinical manifestations, diagnosis, differential diagnosis, treatment, prevention, prognosis of diabetes in children. Insulin therapy. Diabetic ketoacidosis and hypoglycemic coma: etiology, pathogenesis, classification, clinical presentation, diagnosis, differential diagnosis, emergency care and prevention. Prognosis.	PLO 4-10 PLO 13 PLO 14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-10 (workshop 10)	Diseases of the hypothalamic-pituitary system in children. Hypopituitarism. Thyroid diseases in children.	Etiology, pathogenesis, classification, clinical manifestations, diagnosis, differential diagnosis, treatment and prevention. Prognosis of growth abnormalities. Emergency care of thyrotoxicosis and thyroid storm in children.	PLO 4-10 PLO 13 PLO 14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
W-11 (workshop 11)	Gonadal disorders in children. Diseases of the adrenal glands.	Etiology, pathogenesis, classification, clinical manifestations, diagnosis, differential diagnosis, treatment and prevention. Prognosis of pathology of the gonads. Acute and chronic adrenal glands insufficiency in children. Clinical and diagnostic peculiarities. Differential diagnosis. Addisonian crisis. Congenital adrenal hyperplasia.	PLO 4-10 PLO 13 PLO 14 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS1 (self-studying 1-13)	Neonatal birth traumas.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis.	PLO 4-10 PLO 13 PLO 17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS2 (self-studying 2)	Radiographic syndromes of the lung damage in newborns.	The main radiological signs of lung damage in newborns	PLO 4-10 PLO 13 PLO 17 PLO 19 PLO	Associate Professor. Voznyak Andriy. Assistant of

			23-25	Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS3 (self-studying 3)	Perinatal HIV infection.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis.	PLO 4-10 PLO 13 PLO17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS4 (self-studying 4)	Leukemic reactions in children. Lymphadenopathy in children.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis.	PLO 4-10 PLO 13 PLO17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS5 (self-studying 5)	Chronic complications of diabetes mellitus in children. Clinical observation of children with diabetes mellitus. Diabetes insipidus.	The most common chronic complications of diabetes.	PLO 4-10 PLO 13 PLO17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS6 (self-studying 6)	Obesity in children. Growth disorders in children.	Etiology. Pathogenesis. Classification. Clinical manifestations. Diagnosis. Differential diagnosis. Treatment. Prevention. Prognosis.	PLO 4-10; PLO 13; PLO17; PLO 19; PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana

SS7 (self-studying 7)	Preparation for practical classes	In accordance with the allotted time, students independently prepare for workshops. A topic coincides with the topics of workshop (W 1-11).	PLO 1-2 4-10 PLO 13 PLO17 PLO 19 PLO 23-25	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana
SS8 (self-studying 8)	Writing the case report.	Ability to issue in an appropriate way a medical history of an inpatient	PLO 1-2 PLO 4-10 PLO 12-14 PLO 17 PLO 21	Associate Professor. Voznyak Andriy. Assistant of Professor Tutusa Andriy, Tutusa Andriy, Assistant of Professor Furtak Roksolana

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>Self-study is performed by the student independently outside the classroom. It is evaluated on a summative basis.</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; makes significant, gross mistakes when answering and demonstrating practical skills.</p> <p>IW is assessed, in addition to taking into account in current classes, when it is performed or not at the end of each semester</p>

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			
General evaluation system	Participation in the work during the semester - 100% on a 200-point scale		
Rating scales	traditional 4-point scale, multi-point (200-point) scale, ECTS rating scale		
Admission to final control	<p>Students are admitted to semester final control:</p> <ul style="list-style-type: none"> ✓ who have performed all types of work, tasks provided for in the curriculum for the semester in accordance with the discipline (in particular, wrote and handed in the case report ✓ attended all classes provided by the curriculum; ✓ worked out missed classes; ✓ scored the number of points for the current success, not less than the minimum (72 points). <p>Students who have missed workshops are allowed with the <i>Dean's permission</i> to work academic debts up to the specified term within the semester.</p>		
Type of final control	Methods of final control	Enrollment criteria	
Exam	<p>the exam is conducted in writing during the examination session, according to the schedule. The form of the exam is standardized and includes control of theoretical and practical training.</p> <p>Semester exam lasts about 2 academic hours and is carried out according to the following regulations:</p> <p>Stage 1 - Test control - 40 MCQ's, it is held for 40 minutes. The maximum number of points is 40 (0.5 points per 1 correct answer). The minimum criterion for successful passing of the test control is the result of 60% of correct answers.</p> <p>Stage 2 – A complex clinical cases solving, including interpretation of laboratory and instrumental studies data, determination of preliminary clinical diagnosis, determination of therapeutic tactics, treatment prescription. The task is carried out within 60 minutes. The maximum number of points is 20 for one task.</p>	<p>The maximum number of points that a student can score in the exam is 80.</p> <p>The minimum number of points to pass the exam is at least 50.</p>	

At this stage, 2 typical clinical cases are supposed to be solved. One case from the topics of the 4th course, the second - on the topics of the 5th course.

In the case of distance learning, the exam is conducted online and involves solving MCQ's. The student is offered 40 tests of the first level, with one correct answer and 40 tests of the second level, the expanded choice of 50% of correct answers of the total number. A total amount is 80 MCQ's.

The student receives 1 point for a correct answer to one question of the first level MCQ's, and 0.25, 0.5, 0.75, or 1 point for one question of the second level MCQ's, if the number of correct answers are 4 or 0.33, 0.67 or 1 point if the number of correct answers are 3.

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

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2. Nelson textbook of Pediatrics 21st Edition by Robert M. Kliegman, Joseph W. St Geme III, et al. Philadelphia: Elsevier, 2020.
3. Marc dante K., Kliegman R.M., Behrman R.E., Jenson H.B. Nelson Essentials of Pediatrics, 8 ed., Saunders, 2018.-832 p.
4. Pediatric Secrets / 6th ed. by Polin R.A., Ditmar M.F. / Mosby, 2015.- 752 p.
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Additional sources

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3. Queensland Pediatric Guidelines. Diabetic Ketoacidosis (DKA) and Hyperosmolar Hyperglycaemic State (HHS) - Emergency management in children.
<https://www.childrens.health.qld.gov.au/guideline-dka-emergency-management-in-children/>
4. Sharma ST, Nieman LK, Feelders RA. Cushing's syndrome: epidemiology and developments in disease management. Clin Epidemiol. 2015;7:281-293.
5. Pediatric Adrenal Insufficiency: Diagnosis, Management, and New Therapies. International Journal of Pediatrics 2018(1):1-8.
6. Congenital Adrenal Hyperplasia Due to Steroid 21-Hydroxylase Deficiency: An Endocrine Society Clinical

PracticeGuideline. [2018]

Information resources

https://emedicine.medscape.com/pediatrics_general

<https://pubmed.ncbi.nlm.nih.gov/>

<https://www.who.int/>

<https://www.aap.org/en-us/Pages/Default.aspx>

<http://www.generalpediatrics.com/>

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 _____