## MINISTRY OF HEALTH Danylo Halytskyy Lviv National Medical University Pediatrics Infectious Diseases Department

#### APPROVED

Actin First Vise-Rector for Scientific and Pedagogical Affairs

Danylo Halytsky Lviv National Medical University Associate Professor Iryna SOLONYNKO

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### STUDY PROGRAM OF THE DISCIPLINE OK. 38"PEDIATRIC INFECTIOUS DISEASES" training of specialists of the second (master's) level of higher education field of knowledge 22 "Health care" specialty 222 "General Medicine" specialized course of choice "Internal medicine"

Discussed and approved at the methodological meeting of the Pediatric Infectious Diseases Department Protocol № 11 from "13 " May 2022 Head of the Department Assoc. Prof. Halyna LYTVYN APPROVED At the meeting of the specialized methodical committee on pediatric disciplines Protocol № 3 from "13" June 2022 Head of the specialized methodical commission Prof. Lesya BESH

#### **PROGRAMMERS:**

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## Changes and additions to the academic discipline program for 2023-2024 y

Nº	Content of the changes	Date and number of the minutes of the meeting of the department	Notes

Lytvyn H .O, PhD MD, assoc. prof., Head of the Pediatric Infectious Diseases Department

## **INTRODUCTION** The program of study of discipline

### OK 38 "Pediatric infectious diseases"

according to the Standard of higher education of the second (master's) level field of knowledge 22 "Health Care " specialty 222 " General Medicine" educational program of master of medicine

## **Description of the academic discipline (abstract)**

The educational discipline "Pediatric Infectious Diseases" studies classic and new data on infectious diseases in children, their etiology, epidemiology, pathogenesis, clinical picture, methods of diagnosis and treatment of the most common infectious diseases among children. The issues of differential diagnosis, prevention and the latest scientific data on the most common infectious diseases of childhood are studied, with the provision of assistance in the main emergency conditions.

Course "Pediatric Infectious Diseases":

a) is based on the knowledge acquired by students in the study of medical biology, normal and pathological physiology, normal and pathological anatomy, microbiology, histology, pharmacology, pediatric pediatric disease and integrates with these disciplines;

b) lay the foundations for students to develop skills and competences that are determined by the ultimate goals of studying pediatrics as an independent discipline and can be used by students in the study of pediatrics, childhood infectious diseases and other clinical disciplines in V and VI courses and in professional activity.

Structure of the discipline	Number	r of credits, hours, of them			Year of study	Number Practical	type of control
	Total	Auditori	Auditorium			classes	
		Lecture	Practical	study			
		s	classes				
"Pediatric infectious diseases" Content modules 3 Content sections 3	2, 0 credit ECTS / 60 hours		30	30	6 course XI / XII semester	5	credit

Auditory load – 50%, Self stydy– 50%

The subject of study of the discipline are the main manifestations of childhood infectious diseases, the principles of correct interpretation of clinical information obtained during examination of the patient, and the basic principles of treatment patients with infectious pathology

Interdisciplinary connections: normal anatomy, biochemistry, pathological physiology, pharmacology, pediatrics, surgery, infectious diseases, neurology. microbiology, epidemiology, immunology.

## 1. PURPOSE AND TASKS OF THE EDUCATIONAL DISCIPLINE

1.1. The purpose of teaching the course "Pediatric Infectious Diseases" is:

acquisition of the student's knowledge and professional skills in the differential diagnosis of the most common non-infectious and infectious diseases of childhood, dispensary supervision of healthy and sick children in an outpatient setting, and providing first aid in the most common emergency conditions in children based on the knowledge of age-related anatomical and physiognomy etiology, pathogenesis, classification, clinical manifestations, methods of diagnostics, treatment and prophylaxis of the most common non-communicable and infectious diseases of childhood and clinical, laboratory and instrumental examination of the child with observance of the principles of medical ethics and deontology, acquisition of professional skills in keeping medical records.

Formation of the ability to use knowledge, abilities, skills and understanding to solve typical tasks of the doctor's activity in the field of health, the scope of which is provided by certain lists of syndromes and symptoms of diseases, urgent conditions, physiological conditions.

Training of a highly qualified specialist (doctor) capable of solving complex tasks and problems in the field of medicine and health care or in the process of training, characterized by the uncertainty of conditions and requirements and performing the professional activities of a doctor; capable of continuing education with a high degree of autonomy.

## **1.2.** The main tasks of studying the discipline "Pediatric infectious diseases" are:

- Acquiring basic theoretical knowledge of the most common noncommunicable and infectious diseases of childhood, dispensary supervision of healthy and sick children in an outpatient setting.

- Mastering basic practical skills and skills in diagnosis, differential diagnosis, treatment of complicated and uncomplicated forms of the most common non-communicable and infectious diseases of childhood;

- Mastering the basic practical skills and skills to provide first aid in emergency situations in the most common non- infectious and infectious diseases of childhood.

- Keeping medical records.

- Formation in students of moral and ethical and deontological qualities in professional communication with a sick child and persons providing care for a child.

**1.3 Competencies and learning outcomes,** the formation of which is facilitated by the discipline (relationship with the normative content of the training of higher education applicants, formulated in terms of learning outcomes in the Higher Education Standard).

According to the requirements of the Higher Education Standard, the discipline ensures that students acquire the following **competencies:** 

- integral:

The ability to solve complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.

- general:

GC 1. Ability to abstract thinking, analysis and synthesis.

GC 2. The ability to learn and master modern knowledge.

GC 3. Ability to apply knowledge in practical situations.

GC 4. Knowledge and understanding of the subject field and understanding of professional activity.

GC 5. Ability to adapt and act in a new situation.

GC 6. Ability to make informed decisions.

GC 7. Ability to work in a team.

GC 8. Ability to interpersonal interaction.

GC 9. Ability to communicate in a foreign language.

GC 10. Ability to use information and communication technologies.

GC 11. Ability to search, process and analyze information from various sources.

GC 12. Determination and persistence in relation to assigned tasks and

assumed responsibilities.

GC 13. Awareness of equal opportunities and gender issues.

GC 14. The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.

GC 15. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understanding of 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, techniques and technologies, use different types and forms motor activity for active recreation and leading a healthy lifestyle.

Professional competences of the specialty (PC):

PC 1. Ability to collect medical information about the patient and analyze clinical data.

PC 2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.

PC 3. Ability to establish a preliminary and clinical diagnosis of the disease.

PC 5. The ability to determine the nature of nutrition in the treatment and prevention of diseases.

PC 6. Ability to determine the principles and nature of treatment and prevention of diseases.

PC 7. Ability to diagnose emergency conditions.

PC 8. Ability to determine tactics and provide emergency medical care.

PC 10. Ability to perform medical manipulations.

PC 11. 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.

PC 13. Ability to carry out sanitary and hygienic and preventive measures.

PC 14. Ability to plan and carry out preventive and anti-epidemic measures regarding infectious diseases.

PC 16. Ability to maintain medical documentation, including electronic forms.

PC 21. It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.

PC 23. Ability to develop and implement scientific and applied projects in the field of health care.

PC 24. Compliance with ethical principles when working with patients and laboratory animals.

PC 25. Observance of professional and academic integrity, bear responsibility for the reliability of the obtained scientific results

Detailing of competencies in accordance with the NQF descriptors in the form of the "Competence Matrix".

Matrix of competences

	Competence				
	Competence (Classification				
N⁰	of	Knowledge	Skill	Communicatio	Autonomy and
512	competences	Kilowieuge	JAII	n	responsibility
	according to NRK)				
Into	gral competence	•			
		complex problems,	including those of	f a research and i	provision natura
	•	ne. Ability to cont	•		
	eral competence	*			autonomy.
GC	Ability to	Specialized	Specialized	Clear and	Managing
1.	abstract	conceptual	skills/problem-	unambiguous	work or
1.	thinking,	knowledge that	solving skills	presentation of	learning
	analysis and	includes current	required for	one's own	processes that
	synthesis.	scientific	conducting	knowledge,	are complex,
	synthesis.	achievements in	research and/or	conclusions	unpredictable
		the field of	implementing	and arguments	and require
		professional	innovative	to specialists	new strategic
		activity or field	activities to	and non-	approaches
		of knowledge	develop new	specialists, in	approaches
		and is the basis	knowledge and	particular to	
		for original	procedures	people who are	
		thinking and	procedures	studying	
		conducting		staajing	
		research			
GC	Ability to	Specialized	Ability to solve	Use of foreign	Ability to
2.	learn and	conceptual	problems in	languages in	continue
	master	knowledge that	new or	professional	education with
	modern	includes	unfamiliar	activities.	a high degree
	knowledge.	current	environments		of autonomy
	C	scientific	in the presence		2
		achievements	of incomplete		
		in the field of	or limited		
		professional	information,		
		activity or field	taking into		
		of knowledge	account aspects		
		and is the basis	of social and		
		for original	ethical		
		thinking and			

		conducting			
		conducting			
00	A 1 *1*/	research	A 1 *1*/	<u>C1</u> 1	
GC 3.	Ability to apply knowledge in practical situations	Specialized conceptual knowledge that includes modern scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and conducting	Ability to integrate knowledge and solve complex problems in broad or multidisciplin ary contexts	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Managing work or learning processes that are complex, unpredictable and require new strategic approaches
00	¥7 1 1	research	A 1 •1•.		D 11 11
GC 4.	Knowledge and understanding of the subject field and understanding of professional activity.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to integrate knowledge and solve complex problems in broad or multidisciplina ry contexts	Use of foreign languages in professional activities	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
GC 5.	Здатність до адаптації та дії в нової ситуації.	Critical thinking of problems in the field and at the boundaries of fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilities		Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
GC	Ability to	Specialized	Ability to	Clear and	Managing
б.	make an	conceptual	solve problems	unambiguous	work or
		-	-	-	
	informed	knowledge that	in new or	presentation of	learning

		scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and	environments in the presence of incomplete or limited information, taking into account aspects of social and	knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	are complex, unpredictable and require new strategic approaches
		conducting research	ethical responsibilitie s		
GC 7.	Ability to work in a team.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
GC 8.	Interpersonal skills	Specialized conceptual knowledge that includes current scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and conducting research	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
GC	Ability to			Use of foreign	

9.	communicate			languages in	
).	in a foreign			professional	
	language.			activities	
GC	Ability to use	Critical	Ability to	Use of foreign	Ability to
10	information and communicatio n technologies.	understanding of problems in the field and at the border of the fields of knowledge	solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	languages in professional activities	continue learning with a high degree of autonomy
GC 11	Ability to search, process and analyze information from various sources.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to integrate knowledge and solve complex problems in broad or multidisciplin ary contexts	Use of foreign languages in professional activities	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
GC 12	Determination and persistence in relation to assigned tasks and assumed responsibilitie s	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s		Ability to continue learning with a high degree of autonomy
GC	Awareness of	Critical	Specialized	Clear and	Managing

13	equal opportunities and gender issues.	understanding of problems in the field and at the border of the fields of knowledge	skills/problem- solving skills required for conducting research and/or implementing innovative activities to develop new knowledge and procedures	unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	work or learning processes that are complex, unpredictable and require new strategic approaches
GC 14	The ability to realize one's rights and responsibilitie s as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.	Specialized conceptual knowledge that includes current scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and conducting research	Ability to integrate knowledge and solve complex problems in broad or multidisciplin ary contexts	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Ability to continue learning with a high degree of autonomy
GC 15	The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on an understandin g of the history and	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and		Ability to continue learning with a high degree of autonomy

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	patterns of		ethical			
	development		responsibilitie			
	of the subject		S			
	area, its place		1			
	in the general					
	system of		1			
	knowledge		1			
	about nature		1			
	and society		1			
	and in the		1			
	development		1			
	of society,		1			
	technology					
	and					
	technology,					
	to use					
	various types					
	and forms of					
	motor activity		1			
	for active					
	recreation and		1			
	leading a		1			
	healthy		1			
	lifestyle.					
Spe	ecial (profession	al) competence				
PC	Ability to	Critical	Ability to	Use of foreign	Responsibility	
1.	collect	understanding	solve problems	languages in	for contributing	
	medical	of problems in	in new or	professional	to professional	
	information	the field and at	unfamiliar	activities	knowledge and	
	about the	the border of	environments		practice and/or	
	patient and	the fields of	in the presence		evaluating the	
	analyze	knowledge	of incomplete		performance of	
	clinical data.		or limited		teams and	
	knowledge		information,		teams	
	-		taking into			
			account			
			aspects of			
			social and			
			ethical			
			responsibilitie			
			S			
PC	Ability to	Critical	Ability to		Managing	
2.	determine the	understanding	solve problems		work or	
	necessary list	of problems in	in new or		learning	
	of laboratory	the field and at	unfamiliar		processes that	
	of faboratory	the field and at	umammai		processes that	ļ

	and instrumental studies and evaluate their results.	the border of the fields of knowledge	environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s		are complex, unpredictable and require new strategic approaches
PC 3.	Ability to installation previous clinical diagnosis disease	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s		Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
PC 5.	The ability to determine the nature of nutrition in the treatment and prevention of diseases of patients of various ages.	Critical understanding of problems in the field and at the border of the fields of knowledge	Specialized skills/problem- solving skills required for conducting research and/or implementing innovative activities to develop new knowledge and procedures	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Managing work or learning processes that are complex, unpredictable and require new strategic approaches
PC 6.	Ability to determine the principles and	Critical understanding of problems in	Ability to solve problems in new or	Clear and unambiguous presentation of	Managing work or learning

	nature of treatment and prevention of diseases	the field and at the border of the fields of knowledge	unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	processes that are complex, unpredictable and require new strategic approaches
PC 7.	Ability to diagnose emergency conditions.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
PC 8.	The ability to determine the tactics of providing emergency medical care.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams

PC 10	Ability to perform medical manipulations	Specialized conceptual knowledge that includes current scientific achievements in the field of professional	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information,	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non-	Managing work or learning processes that are complex, unpredictable and require new strategic approaches
		activity or field of knowledge and is the basis for original thinking and conducting research	taking into account aspects of social and ethical responsibilities	specialists, in particular to people who are studying	
PC 11.	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.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilities	Clear and unambiguous communication of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to persons studying	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
PC 13.	Ability to carry out sanitary and hygienic and preventive measures.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to integrate knowledge and solve complex problems in broad or multidisciplina ry contexts	Clear and unambiguous communication of one's own knowledge, conclusions and arguments to specialists and non specialists, in particular to persons who	Responsibility for the contribution to professional knowledge and practice and/or evaluation of the results of the activities of teams and collectives

				are studying	
PC 14.	Ability to plan and carry out preventive and anti epidemic measures for infectious diseases.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Responsibility for contributing to professional knowledge and practice and/or evaluating the performance of teams and teams
PC 16.	Ability to maintain medical documentatio n, including electronic forms.	Critical understanding of problems in the field and at the border of the fields of knowledge	Specialized skills/problem- solving skills required for conducting research and/or implementing innovative activities to develop new knowledge and procedures	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Managing work or learning processes that are complex, unpredictable and require new strategic approaches
PC 21.	It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non- specialists, in particular to people who	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie	Use of foreign languages in professional activities	Responsibility for contributing to professional knowledge and practice and/or evaluating the results of team and collective activities

	are studying.		S		
PC 23.	Ability to develop and implement scientific and applied projects in the field of health care.	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to solve problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibilitie s	Use of foreign languages in professional activities	Ability to continue learning with a high degree of autonomy
PC 24.	Adherence to ethical principles when working with patients and laboratory animals.	Specialized conceptual knowledge that includes current scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and conducting research	Ability to integrate knowledge and solve complex problems in broad or multidisciplin ary contexts	Clear and unambiguous presentation of one's own knowledge, conclusions and arguments to specialists and non- specialists, in particular to people who are studying	Managing work or learning processes that are complex, unpredictable and require new strategic approaches
PC 25.	Adherence to professional and academic integrity, bear responsibility for the reliability of the obtained scientific results	Critical understanding of problems in the field and at the border of the fields of knowledge	Ability to integrate knowledge and solve complex problems in broad or multidisciplina ry contexts	Use of foreign languages in professional activities	Ability to continue learning with a high degree of autonomy

LEARNING RESULTS: Distribution of learning outcomes by types of learning activities

Competencies	Program	Names of educational
that the	learning results	disciplines, practices
applicant must		
master		
GC 1 - 15	PLR 1 – 7,	Infectious diseases
PC 1 - 3, 5 – 8,	9, 10, 12-14, 17, 18,	Pediatric infectious
10, 11, 13, 14, 16,	20 – 22, 24, 25, 29	diseases
21, 23 – 25.		

Integrative final program learning outcomes, the formation of which is facilitated by the educational discipline:

- PLR 1.To have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
- PLR 2. Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.
- PLR 3. Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.
- PLR 4. Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
- PLR 5. Collect complaints, history of life and diseases, evaluate psychomotor and physical development of the patient, state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information regarding the diagnosis (according to list 4), taking into account the age of the patient.
- PLR 6. Establish the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, differential diagnosis, observing the relevant ethical and legal norms, under the control of the head physician in the conditions of the health care institution (according to the list 2).
- PLR 7. Assign and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
- PLR 9. Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the age of the patient, in the conditions of the health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms,

by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical institution.

- PLR 10. Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- PLR 12. To assess the general condition of a newborn child by making a reasoned decision according to existing algorithms and standard schemes, observing the relevant ethical and legal norms.
- PLR 13. Assess and monitor the child's development, provide recommendations on feeding and nutritional features depending on age, organize preventive vaccinations according to the calendar.
- PLR 14. Determine tactics and provide emergency medical care in emergency situations (according to list 3) in limited time in accordance with existing clinical protocols and standards of treatment.
- PLR 17. To perform medical manipulations (according to list 5) in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.
- PLR 18. To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data on the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.
- PLR 20. Analyze the epidemiological situation and carry out 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 22. Apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex healthcare problems.
- PLR 24. To organize the necessary level of individual safety (own and the persons he cares for) in case of occurrence of typical dangerous situations in the individual field of activity.
- PLR 25. Clearly and unambiguously communicate own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.
- PLR 29. To plan, organize and carry out measures 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.

#### Learning outcomes for the discipline:

- 1. Identify different clinical options and complications of the most common childhood infectious diseases;
- 2. Plan the examination of a sick child and interpret the obtained results for the most common childhood infectious diseases;
- 1. Carry out differential diagnosis and make a preliminary clinical diagnosis of the most common childhood infectious diseases;
- 2. To determine the tactics of managing a patient with the most common infectious diseases of childhood;
- 3. Demonstrate the ability to maintain medical documentation in the clinic of children's infectious diseases;
- 6. Diagnose and provide emergency care in the main emergency conditions in the pediatric infectious diseases clinic (shock (ITS, hypovolemic), coma, allergic reactions, asphyxia, cerebral edema, convulsive syndrome).

## 2. INFORMATION VOLUME OF THE EDUCATIONAL DISCIPLINE

2 ECTS credits / 60 hours are assigned to the study of the academic discipline.

#### **Content section 1. Pediatric respiratory infections**

Specific goals:

1. Determine the place of children's droplet infections in the structure of infectious diseases in children.

2. To determine the etiology, peculiarities of the epidural process, the main phases of the pathogenesis of diseases.

3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergency conditions.

- 4. Draw up an examination plan, evaluate the examination results.
- 5. Carry out differential diagnosis.
- 6. Determine indications for hospitalization, prescribe treatment.

7. To draw up a plan of anti-epidemic measures in the focus of infection. promote medical services.

13. Form goals and determine the structure of personal activities.

14. Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.

15. To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.

16. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

17. Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.

## TOPIC 1. Differential diagnosis and emergency conditions for influenza and ARVI in children (influenza, parainfluenza, adenovirus, respiratory syncytial (RS), rhinovirus infection, COVID-19), whooping cough.

Etiological, epidemiological, pathogenetic features, leading clinical symptoms and complications of the above-listed infections in children. Emergency conditions that may occur with these diseases (hyperthermic syndrome, acute stenotic laryngotracheitis, apnea during whooping cough, etc.), providing medical assistance for them. Tactics of managing patients with respiratory diseases and whooping cough, their prevention and immunoprophylaxis.

- **TOPIC 2. Differential diagnosis of diphtheria of the tonsils, infectious mononucleosis and diseases accompanied by acute tonsillitis syndrome in children.** Clinical features of tonsillitis of various etiologies (streptococcal, staphylococcal, simanovsky-vincent, viral, fungal). Etiological, epidemiological, pathogenetic features, leading clinical symptoms and complications of the above-listed infections in children. Classification of diphtheria and tonsillitis. Patient management tactics. Emergency conditions that may occur with these diseases (hyperthermic syndrome, diphtheria croup, its in diphtheria), providing medical assistance for them. Prevention and immunoprophylaxis.
- **TOPIC 3. Differential diagnosis of infections with exanthema syndrome.** Etiological, epidemiological, pathogenetic features, leading clinical symptoms, course options and complications of infections with exanthema syndrome (measles, rubella, chicken pox, scarlet fever, pseudotuberculosis). Differential diagnosis of exanthema syndrome in various infectious and non-infectious diseases. Severe atypical forms of chicken pox. Patient management tactics, organization of anti-epidemic measures in the focus of infection in diseases with exanthema syndrome. Immunoprophylaxis.

#### Content section 2. Infectious diseases of the nervous system

Specific goals:

- 1. Determine the place of infectious diseases of the nervous system in the structure of infectious diseases in children.
- 2. To determine the etiology, features of the epidural process, the main phases of the pathogenesis of the disease.
- 3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergency conditions.
- 4. Draw up an examination plan, evaluate the examination results.
- 5. Carry out differential diagnosis with NS diseases of non-infectious origin.
- 6. Determine indications for hospitalization, prescribe treatment.
- 7. To draw up a plan of anti-epidemic measures in the focus of infection.
- **TOPIC 4. Differential diagnosis of infections of the nervous system in children. Meningococcal infection:** etiological, epidemiological, pathogenetic features, leading clinical symptoms and variants of the course of meningococcal infection. Differential diagnosis of meningococcemia with diseases

accompanied by hemorrhagic rash (hemorrhagic vasculitis, thrombocytopenic purpura, etc.).

- **Differential diagnosis of enterovirus infection, poliomyelitis.** Etiological, epidemiological, pathogenetic features, leading clinical symptoms and options for the course of diseases. Clinical forms, diagnosis, complications and residual effects, treatment, prevention.
- **Emergencies in neuroinfections:** toxic shock syndrome (TSS) in meningococcal infection, brain edema (BE), cerebral coma. Patient management tactics. Prevention and immunoprophylaxis.

# Content section 3. Infectious diseases of the gastrointestinal tract and hepatobiliary system in children.

Specific goals:

- 1. Determine the place of acute intestinal infections and viral hepatitis in the structure of infectious disease in children.
- 2. To determine the etiology, features of the epidural process, the main phases of the pathogenesis of the disease.
- 3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergency conditions.
- 4. Draw up an examination plan, evaluate the examination results.
- 5. Carry out differential diagnosis with diseases of the gastrointestinal tract of noninfectious origin.
- 6. Determine indications for hospitalization, prescribe treatment.
- 7. To draw up a plan of anti-epidemic measures in the focus of infection.
- **Topic 5. Differential diagnosis of GIT infections in children.** Etiological, epidemiological, pathogenetic features, leading clinical symptoms and syndromes. Differential diagnosis of GIT infections between itself and with diseases of the gastrointestinal tract of non-infectious origin, surgical pathology. Tactics of managing children with GIT infections (diagnosis, indications for hospitalization, treatment). Emergencies in GIT infections in children (toxicosis, exicosis, hypovolemic shock, neurotoxicosis, its, HUS), provision of medical assistance.
- Differential diagnosis and emergency conditions in viral hepatitis (VH) in children. Etiological, epidemiological, pathogenetic features, leading clinical symptoms, laboratory research data depending on the causative agent of VH. Differential diagnosis of typical and atypical forms of hypertension in children. Tactics of managing a patient with viral hepatitis. Diagnostic markers of hepatitis.
- Acute liver failure with acute hepatitis in children, clinical symptoms, assessment of the severity and prognosis of the course of hepatitis, taking into account the indicators of laboratory studies. Tactics of management of a patient with hypertension with acute liver failure syndrome. Providing emergency care.

Differential diagnosis of VH with other parenchymal jaundices (drug-induced, toxic and autoimmune hepatitis, Gilbert's disease, tropical malaria, sepsis, yersiniosis, infectious mononucleosis, etc.).

Differential diagnosis with suprahepatic and subhepatic jaundice.

## 3. STRUCTURE OF THE EDUCATIONAL DISCIPLINE

	<b>T</b>		0.10	
Торіс	Lectu	Practi	Self-	Self-study
	res	cal	stud	
		class	У	
		es		
Content section 1. Pediatric respirator	y infect			Self-examination of
Topic 1. Differential diagnosis and		6	5	the child,
emergency conditions for influenza,				identification of
ARVI and SARS-CoV-2 in children.				characteristic
Whooping cough				symptoms and
Topic 2. Differential diagnosis of		6	5	syndromes of
diphtheria of the tonsils, infectious				infectious diseases,
mononucleosis and diseases				evaluation of the
accompanied by acute tonsillitis				results of laboratory
syndrome in children.				studies. Justification
Topic 3. Differential diagnosis of		6	5	of the clinical
infections with exanthema syndrome.				diagnosis.
Content section 2. Infectious disea	ses of	the ne	ervous	Appointment of
system				therapy.
Topic 4. Differential diagnosis of		6	6	writing micrographs
neuroinfections in children.				for the patient.
Meningococcal, enterovirus infection,				Drawing up a plan of
poliomyelitis. Emergency conditions in				anti-epidemic
neuroinfections.				measures in the focus
Content section 3. Infectious	diseas	es of	the	of infection.
gastrointestinal tract and hepato	biliary	syste	n in	Compilation of tables
children.		•		on the differential
Topic 5. Differential diagnosis of GIT		6	6	diagnosis of
infections in children. Emergencies				symptoms, individual
with GIT in children. Diagnosis and				signs, laboratory
treatment				indicators of the
Differential diagnosis and emergency				disease (rash, plaque,
conditions in viral hepatitis (VH) in				yellowness of the
children. Acute liver failure with				skin, bowel
hypertension in children.				movements,
			3	indicators of
_			_	hemogram,
_				cerebrospinal fluid).
Test control (format A) on the topics of classes, solving situational cases			3	hemogram,

<b>Total:</b> ECTS credits – 2.0;	30	30	Performing a lumbar
hours – 60;			puncture on a
			dummy. Preparation
			of a report for classes
			on the topic of self-
			study

## 4. THEMATIC PLAN OF LECTURES

Lectures are not provided for in the curriculum (according to order no. 881-z dated 03.15.22 (addition 1-4)

## 5. THEMATIC PLAN OF PRACTICAL CLASSES

N⁰	Торіс	Hours
1.	Differential diagnosis and emergency conditions for influenza and ARVI in children (influenza; parainfluenza; adenovirus, respiratory syncytial (RS), rhinovirus infection; COVID-19). Whooping cough	6,0
2.	Differential diagnosis of diphtheria of the tonsils, infectious mononucleosis and diseases accompanied by acute tonsillitis syndrome in children.	6,0
3.	Differential diagnosis of infections with exanthema syndrome.	6,0
4.	Differential diagnosis of infectious diseases of the nervous system in children: meningococcal, enterovirus infection, poliomyelitis. Aseptic meningitis. Emergency conditions in infectious diseases of the nervous system	6,0
5.	Differential diagnosis of GIT infections in children. Emergencies with GIT infections in children. Diagnosis and treatment Differential diagnosis and emergency conditions in viral hepatitis (VH) in children.	6,0
	Total	30

## 1. 1. THEMATIC PLAN OF SELF-STUDY OF STUDENTS

N⁰	Торіс	Hours	Types of control
1.	Helminthiasis in children. Diagnostics.	2	Current and final control
	Treatment.		
2.	Differential diagnosis of encephalitis in	2	
	children, classification, clinical features,		
	diagnosis, treatment.		
3.	Aseptic meningitis in children.	2	
	Differential diagnosis of aseptic and		

	1		1
	purulent meningitis (primary, secondary,		
	viral, bacterial) among themselves and		
	with other conditions. Meningeal		
	syndrome in the clinic of infectious		
	diseases. Issues of clinical and laboratory		
	diagnosis of neuroinfections. Diagnosis of		
	cerebrospinal fluid		
4.	Whooping cough in newborns.	2	
5.	Rabies	2	
6.	Differential diagnosis of mumps	2	
	infection. Etiological, epidemiological,		
	pathogenetic features, leading clinical		
	symptoms and options for the course of		
	diseases. Clinical forms, diagnosis,		
	complications and residual effects,		
	treatment, prevention.		
7.	HIV infection in children. Prevention of	3	
	HIV infection, prevention of transmission		
	from mother to child, diagnosis, treatment		
	of HIV-infected children.		
8.	Immunoprophylaxis of infectious diseases	4	-
0.	in children. Types of vaccines. Guideline	•	
	of preventive vaccinations. Mandatory		
	and recommended vaccinations.		
	Contraindications to vaccination. Post-		
	vaccination events, their diagnosis and		
	treatment. Anaphylactic shock, diagnosis		
	and emergency care.		
9.	Tetanus in children.	2	
4.	Individual self-study: curation of patients,	4	A student's report at a
· ·	writing microcuration of the patient.	г	practical session and/or a
	Compilation of differential diagnosis		practical conference
	tables, analysis of clinical cases and		practical conference
	presentations at clinical conferences		
5.	Preparation for practical classes	5	Current control in
5.	r reparation for practical classes	5	practical classes
	Total	30	
	10101	30	

- A student's self work is one of the organizational forms of learning, which is regulated by the working curriculum and is performed by the student independently outside the classroom. Possible types of independent work of students:
- 1. Preparation for practical classes and study of topics considered only in the plan of independent work of the student, search and study of additional literature,

2. Creation of algorithms, structural and logical schemes, writing abstracts, annotations, reports and presentations for speaking with messages at practical classes, on duty at the clinic outside of school hours.

- The organization of independent work in the departments of the pediatric hospital should be provided by the teachers of the department.
- Independent work of students is evaluated during the current control of the topic in the corresponding lesson.

## Integrative end programmatic learning outcomes facilitated by the discipline:

1. Be able to collect data on patient complaints, medical history, life history,

conduct and evaluate the results of physical examination.

2. Evaluate information about the diagnosis, using a standard procedure bas

3. Highlight the leading clinical symptom or syndrome. Establish the most probable or syndromic diagnosis of the disease. Assign laboratory and / or instrumental examination of the patient. Carry out differential diagnosis of diseases. Establish a preliminary and clinical diagnosis.

4. Determine the necessary therapeutic nutrition in the treatment of the disease.

5. To determine the principles and nature of treatment of infectious diseases (within the curriculum).

6. Determine the tactics of emergency medical care on the basis of diagnosis, emergency.

7. Provide emergency medical care on the basis of a diagnosis of emergency.

8. Perform medical manipulations.

9. Plan measures to prevent the spread of infectious diseases. Carry out detection and early diagnosis of infectious diseases; primary anti-epidemic measures in the center of an infectious disease. Identify risk groups, risk areas, time of risk, risk factors and carry out epidemiological analysis of infectious diseases in the population.

10. Prepare an annual report on personal production activities; keep medical records of the patient and the population.

11. Investigate the scope and effectiveness of the doctor, department, health care institution; identify defects in activities and the reasons for their formation. Carry out the selection and use of unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine; develop and use local health care protocols. Carry out quality control of medical care; identify factors that hinder the improvement of the quality and safety of medical care. Estimate the cost of medical services; substantiate the choice of an adequate method of financing (payment) and the choice of rational forms of organization of medical services. Apply methods of economic analysis when choosing methods of diagnosis, prevention, treatment, rehabilitation.

12. Organize the work of medical staff; to form rational medical routes of patients; organize interaction with colleagues, organizations and institutions; apply tools to Specific goals:

1. Determine the place of children's droplet infections in the structure of infectious diseases in children.

2. To determine the etiology, peculiarities of the epidural process, the main phases of the pathogenesis of diseases.

3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergency conditions.

4. Draw up an examination plan, evaluate the examination results.

5. Carry out differential diagnosis.

6. Determine indications for hospitalization, prescribe treatment.

7. To draw up a plan of anti-epidemic measures in the focus of infection. promote medical services.

13. Form goals and determine the structure of personal activities.

14. Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.

15. To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.

16. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

17. Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.

## Learning outcomes for the discipline:

1. Identify different clinical variants and complications of the most common infectious diseases of childhood;

2. Plan the examination of a sick child and interpret the results of the most common infectious diseases of childhood;

3. Carry out differential diagnosis and make a preliminary clinical diagnosis of the most common infectious diseases of childhood;

## **1. INFORMATION SCOPE OF THE EDUCATION**

The study of the discipline is given 2,0 credits ECTS <u>/60</u> hours. *If there is a need to structure the discipline into content modules:* 

## Content module 1. Pediatric drip (respiratory) infections

## Specific goals:

1. To determine the place of pediatric drip infections in the structure of infectious diseases in children.

2. To determine the etiology, features of the epidemiological process, the main phases of the pathogenesis of diseases.

3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergencies.

4. Make a survey plan, evaluate the results of the survey.

5. To carry out differential diagnostics.

6. Determine the indications for hospitalization, prescribe treatment.

7. Make a plan of anti-epidemic measures in the center of infection.

**Topic 1. Differential diagnosis of respiratory diseases of viral and bacterial etiology in children (influenza; parainfluenza; adenoviral, respiratory syncytial (MS), rhinovirus infections; COVID-19, pertussis; diphtheria; infectious mononucleosis, etc.).** Etiological, epidemiological, pathogenetic features, leading clinical symptoms and complications of the above infections in children. Emergency conditions that may occur in these diseases (hyperthermic syndrome, croup syndrome (laryngotracheitis), toxic shock syndrome (TSS) in diphtheria, apnea in whooping cough, etc.), providing medical care for them. Patients management with respiratory diseases of viral and bacterial etiology, their prevention and immunoprophylaxis.

**Topic 2. Differential diagnosis of infections with exanthema syndrome.** Etiological, epidemiological, pathogenetic features, leading clinical symptoms, variants of course and complications of infections with exanthema syndrome (measles, rubella, chicken pox, scarlet fever, pseudotuberculosis). Differential diagnosis of exanthema syndrome in various infectious and non-infectious diseases. Acute abdomen syndrome in patients with measles. Severe atypical forms of chickenpox, bacterial skin lesions. Patients management, organization of anti-epidemic measures in the center of infection in diseases with exanthema syndrome. Immunoprophylaxis

## Content module 2. Infectious diseases of the nervous system

## Specific goals:

1. To determine the place of infectious diseases of the nervous system in the structure of infectious diseases in children.

2. To determine the etiology, features of the epidemiological process, the main phases of the pathogenesis of the disease.

3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergencies.

- 4. Make a examination plan, evaluate the results of the survey.
- 5. Carry out differential diagnosis with diseases of non-infectious origin.
- 6. Determine the indications for hospitalization, prescribe treatment.
- 7. Make a plan of anti-epidemic measures in the center of infection.

**Topic 3. Differential diagnosis of CNS's infection in children**. Etiological, epidemiological, pathogenetic features, leading clinical symptoms and variants of meningococcal infection. Differential diagnosis of meningococcemia with diseases accompanied by hemorrhagic rash (hemorrhagic vasculitis, thrombocytopenic purpura, etc.).

Aseptic meningitis in children. Differential diagnosis of aseptic and purulent meningitis (primary, secondary, viral, bacterial) among themselves and with other conditions. Meningeal syndrome in the course of infectious diseases. Clinical and laboratory diagnosis of neuroinfections. Diagnosis of cerebrospinal fluid.

Encephalitis in children, classification, clinical features, diagnosis, treatment. Enterovirus and mumps infections, polio: clinical forms, diagnosis, complications and residual effects, treatment, prevention

Emergency states (conditions) in neuroinfections: toxic shock syndrome (TSS), disseminated intravascular coagulation (DIC) syndrome in meningococcal infection, edema of the brain, cerebral coma, convulsive syndrome. Patients management and emergency care in these conditions.

#### Content module 3. Infectious diseases of the gastrointestinal tract and hepatobiliary system in children.

## Specific goals:

1. To determine the place of acute intestinal infections and viral hepatitis in the structure of infectious diseases in children.

2. To determine the etiology, features of the epidemiological process, the main phases of the pathogenesis of the disease.

3. Conduct a clinical examination of a sick child, identify symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of emergencies.

4. Make a examination plan, evaluate the results of the survey.

5. Carry out differential diagnosis with gastrointestinal diseases of non-infectious origin.

6. Determine the indications for hospitalization, prescribe treatment.

7. Make a plan of anti-epidemic measures in the center of infection.

**Topic 4. Differential diagnosis of gastrointestinal tract (GIT) infections in children.** Etiological, epidemiological, pathogenetic features, leading clinical symptoms and syndromes of GIT infections: local (gastritis, enteritis, colitis) and general. Clinical variants of shigellosis, salmonellosis, Escherichia coli, intestinal yersiniosis, viral diarrhea in children of different ages. Differential diagnosis of GTI infections among themselves and with diseases of the gastrointestinal tract of non-infectious origin, surgical pathology. Tactics of management of children with GIT infections (diagnosis, indications for hospitalization, treatment). Anti-epidemic measures in the center of infection. Emergencies in GIT in children (toxicosis, exsiccosis, hypovolemic shock, neurotoxicosis, TSS, HUS). Diagnosis and treatment. Data of laboratory and instrumental investigation.

## Topic 5. Differential diagnosis and emergencies in viral hepatitis (VH) in

**children.** Etiological, epidemiological, pathogenetic features, leading clinical symptoms, laboratory data depending on the pathogen of VH. Differential diagnosis of typical and atypical forms of VH in children. Patients management in.viral hepatitis. Diagnostic markers of hepatitis. Anti-epidemic measures in the center of infection.

Acute liver failure in VH in children, clinical symptoms, assessment of severity and prognosis of VH, taking into account laboratory tests. Tactics of management of the patient with VH with liver failure. Providing emergency care. Emergency immunoprophylaxis of VH before elective surgery. Differential diagnosis of VH with other parenchymal jaundice (drug, toxic and autoimmune hepatitis, Gilbert's disease, tropical malaria, sepsis, yersiniosis, infectious mononucleosis, etc.).

HIV infection in children. Prevention of HIV infection, prevention of mother-tochild transmission, diagnosis, treatment of HIV-infected children

3. STRUCTURE OF THE COURSE				1
Торіс	Lectu	practi	Self	Self study
	res	cal	stud	
		traini	У	
		ng		
Content module 1. Pediatric drip (res	piratory	y) infect	ions	Independent
<b>Topic 1.</b> Differential diagnosis of		6	5	examination of the
respiratory diseases of viral and				child, identification
bacterial etiology in children				of characteristic
(influenza; parainfluenza; adenoviral,				symptoms and
respiratory syncytial, rhinovirus				syndromes of
infections; COVID-19, pertussis;				infectious diseases,
diphtheria; infectious mononucleosis,				evaluation of
<b>TOPIC 2.</b> Differential diagnosis of		6	5	laboratory results.
infections with exanthema syndrome.				Rationale for clinical
Content module 2. Different	ial di	iagnosis	s of	diagnosis.
neuroinfections in children.				Appointment of
<b>TOPIC 3.</b> Differential diagnosis of		6	5	therapy. Writing
neuroinfections in children.				microcuration (case
Emergencies in neuroinfections in				report) on the patient.
children. Diagnosis and treatment.				Drawing up a plan of
Content module 3. Differential dia	gnosis	of infe	ctious	anti-epidemic
lesions of the gastrointestinal	tract	(GIT)	and	measures in the
hepatobiliary system in children.				center of infection.
<b>TOPIC 4.</b> Differential diagnosis of		6	5	Compilation of tables
GIT infections in children.				for the differential
Emergencies in GIT infections in				diagnosis of
children. Diagnosis and treatment				symptoms, individual
<b>TOPIC 5.</b> Differential diagnosis and		6	5	symptoms, laboratory
emergencies in viral hepatitis (VH) in				indicators of the
children. HIV infection in children.				disease (rash, plaque,
Test control (format A) on the topics of			5	jaundice, defecation,
classes, situational solutions				hemogram,
tasks				cerebrospinal fluid).

#### **3. STRUCTURE OF THE COURSE**

Total: ECTS credits - 2;	30	30	Lumbar puncture on
hours - 60;			a mannequin.
			Preparation of a
			report for classes on
			the topic of
			independent work.

## 4. THEMATIC PLAN OF LECTURES

Lectures are not provided by Educational Program

## 5. THEMATIC PLAN OF PRACTICAL CLASES.

№ 3/п	Торіс	Number of hours
1.	Differential diagnosis of respiratory diseases of viral and	6,0
	bacterial etiology in children (influenza; parainfluenza;	
	adenoviral, respiratory syncytial (MS), rhinovirus infections;	
	COVID-19, pertussis; diphtheria; infectious mononucleosis,	
	etc.).	
2.	Differential diagnosis of infections with exanthema	6,0
	syndrome.	
3.	Differential diagnosis of neuroinfections in children.	6,0
	Emergencies in neuroinfections in children. Diagnosis and	
	treatment.	
4.	Differential diagnosis of GIT infections in children.	6,0
	Emergencies in GIT infections in children. Diagnosis and	
	treatment	
5.	Differential diagnosis and emergencies in viral hepatitis	6,0
	(VH) in children. HIV infection in children. Prevention of	
	HIV infection, prevention of mother-to-child transmission,	
	diagnosis, treatment of HIV-infected children.	
	Total	30

## 6. THEMATIC PLAN OF STUDENTS SELF STUDY

Nº	ΤΟΡΙΟ	Number of	type of control
		hours	
1.	Prevention of infectious diseases.	2	
2.	Helminthiasis children. Diagnosis. Treatment.	1	
3.	Typhoid fever in children	1	Ongoing
4.	Rabies. Clinical signs. Treatment	1	control over
5.	Tetanus. Clinic. Diagnosis. Treatment	1	practical classes
6.	Lyme disease. Diagnosis. Treatment. Lyme	1	

	arthritis. Lime Carditis.		
7.	Acute intestinal infection caused by Clostridium difficile	1	The question of
8.	Pseudomembranous colitis in children	1	the processed
9.	Felinosis (bortenellosis). Clinical signs. Diagnosis. Treatment.	1	independent the material is included in the semester control tests
10.	Individual VTS: curation of patients, writing microcuration of the patient. Compilation of tables on differential diagnosis, analysis of clinical cases and speeches at clinical conferences	10	Student report at a practical lesson and / or practical conference
11.	Preparation for practical classes	10	
	TOTAL	30	

According to the current regulations on the organization of the educational process, the student's independent work is one of the forms of the organization of training, the main form of mastering the educational material in the free time from the obligatory educational classes on time. Independent work of students of the University is regulated by the "Regulations on the Independent Work of Students of the Danylo Halytsky Lviv National Medical University " of October 24, 20, protocol  $N_{2}4$ .

#### 7. Individual tasks

**Individual assignment** (case history, forensic reports, diploma, term and master's theses)

#### are not provided by the Educational Program.

#### 8. Learning methods

It is necessary to present the system of organization of classes, use of interactive methods, educational technologies used for transfer and assimilation of knowledge, skills and skills.

In studying the discipline "Pediatric Infectious Diseases" are used varieties of teaching methods recommended for higher education, namely:

- by sources of knowledge: verbal (explanation, lecture, conversation, discussion); visual (demonstration); practical (practical work, mastering practical skills);

-by the logic of the educational process: analytical (determination of the general condition of the patient and the main features of the disease), synthetic (clarification of the relationship of the main features of the disease, determination of optimal measures for diagnosis, treatment and prevention), their combination - analytically-synthetic, as well as inductive deductive method, their combination is

a deductive method;

- by the level of independent mental activity: problematic, partially search, research.

By combining and summarizing the above methods of teaching, it is advisable to introduce such methods of organization of training as:

- clinical case method,
- problem-oriented method,
- method of individual research and practical tasks,
- method of competing groups,
- method of training technologies,
- business game method,
- the method of "brainstorming",

- a method of holding conferences using interactive, interdisciplinary and information-computer technologies.

Types of educational activity of the student, according to the Curriculum, are lectures, practical classes, independent work of students.

The thematic plans of practical classes and Self-study provide for the implementation in the educational process of all topics that are part of the modules.

**Lectures.** During lectures, students develop theoretical basic knowledge, provide a motivational component and a general-oriented stage of mastering scientific knowledge during students' independent work.

#### **Practical classes**

are clinical, aimed at controlling the assimilation of theoretical material and the formation of practical skills, as well as the ability to analyze and apply the acquired knowledge to solve practical problems, are conducted in the children's departments of the clinical bases of the department

• Each class begins with a test test to assess the baseline and determine students' readiness for the class. The teacher defines the purpose of the class and creates a positive cognitive motivation; answers students' questions raised during the VTS on the topic of the lesson.

• The main stage of the lesson is the practical work of the student at the patient's bed. Teachers and students traverse patients. Students examine sick children, collect anamnesis, examine them, perform diagnostic procedures, and the like. Control of the main stage of the class is carried out by assessing the student's practical skills, ability to solve typical situational tasks. The teacher discusses and explains, emphasizes the peculiarities of the disease in a particular child, aims at a more rational conduct of a particular survey method, etc.

#### In addition, practical classes include:

- planning of examination of the sick child;
- interpretation of laboratory and instrumental research data;
- differential diagnosis of the most common

childhood diseases with typical or complicated course;

- determination of the previous clinical diagnosis;
- definition of therapeutic tactics;
- appointment of medical nutrition;
- providing emergency medical care;
- solving situational problems;
- practicing practical skills on the models and near the bed of the sick child;
- keeping medical records.

The assimilation of the topic is controlled in practical classes according to specific goals: the ability to determine the etiological and pathogenetic factors of infectious diseases of childhood, to classify and analyze a typical clinical picture, to plan a survey and analyze data from laboratory and instrumental examinations during a typical course of disease, to demonstrate and prevention of diseases, to diagnose and determine major urgent conditions, to evaluate the prognosis of the disease, pla uvaty control measures at the source of infection, demonstrate the moral and ethical principles of medical specialist and principles of professional subordination in pediatrics.

The list of criteria for diagnosis and treatment of diseases is governed by the relevant protocols in the specialties of "pediatrics", "infectious diseases in children" and others. Ministry of Health of Ukraine, Decrees of the Ministry of Health of Ukraine "On Improvement of Outpatient Clinic Assistance to Children in Ukraine" (Order of the Ministry of Health of Ukraine No. 434 of 29.11.2002), "On Improvement of Organization of Medical Assistance to Adolescent Children" (Order of the Ministry of Health of Ukraine No. 465 of 12.12.2002).

Means of control are test tasks, clinical situational tasks; control of practical skills.

- In the final stage of the class, the student is asked to answer situational tasks to assess the topic of mastering the topic. The teacher summarizes the lesson, gives students assignments for independent work, points to the nodal questions of the next topic and offers a list of recommended literature for independent study.
- The duration of one practical training of the topic and taking into account the standards of the weekly classroom load is 4.0 academic hours.

## 9. Control methods

The section should contain a presentation of the content and technology of student knowledge assessment, namely a list of all types of work that the student is obliged to perform during the ongoing, final control, independent work, individual tasks and criteria for their evaluation. The section indicates:

• Types of control (current and final)

• Form of final control according to the curriculum (credit, differentiated credit, exam)

Methods and forms of control and assessment of students 'achievement in the discipline are carried out in accordance with the requirements of the program and Instruction on the evaluation of students' educational activities in the conditions of implementation of the European Credit Transfer System of the educational process approved by the Ministry of Health of Ukraine (letter of the Ministry of Health of Ukraine  $N_0 08.01-47 / 10395$  dated 15.04.2014).

When assessing students' knowledge, preference is given to standardized methods of control: testing (oral, written), structured written work, working with standard medical records, standardized by the method of performing control of practical skills.

#### **10. Control methods**

Theoretical knowledge:

- Writing and computer testing,

- individual interview, interview,

- Written works structured in content.

Practical skills:

- control of the implementation of standardized methods of practical skills, provided by the plan of practical training of the student in the discipline:

- analysis of laboratory and instrumental studies;

- performing medical manipulations in pediatrics;

- assistance in emergency situations in children.

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#### **Evaluation criteria**

**Score ''excellent''** - is given if the student correctly answered 90-100% of tests of format A (from the database "Step-2"), when the student correctly and completely completed homework; gives accurate and clear answers to the survey without any guiding questions; teaches material without errors and inaccuracies; demonstrates free practical skills (on dummies and / or near the patient's bed), ability to analyze and apply the results obtained during the examination of the patient to solve practical problems, namely: history taking, examination of the child, planning of the examination, interpretation of laboratory and instrumental research data; correctly determines the clinical diagnosis at the typical course of the disease; fully performs differential diagnostics; prescribes proper treatment in full; Demonstrates excellent emergency care skills; maintains medical records correctly; correctly and completely solves a complex situational case (problem).

**The grade of "good"** is given if the student student correctly answered 70-89% of tests of format A (from the database "Step-2"); did some homework with some mistakes; when answering the questions correctly, consistently and systematically, but they are not exhaustive, the student answers the additional questions without significant mistakes; has good practical skills (on dummies and / or near the patient's bed); with some inaccuracies analyze and apply the results obtained during the examination of the patient to solve practical problems; correctly determines the clinical diagnosis at the typical course of the disease; correctly but not fully performs differential diagnostics; prescribes overall correct treatment, but there may be some minor irregularities that it corrects independently; Demonstrates good emergency care knowledge and skills; solves with some inaccuracies the situational problem associated with the consideration of this clinical case; ; generally maintains proper medical records, but there may be some minor, self-correcting errors; correctly solves a complex situational problem, but there may be some minor irregularities that he corrects on his own.

A "satisfactory" grade is given to a student if the student correctly answered 50-69% of A-format tests (from the Step-2 database). Applies to a student if the student homework is not completed in full and with errors; the student demonstrates knowledge of the main content of the lesson with a satisfactory level of understanding; able to solve simplified problems with the help of the following questions; is capable of performing basic practical tasks (on dummies and / or near the patient's bed) only after appropriate comments and assistance of the teacher; with individual errors parses and apply the results obtained to solve practical problems; determines the clinical diagnosis at the typical course of the disease; makes some mistakes during differential diagnostics; appoints generally correct but not complete treatment and / or minor errors; demonstrates satisfactory knowledge and skills in providing first aid; maintains medical records with individual errors; solves situational problems with individual mistakes.

**The grade is "unsatisfactory"** when the student correctly answered only 50% of tests of format A.

The student can work out the missed topics or translate them for a positive evaluation of the teacher during his consultations (individual work with students) no more than 3 times during the study of the module, thereby to score at least the minimum points to be admitted to the final module control.

The current control is carried out during the training sessions and is aimed at checking the students' learning of the learning material (it is necessary to describe the forms of conducting the current control during the training sessions on a 4-point (national) scale). Forms of assessment of current learning activities should be standardized and include control of theoretical and practical training.

#### 10.1 Evaluation of current learning activities.

*Ongoing control* is carried out at each practical session according to the specific objectives of the topic. All practical training uses objective control of theoretical training and practical skills (standardized by the method of implementation).

Student answers 10-15 tests (tests on topic of class, format A)

• Answers standardized questions that require knowledge to understand the current topic.

• Demonstrates knowledge and skills of practical skills in accordance with the topic of practical training near the patient's bed

• Solves a situational problem by topic of employment

During assessment of mastering of each topic for the current educational activity of the student marks are given on 4 points (national). This takes into account all types of work provided by the discipline program. The student must receive a grade on each topic to further convert the grades into scores on a multi-scale (200-point) scale. This takes into account all types of work provided by the curriculum. The student must receive a grade on each topic. Forms of assessment of current learning activities should be standardized and include control of theoretical and practical training.

#### 11. The form of final control of academic success ( credit) is carried out upon completion of studying the block of relevant topics in the last lesson in the form of differential credit.

Semester credit is a form of final control, which consists in assessing the student's mastery of educational material solely on the basis of the results of certain types of work in practical, seminar or laboratory classes on a national scale and ECTS scale. Final control includes semester control and certification of the applicant for higher education for compliance of its competencies with the requirements of higher education standards. Semester credit in disciplines is held after the end of its study, before the examination session.

In the case when a student studies according to an individual curriculum, he, by order of the rector, is determined by a separate schedule of control activities. Students who have completed all types of work, tasks provided for in the curriculum for the semester in the relevant discipline, attended all the practical classes provided by the curriculum and scored at least half of the points for the current success are admitted to the semester final control (semester credit). minimal. For students who have missed classroom classes, it is allowed, with the permission of the dean, to work off the academic debt until a certain date within the semester.

Credits are put by teachers who conducted practical, seminar and other classes in the study group. Students receive a credit if the average score for current performance during the semester is at least "3" (120 points on a 200-point scale). The entry is made in the student's record book and in the test report.

*Calculation of the number of points* is made on the basis of the student's scores on the 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (AM). The

$$x = \frac{CA \times 120}{5}$$

#### rounded to two decimal places. The resulting value is converted to scores on

#### **a** multicolor scale as follows:

For convenience, the table is calculated on a 200-point scale:

## Recalculation of the average grade for current activity into a multi-scale scale for examinations completed

4-	200-	4-	200-	4-	200-	4-	200-
point	point						
scale	scale						
5	120	4.45	107	3.91	94	3.37	81
4.95	119	4.41	106	3.87	93	3.33	80
4.91	118	4.37	105	3.83	92	3.29	79
4.87	117	4.33	104	3.79	91	3.25	78
4.83	116	4.29	103	3.74	90	3.2	77
4.79	115	4.25	102	3.7	89	3.16	76
4.75	114	4.2	101	3.66	88	3.12	75
4.7	113	4.16	100	3.62	87	3.08	74
4.66	112	4.12	99	3.58	86	3.04	73
4.62	111	4.08	98	3.54	85	3	72
4.58	110	4.04	97	3.49	84	Less 3	Not
4.54	109	3.99	96	3.45	83	Less 3	enough
4.5	108	3.95	95	3.41	82		

*Independent work of students* is evaluated during the current control of the topic in the relevant lesson. The assimilation of topics that are presented only for independent work is controlled at the final control.

#### Assessment from a discipline that completes a differentiated test

is defined as the sum of points for current educational activity (at least 72) and points for completing individual test tasks in the last lesson (at least 50).

#### **POINTS ISTRIBUTION**

that are assigned to students when evaluating current learning activities

Total points for current educational activity *	The maximum rating is 120 The minimum rating is 70
Differential credit	The maximum rating – 80 It is considered enrolled – 50 – 50

\* A student may receive a maximum of 120 points for their current academic activities. This score is calculated by multiplying the number of points corresponding to the grade of "excellent" by the number of topics in the module with the addition ofpoints for individual work.

The minimum number of points required to be admitted to the final module

control is calculated by multiplying the number of points that are "satisfactorily" by the number of topics.

The maximum number of points awarded to students in mastering the subject (credit credit) is 200, including 120 points (60%) for their current educational activity, and 80 points (40%) for the results of the differential credit. The semester grade is defined as the sum of the assessments of the current educational activity (in points) and the assessment of the differential test (in points), which is exposed when assessing theoretical knowledge and practical skills according to the lists determined by the discipline program.

The points from the course are independently converted to both the ECTS scale and the 4-point (national) scale. ECTS points are not converted to the 4-point scale and vice versa.

The points of students studying in one specialty, based on the number of points earned from the discipline, are ranked on the ECTS scale as follows:

	Rating ECTS	Statistics
	А	Top 10% of students
h	В	The next 25% are students
	С	The next 30% are students
	D	The next 25% are students
	E	The last 10% of students

## Ranking with assignment of grades

"A<sup>"</sup>, "B",

"C", "D", "E" is made for students of this course, who study in one specialty and have successfully completed the study of the discipline. Students who have received FX, F ("2") grades are not included in the ranked student list. Students with an FX score automatically receive an "E" grade upon transfer.

Discipline points for students who have successfully completed the program are converted to the traditional 4-point scale by the absolute criteria given in the table below:

Score from discipline	Score on a 4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 to to the minimum number of points that a student must score	3
Below the minimum number of points that a student must score	2

The ECTS score is not converted to the traditional scale because the ECTS scale and the four-point scale are independent.

The objectivity of the evaluation of students' educational activity is checked by statistical methods (correlation coefficient between ECTS and national scale scores).

13. Methodical provision (educational content (synopsis or extended lecture plan), practical plans (seminars, assignments for laboratory work, independent work, questions, tasks or cases for current and final control of students' knowledge and skills, complex control work, post-certification monitoring of acquired knowledge and skills in the discipline).

Methodological support is provided by all kinds of educational activities: lectures, practical classes, independent work of students.

Methodical provision of the lecture course:

- 1. Lectures.
- 2. Methodical development of lectures.
- 3. Presentation of lectures.
- 4. Lecture videos and motion pictures.

#### Methodical provision of practical classes:

1. Methodical development of practical classes for teachers.

2. Guidelines for practical classes for students.

3. Variants of test questions and tasks to check the baseline knowledge on each topic.

- 4. Variants of situational tasks for checking the assimilation of topics.
- 5. Variants of tasks (theoretical and practical) for final control.
- 6. Instructions for working with phantoms and models to practice practical skills.

#### Methodical support of students' independent work:

- 1. Guidelines for pre-classroom preparation for practical classes.
- 2. Workbook for pre-classroom training.
- 3. Methodical instructions for the implementation of practical skills.
- 4. Tasks for students to work independently.

The following tools are used to diagnose learning success:

- 1. Test tasks of format A
- 2. Practical tasks to test the acquisition of practical skills
- 3. Situational tasks.

The development of test-control questions, structured situational tasks, and practical tasks used to diagnose academic success should be based on a list of questions and practical skills that a student must acquire when studying in accordance with the discipline "Pediatric Infectious Diseases." The sets of practical tasks are formed from the list of practical skills that the student should acquire during the study of the discipline, which are standardized by the method of practical work.

- 14. Recommended Books Basic
  - Principles and Practice of Pediatric Infectious Diseases / Sarah S. Long, Larry K. Pickering, Charles G. Prober.; Editor: Sarah S. Long, MD. – Third Edition. – Churchill Livingstone elsevier. – 2008. – 1618 p.
  - Pediatric Infectious Diseases / Edted by Prof. S.O. Kramarev and Prof. O. B. Nadraga. – second edition, corrected. – Kyiv AUS Medicine Publishing.- 2015. – 240 p.
  - 3. Red Book Atlas of Pediatric Infectious Diseases / Edited by American Academy of Pediatrics Edited by Carol J. Baker, MD, FAAP. 4-th edition, 989 p.
  - 4. Nelson textbook of pediatrics / Elsevier, Volume 2, 21st edition. 4264
- p.
- 15. Information resources
  - 4. WHO.Vaccine Position Papers. https://www.who.int/immunization/documents/positionpapers/en/
  - 5. <u>https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/21/57/hiv-and-immunizations</u>
  - 6. <u>https://www.cdc.gov/vaccines/adults/rec-vac/health-conditions/hiv.html</u>
  - 7. <u>https://www.cdc.gov/vaccines/vac-gen/imz-basics.htm</u>
  - 8. https://medlineplus.gov/immunization.html