Syllabus of the discipline "Pediatrics"
individual profile course on choice: Obstetrics and gynecology

1. General information

Name of the faculty	Medical faculty No.2
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 (e-mail address on the website of Danylo Halytsky LNMU)	**EB 3.3** **3.3.4.1 - PEDIATRICS**
Department (name, address, telephone number, e-mail)	**Department** of Pediatrics № 2, 79059, Lviv, Pylypa Orlyka str, 4, phone / fax: +38 (032) 2938250; Kaf_pediatrics_2@meduniv.lviv.ua
Head of the department (contact e-mail)	Prof. Lesya Besh +38 (032) 2938250 lesya.besh@gmail.com
Studying year	6th
Semester	11-12
Type of discipline / module	an obligatory component of the educational and professional training program
Teachers	Sergiy Gerasymov, M.D., Ph.D., Associate Professor, dr.gerasimov@gmail.com Oksana Matsyura M.D., Ph.D., Associate Professor, omatsyura@gmail.com Dmytro Dobryansky, M.D, Professor, dmytro_d@hotmail.com
Erasmus yes\no	No
The person responsible for the syllabus	Sergiy Gerasymov, Ph.D., Associate Professor (dr.gerasimov@gmail.com)
Number of credits ECTS	6
Number of hours (lectures/ practical classes/ independent work of students)	90 (0 - lectures/ 90 - practical classes/ 90 - 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: +38 032 2931888 “Western Ukrainian Specialized Children's Medical Center” tel: +38 032 2702207

2. Short annotation to the course

General characteristics, brief description of the course, features, benefits.

Studying the discipline "Pediatrics" the 6th year-students consolidate knowledge gained in the classroom at the department of Propaedeutic Pediatrics and the Department of Pediatrics. They are mastering basic skills of collecting anamnesis, conducting a physical 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 and childhood, determination of the preliminary clinical diagnosis, determination of therapeutic tactics, comprehensive treatment with drug dosages administration, emergency medical care not only in typical but also in complex clinical situations. The 6^{th} year students are solving complex (atypical) clinical cases, 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. The objectives of the course is to develop students' knowledge of principles of differential diagnosis of the most common diseases in children, backup knowledge of newborn resuscitation, observation of the child at outpatient department, integrated management of childhood illnesses, and algorithms in pediatric coma and lymphoproliferative syndromes.

As a result of studying the discipline the student should know: subject area - differential diagnosis of the most common diseases in newborn children, backup knowledge of newborn resuscitation, observation of the child at outpatient department, integrated management of childhood illnesses, and algorithms in pediatric coma and lymphoproliferative syndromes, 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 according to established algorithms and evaluate the results of physical examination in the most common diseases of newborn and older children (SC1; PLR5) (SC - Special Competency, PLR - Program Learning Results)
- Identify the principal clinical symptom or syndrome for differential diagnosis. Make the preliminary and clinical and differential diagnosis (SC3; PLR4);
- Make the plan of investigation (laboratory, instrumental) of a sick child, interpret their results (SC2; PLR2);
- Assign the appropriate therapeutic nutrition (SC5; PLR10)
- Determine the principles of treatment (SC6; PLR14)
- Define the tactics of emergency medical care based on the diagnosis of emergency of the most common diseases of newborn children (SC7; PLR14)
- Provide emergency medical care based on an emergency diagnosis (SC7; PLR14)
- Perform medical manipulations (SC10)

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)
- Awareness of equal opportunities and gender issues (GC 13)
- The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights (GC14)

The student should have the skills:

- Ability to search, process and analyze information from various sources (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
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 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 foreign language
GC10	Skills in using information and communication technologies
GC11	Ability to search, process and analyze information from various sources
GC12	Certainty and perseverance on the tasks and responsibilities
GC13	Awareness of equal opportunities and gender issues
GC14	The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights
GC15	Ability to retain and develop moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology, use various types of physical activities for recreation and a healthy lifestyle

Special (Professional):

SC1	Ability to collect medical information about the patient and analyze clinical data
SC2	Ability to determine the required list of laboratory and instrumental studies and assess their results.
SC3	The ability to establish preliminary and clinical diagnosis
SC5	Ability to prescribe an appropriate diet in treatment and prevention of diseases
SC6	Ability to determine the principles and type of treatment and prevention of diseases
SC7	The ability to diagnose emergency conditions
SC8	Ability to determine the tactics and implement emergency medical care
SC10	The skills of performing medical manipulations
SC11	Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information taking into account aspects of social and ethical responsibility
SC13	Ability to carry out sanitary and hygienic and preventive measures
SC14	Ability to plan and carry out preventive and anti-epidemic measures for infectious diseases
SC16	Ability to keep medical records, including electronic forms
SC21	Clearly and unambiguously to convey own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying
SC24	Adherence to ethical principles when working with patients
SC25	Adherence to professional and academic integrity, be responsible for the accuracy of scientific results

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)

PLR 1. 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.

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

PLR 3. Specialized conceptual knowledge, which includes scientific achievements in the field of health care and is the basis for research, critical understanding of problems in the field of medicine and related interdisciplinary problems.

PLR 4. 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.

PLR 5. 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.

PLR 6. 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.

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

PLR 9. 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.

PLR 10. 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.

PLR 12. 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 norms.

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

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

PLR 17. 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.

PLR 18. Evaluate the state of functioning and restrictions of life of the person and the duration of disability with the registration of relevant documents at health care institution on the basis of data on illness and its course, features of human professional activity, etc. Keep a medical document on the patient and a certain contingent of the population on the basis of regulatory documents.

PLR 20. Analyze the epidemiological condition and take measures of mass and individual, general and local prevention of infectious diseases.

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

PLR 24. Organize the necessary level of individual safety (own and care persons) in the event of typical dangerous situations in the individual field of activity.

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

PLR 29. Plan, organize and conduct activities for the specific prevention of infectious diseases, including in accordance with the National Calendar of preventive vaccinations, both mandatory and recommended. Manage vaccine residues; organize additional vaccination campaigns, including immune-prophylaxis measures.

6.0 List of learning results

Learning results code	**The scope of the learning results**	**Reference to the code of the competence matrix**
The code is created when the syllabus is filling (category: **Kn** - Knowledge, **Sk-** Skill, **C**-Competence, **AR** - Autonomy and Responsibility	Learning outcomes determine what the student must know, understand and be able to perform, after completing the discipline in accordance with the learning objectives. To enroll in the discipline, it is necessary to confirm the achievement of each learning result.	The symbol of the code of the program learning results in the Standard of Higher Education
Kn-1 ***Sk- 1*** ***C-1*** ***AR -1***	Have a 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.	**PLR1**
Kn- 2 ***Sk- 2*** ***C-2*** ***AR -2***	Have knowledge in pharmacology, biochemistry, physiology, pathology, microbiology, pediatric nursing, pediatric propedeutics Be able to make systematic physical examination Be able to make preliminary and differential diagnosis Be responsible for provision of quality standard care in pediatric diseases	**PLR2**
Kn- 3 ***Sk- 3*** ***C-3*** ***AR -3***	Specialized conceptual knowledge, which includes scientific achievements in the field of health care and is the basis for research, critical understanding of problems in the field of medicine and related interdisciplinary problems. Be able to apply current scientific advances in medical practice	**PLR3**
Kn- 4 ***Sk- 4*** ***C-4*** ***AR -4***	Know the diagnostic algorithms for diseases; algorithms for discrimination of major symptoms or syndromes; make preliminary and final diagnoses; methods Be able to make relevant decisions, highlighting of the main clinical symptom or syndrome; be able to make the preliminary and final clinical diagnosis According to the normative documents fill in medical documentation of the patient (outpatient / inpatient records, etc.) According to the ethical and legal norms, be responsible for making reasonable decisions and actions concerning of the preliminary and final clinical diagnosis accuracy	**PLR4**
Kn-5 ***Sk-5***	Demonstrate knowledge about child's body, anatomical and physiological peculiarities of child's organs and systems at different ages, know the standard methods of interview, able to compile a pedigree, perform physical examination, know stages and methods 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.	**PLR5**

	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.	
C-5	Communicate effectively with patient and/or his parents (care givers). Transfer information about the child health to the relevant medical documentation.	
AR-5	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.	
Kn-6 ***Sk-6*** ***C-6*** ***AR-6***	Know similar and different features of major pediatric diseases 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 mentor physician in a health care institution.	**PLR6**
Kn-7 ***Sk- 7*** ***C-7*** ***AR -7***	Know the standard methods of laboratory and instrumental research. Be able to assign an appropriate laboratory and instrumental examination of the patient by applying standard techniques, analyze the results of examination (laboratory and instrumental) and make preliminary diagnosis Create a list and inform the patient and/or his/her parents (care givers), experts about conclusions concerning the necessary list of laboratory and instrumental tests Be responsible for the decision concerning the evaluation of laboratory and instrumental examinations results	**PLR7**
Kn-8 ***Sk- 8*** ***C-8*** ***AR -9***	Know 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. Be able to expand the standard scheme and justify personalized recommendations under the supervision of a physician.	**PLR9**
Kn – 10 ***Sk - 10*** ***C - 10***	Know the system of hygienic and preventive measures among the population observed. Know the principles of organization of follow-up of different groups of population, who are subject to supervision (newborns, children, teenagers). Be able to setup groups of children for follow-up. Be able to plan follow-up for different age groups. Know indicators for efficiency of follow-up and rules of the reporting to the health authorities. Know the methodical approaches to assess the environment for pollution and the presence of factors which affect the health of the population in this environment. Know principle of rational nutrition, water supply, mode of activity and rest, forming a favorable work environment, primary prevention of diseases and injuries; Principles and methods of promoting healthy lifestyles Based on the results of follow-up and analysis of children's health, and environment know the principles of submitting analytical information to local government and health authorities to eliminate harmful effects on children's health.	**PLR10**

AR - 10	Be responsible for timely and qualitative activities on assessment of the health of children, health improvement and improvement of the health of certain contingents, improving the environment, promoting healthy lifestyles, primary prevention of diseases and injuries.	
Kn - 12	Know criteria for assessment of the general condition of the newborn child. Know modern algorithms and standard schemes in neonatology. Be aware of ethical and legal issues in neonatology.	**PLR12**
Sk - 12	Perform physical examination of a newborn	
C - 12	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 norms.	
AR - 12	Be responsive for quality care in for newborn	
Kn - 13	Know monitoring of child's development, provide recommendations for breastfeeding and nutrition depending on age, management of preventive vaccinations	**PLR13**
Sk - 13	Be able to assess the health of patients and the affected population; to organize medical examination of children who require supervision.	
C - 13	Organize follow-up supervision of patients (secondary prevention of diseases) and healthy persons who is subject to further follow-up supervision (primary prevention of diseases).	
AR - 13	Be responsible for the quality of the organization of follow-up supervision of certain groups of children.	
Kn - 14	Know the algorithms for providing emergency medical care in emergencies	**PLR14**
Sk - 14	Be able to provide emergency medical care in most common emergency conditions in children.	
C - 14	Explain the need and procedure for therapeutic measures of emergency medical care.	
AR - 14	Be responsible for the timeliness and quality of emergency medical care	
Kn - 17	Have specialized knowledge of algorithms for performing medical manipulations.	**PLR17**
Sk - 17	Be able to carry out medical manipulations	
C - 17	Formulate and inform the patient, and/or his parents (care givers) regarding the need for medical manipulations	
AR - 17	Be responsible for the quality of medical manipulations	
Kn - 18	Know functioning and restrictions of life of the person and the duration of disability with the registration of relevant documents at	**PLR18**
Sk - 18	health care institution on the basis of data on illness and its course,	
C - 18	features of human professional activity. Be able to keep a medical document on the patient and a certain	
AR - 18	contingent of the population on the basis of regulatory documents. Be responsible for protection of private medical information	
Kn - 20	Know principles of epidemiology and epi-/pandemic disease prevention strategies	**PLR20**
Sk - 20	Be able to analyze the epidemiological condition and take measures	
C - 20	of mass and individual, general and local prevention of infectious diseases.	
AR - 20	Be responsible for the local disease prevention	
Kn - 21	Know major information paid and free resources on the internet, copyright rules, and rules of electronic access	**PLR21**
Sk - 21	Be able to search for the necessary information in the professional	
C - 21	literature and databases, analyze, evaluate and apply this	

AR - 21	information Be responsible for sharing updated professional information with colleagues	
Kn - 24 ***Sk - 24*** ***C - 24*** ***AR - 24***	Know about professional health protection measures Be able to organize the necessary level of individual safety (own and care persons) in the event of typical dangerous situations in the individual field of activity. Be responsible for personal and patient safety.	**PLR24**
Kn - 25 ***Sk - 25*** ***C - 25*** ***AR - 25***	Know principles of logical thinking and making informed conclusions, essential vs non-essential information Ability to make an informed decision based on a set of arguments Be responsible and produce competency toward clear professional statements	**PLR25**
Kn - 29 ***Sk - 29*** ***C - 29*** ***AR - 29***	Know epidemiology of the most common infectious diseases, including preventable diseases, national schedule for vaccination of children of various ages Be able and responsible to plan, organize and conduct activities for the specific prevention of infectious diseases, including in accordance with the National Calendar of preventive vaccinations, both mandatory and recommended. Manage vaccine residues; organize additional vaccination campaigns, including immunoprophylaxis measures.	**PLR29**

6. Format and scope of the course

Type of activity	**Number of hours**	**Number of groups**
Lectures (*full-time lesson)*	0	-
Workshops (*full-time lesson)*	90	x (foreigners)
Self-studying (*full-time lesson)*	90	x (foreigners)

7. Topics and content of the course

Code of the type of the classes	***Topic***	***Content of the studying***	***Learning results code***	***Teacher***
W-1 (workshop 1)	Medical care for healthy newborn in the maternity hospital.	Organization of neonatal medical care for a healthy newborn. Care in the maternity hospital. The infant feeding. Hospital discharge criteria. The transitional conditions. Doctor's tactics	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-2 (workshop 2)	Neonatal asphyxia and perinatal injury of the central nervous system: prevention, differential diagnosis and principles of treatment.	Differential diagnosis of asphyxia, central nervous system lesions in newborns. Prevention. Principles of treatment. Prognosis.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-3	Resuscitation of a	Indications for resuscitation.	PLR 2, 4-7,	Dmytro

(workshop 3)	newborn	Basic principles of newborn resuscitation. Initial and subsequent steps of neonatal resuscitation.	14, 17, 21,27	Dobryanskyy,
W-4 (workshop 4)	Differential diagnosis of the most common birth traumas in newborns.	Differential diagnosis of the birth traumas in newborns. Principles of treatment. Prognosis.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-5 (workshop 5)	Nursing of premature and low-birth weight babies. Modern priorities.	Features of postnatal adaptation of preterm infants. Principles of preterm infant's nursing in the maternity and secondary-care hospitals. Intrauterine growth retardation (IUGR): causes, postnatal diagnosis, treatment and prevention. Disadaptation syndromes in preterm infants. The feeding peculiarities of premature infants. Medical care for major emergencies in premature infants: respiratory failure, intestinal paresis, hyperbilirubinemia, hypoglycemia.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-6 (workshop 6)	Differential diagnosis and treatment of lung diseases in newborns.	Differential diagnosis. Modern approaches to the treatment of lung diseases in newborns Prevention.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-7 (workshop 7)	Intrauterine and perinatal infections in newborns: differential diagnosis, treatment and prevention.	Differential diagnosis of intrauterine and perinatal infections in newborns, treatment, prevention, prognosis. Perinatal HIV-infection. Purulent inflammatory diseases of the skin and subcutaneous tissue, diseases of the umbilical cord stump and umbilical vessels: differential diagnosis, treatment, prevention, prognosis. Neonatal sepsis: differential diagnosis, treatment, prevention, prognosis	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-8 (workshop 8)	Differential diagnosis of jaundice in newborns.	Differential diagnosis. Treatment. Prevention. Prognosis. Features of hyperbilirubinemia in premature and underweight infants.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
W-9 (workshop 9)	Differential diagnosis of pneumonia in children. Acute respiratory disease COVID-	Leading clinical symptoms and syndromes in different clinical variants of pneumonia in children. Results of laboratory and instrumental studies in different clinical variants of	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura

	19 in children. Current aspects of treatment. Complications of pneumonia	pneumonia. Differential diagnosis of pneumonia, bronchitis, and bronchiolitis in children. Making a preliminary diagnosis. Treatment of patients with different clinical variants of pneumonia. Prevention of pneumonia and its complications in children. Clinical presentation and course of COVID-19. Updated diagnosis and management protocol. Prophylaxis.		
W-10 (workshop 10)	Differential diagnosis of bronchial obstruction in children. Differential approach of bronchial obstruction in children	Leading clinical symptoms and syndromes in bronchial asthma, bronchiolitis and acute obstructive bronchitis in children. Peculiarities of asthma in children, depending on the severity and level of control. Results of laboratory and instrumental studies in bronchial asthma, bronchiolitis and acute obstructive bronchitis and its complications. Differential diagnosis of asthma and bronchial obstruction versus acute respiratory infections in children of all ages. Making the preliminary diagnosis. Treatment of patients with different clinical variants of obstructive syndrome and its complications in children. Providing emergency assistance in an asthma attack and status asthmaticus. Prevention of asthma and bronchial obstruction syndrome against acute respiratory infections in children of all ages.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
W-11 (workshop 11)	Differential diagnosis of inflammatory and non-inflammatory disease of the heart in children. Treatment of chronic heart failure in children.	Differential diagnosis of myocarditis, endocarditis, pericarditis, cardiomyopathy, congenital and acquired heart defects in children. Prevention and treatment of chronic heart failure.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
W-12 (workshop 12)	Differential diagnosis of functional and organic disorders of the digestive	The most important clinical symptoms and syndromes in children with functional and organic gastrointestinal disorders. Clinical - instrumental	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura

	system in children.	investigations and differential diagnosis. Clinical management of children with functional and organic diseases of the digestive system.		
W-13 (workshop 13)	Food and drug allergy in children	Leading clinical symptoms of food and drug allergies in children. Diagnostic algorithm: laboratory and instrumental methods of examination, consultations. Clinical management of children with food and drug allergies. Providing emergency care for hives, anaphylactic shock.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
W-14 (workshop 14)	Differential diagnosis of the diseases of urinary system in children. Emergency care in acute renal failure.	Leading clinical symptoms and syndromes in inflammatory diseases of the urinary system (urinary system infections, urethritis, cystitis, pyelonephritis) dysmetabolic nephropathy, hereditary tubulopathy. The results of the laboratory and instrumental tests. Differential diagnosis of the most common infectious diseases of the urinary system, interstitial nephritis, nephropathy and hereditary dysmetabolic tubulopathy in children. Clinical management of the sick child in the most common inflammatory diseases of the urinary system and their complications, with interstitial nephritis, with dysmetabolic nephropathy and hereditary tubulopathy in children. First aid in acute urinary retention. Preventing urethritis, cystitis, pyelonephritis. Clinical and morphological variants of primary glomerulonephritis in children. Differential diagnosis of acute post-streptococcal glomerulonephritis with hereditary Alport nephritis, rapidly progressive glomerulonephritis, Berger's disease. Nephrotic syndrome in children: Differential diagnosis, complications. Clinical variants of chronic glomerulonephritis in children. Indications for renal biopsy in children. Clinical management of the sick child in	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura

		acute and chronic glomerulonephritis. Tactics in treatment of acute and chronic glomerulonephritis in children. Clinical supervision of children with glomerulonephritis. Prevention of chronic kidney disease. Acute kidney injury (acute renal failure) in children: etiology, pathogenesis, clinical and laboratory symptoms, Acute and chronic renal failure. Treatment approach. Prevention of progression of chronic renal failure.		
W-15 (workshop 15)	Medical supervision of children in the first three years of life in the polyclinic setting**.**	Procedure for obligatory preventive examinations of children under three years old. Efficient feeding and nutrition of the child under three years old. Evaluation of physical and psycho-motor development of children up to three years. Tactics of the general practitioner in violation of physical and neuropsychological development of children during the first three years of life. Principles of effective counseling. Differential diagnosis and prevention of the most common deficient states (rickets, iron deficiency) in infants. Prophylactic vaccination of children up to three years.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
SS1 (self-studying 1)	Seizures in newborns: differential diagnosis and principles of treatment.	Causes of neonatal seizures, clinical symptoms, diagnostic search, therapeutic approach.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS2 (self-studying 2)	Creating an optimal environment for the care of premature children. The Kangaroo method is a family-oriented assistance.	Practical aspects of the introduction of the Kangaroo method, the advantages of the method, its main components.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS3 (self-studying 3)	Methods of respiratory support of newborns.	Contemporary recommendations for respiratory support of newborns.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS4 (self-studying 4)	The most common congenital anomalies in newborns:	Congenital abnormalities of respiratory, digestive and urinary systems in newborns. Teratomas and other formations.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy

	differential diagnosis and principles of treatment	Differential diagnosis, the most optimal postpartum care. Multidisciplinary approaches to treatment.		
SS5 (self-studying 5)	Critical congenital heart defects - diagnosis and management.	Modern opportunities of prenatal and early postnatal diagnosis of critical heart defects. Methods of correction, prognosis.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS6 (self-studying 6)	Peculiarities of medical care for newborns born from multiple pregnancies.	Specific medical problems that can occur in newborns from multiple pregnancies. Significance of zygosity and chorionicity. Intrauterine growth discordance, feto-fetal (or twin-to-twin) transfusion syndrome, anemia-polycythemia sequence, developmental abnormalities associated with multiple births. Differential diagnosis, postpartum care approaches, prognosis.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS7 (self-studying 7)	Therapeutic hypothermia (types of therapeutic hypothermia, indications and contraindications, methods, monitoring of the patient during therapeutic hypothermia, complications).	Current recommendations for the use of therapeutic hypothermia (LH). The protocols of LH in neonatal care facilities with multidisciplinary care teams and the availability of resources for close monitoring and treatment.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS8 (self-studying 8)	Modern aspects of HIV prevention in newborns.	The standard of medical care "Prevention of HIV transmission from mother to child". Antenatal fetus; pre-test and post-test counseling; examination of pregnant women for HIV; antiretroviral prevention and treatment of pregnant women, maternity, woman in childbirth and newborn; safe childbirth, newborn examination; safe feeding.	PLR 2, 4-7, 14, 17, 21,27	Dmytro Dobryanskyy
SS9 (self-studying 9)	Current aspects in antibiotic therapy in children.	Therapeutic range of antibiotic therapy. Types of antibacterial drugs. Types of antibiotic action modes. Pharmacokinetics, pharmacodynamics. Age-specific indications and contraindications and concomitant pathology.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
SS10 (self-studying 10)	Differential diagnosis of hereditary,	Cystic fibrosis, idiopathic pulmonary hemosiderosis, primary cilia dyskinesia, a	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura

	congenital, and chronic broncho-pulmonary disease in children.	syndrome of Wilms Campbell bronchomalacia, aplasia and hypoplasia of the lungs, α1-antitrypsin deficiency, bronchopulmonary dysplasia, sequestration lung) in children. The results of laboratory and instrumental studies in chronic bronchitis, bronchiectasis, hereditary and congenital diseases of the respiratory system and their complications. Differential diagnosis of chronic, hereditary, and congenital bronchopulmonary disease in children. Management. Prevention.		
SS11 (self-studying 11)	Differential diagnosis of systemic connective tissue disease and systemic vasculitis in children.	Juvenile rheumatoid arthritis, systemic lupus erythematosus, acute rheumatic fever, dermatomyositis, scleroderma, Kawasaki disease, polyarteritis nodosa and other systemic vasculitis in children. Clinical variants of the course and complications of systemic connective tissue diseases and systemic vasculitis in children. The results of laboratory and instrumental studies in systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of systemic connective tissue diseases in children. Differential diagnosis of arthritis in children. Clinical management of patients with systemic connective tissue diseases and systemic vasculitis in children. Primary and secondary prevention of acute rheumatic fever in children.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
SS12 (self-studying 12)	Differential diagnosis of malabsorption syndrome in children.	Malabsorption syndrome, clinical manifestations, causes. Current approaches to the diagnosis of malabsorption syndrome, treatment. Multidisciplinary approach.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
SS13 (self-studying 13)	Helminthiasis in children.	The state of the art in helminthiasis in children. Prevalence, polymorphism of clinical manifestations. Modern opportunities for diagnosis. Management.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura
SS14 (self-studying 14)	Anomalies of the urinary system	Anomalies of development of the urinary system, which lead	PLR 2, 4-7, 14, 17,	

	accompanied by pathologic urodynamics in children.	to impaired urodynamics and cause urinary retention. Complications, timely diagnosis and management.	21,27	
SS15 (self-studying 15)	Nutrition of children of the first years of life: intake of vitamins and macro- and micronutrients with food.	Rational feeding and nutrition of a child under three years of life. Leading clinical symptoms and syndromes in insufficiencies of vitamins and trace elements. Diagnosis and principles of correction.	PLR 2, 4-7, 14, 17, 21,27	Sergiy Gerasymov Oksana Matsyura

The following teaching methods are used to develop skills:

- ✓ ***verbal/oral*** (explanation, cases);
- ✓ ***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

Current control is carried out during the training sessions and aims to check the assimilation of students' educational material (it is necessary to describe the forms of current control during training sessions). Forms of assessment of current educational activities should be standardized and include control of theoretical and practical training. For the final grade for the current educational activity a **4-th grade** (national) scale is used All types of work are considered in this case. The student should get an estimate from each topic and then it will be converted into points according to 200-point scale.

The student answers 10 MCQs (devoted to the topic of the lesson, format A). Right answers:
for 10-9 MCQs = 5 points; by 8-7 MCQs = 4 points; 6-5 MCQs = 3 points; 4 or less MCQs = 0 points.
Answers standardized questions, knowledge of which is necessary to understand the current topic.
Demonstrates knowledge and skills of practical skills in accordance with the topic of the workshop.
Solves a clinical case according to 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.
Connects 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-2, 4-7, 14, 17, 21,27, Sk-2, 4-7, 14, 17, 21,27 C – 2, 4-7, 14, 17, 21,27 AR -2, 4-7, 14, 17, 21,27	W 1-15 SS -1-18	Mastering of material is checked during practical classes in accordance with the topics. Current control is carried out at each practical lesson. The initial stage - answers to 10 test tasks. In the first practical lesson, tests test the knowledge of pediatrics in the disciplines of prerequisites. The main part of the lesson is the practical work of the student at the bedside of a patient. A lecturer with students is bypassing the patients. Students examine sick children, collect anamnesis, examine them, perform diagnostic manipulations, etc. Control of the main part of the lesson is carried out by assessing the student's practical skills, ability solve typical situational tasks. The lecturer discusses and gives explanations, emphasizes the features of the disease course in a particular child, targets a more rational realization of this or that method of examination, etc. The control of this stage is carried out by the teacher by assessing the students' skills and abilities when he is working with a sick child, filling in the documentation, interprets the test results, etc.). At the final part of workshop students are giving an answer to clinical case. The teacher sums up the results of the lesson, gives students the task for independent work, points the key questions of the next topic and offers a list of recommended literature for self-study. Independent work (IW) is performed by the student independently out of the classroom and evaluated overall.	Initial stage: 10-9 MCQs = 5 points; by 8-7 MCQs = 4 points; 6-5 MCQs = 3 points; 4 or less MCQs = 0 points. Main stage: It is rated with traditional grades of 5, 4, 3, 2. "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. "4" - correctly and essentially answers all standardized questions of the current topic; demonstrates performance/knowledge of practical skills; differential diagnosis. "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. "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. IW is assessed, in addition to considering in

			current classes, when it is performed or not at the end of each semester

Final control		
General evaluation system	Participation in the work during the semester / credit on a 200-point scale	
Rating scales	traditional 4-point scale, multi-point (200-point) scale, ECTS rating scale	
Admission to final control	The student attended all practical (laboratory, seminar) classes and received at least 120 points for current performance	
Type of final control	***Methods of final control***	***Enrollment criteria***
Credit	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:

$$x = \frac{\text{CA} \times 200}{5}$$

9. Course policy

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

Observance of academic integrity by students:

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

10. References

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

- Training program of the discipline
- Plans of 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

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: Kaf_pediatrics_2@meduniv.lviv.ua

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 №2" on the website of LNMU named after Danylo Halytsky: http://misa.meduniv.lviv.ua/ login / index.php

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.

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