# Ministry of Health of Ukraine Danylo Halytskyy Lviv National Medical University Pediatrics Infectious Diseases Department

#### **APPROVED**

First Vise-Rector for Scientific and Pedagogical Affairs

Danylo Halytsky Lviv National Medical University

Prof. M.R. Gzhehotskyy

" 2020 p



# STUDY PROGRAM

# ON PEDIATRIC INFECTIOUS DISEASES FOR STUDENTS 5 COURSE

training of the students of the second (Master Dergree) level of higher education speciality 22 "Health Care " speciality 222 "General Medicine" 228 "Pediatry"

Materials discussed and approved at the methodological meeting of the Pediatric Infectious Diseases Department Protocol № 215 from "26"\_ February 2020 Head of the Department Assoc. Prof. Lytvyn H.O.

APPROVED
At the meeting of the specialized methodical committee on pediatric disciplines Protocol No.\_2\_ of "07" May 2020
Head of the specialized methodical commission
Prof. L.V. Besh

PROGRAMMERS:
Lytvyn H.O, PhD MD, Associate Professor, Head of the Department of Pediatric
Infectious Diseases;
REVIEWERS:
D.A. Dobryanskyy, professor, MD PhD of Pediatric's № 2 Department of Danylo
Halytsky Lviv National Medical University.

Changes and additions to the curriculum for the 2020-2021 academic year

No	The content of the changes	Date and №  protocol of the  meeting of the  department	Notes
	No changes or additions have been made		

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

#### **INTRODUCTION**

# The program of study of discipline

"Pediatric infectious diseases"

in accordance with the Higher Education Standard of the second (master's) level

speciality 22 "Health Care " speciality 222 "General Medicine" 228 "Pediatry"

#### **Course description (abstract)**

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	ber of credits, hours, of them			Year of study	Number Practical	type of control
	Total	Auditori	um	Self		classes	
		Lecture	Practical	study			
		S	classes				
Pediatric infectious diseases	1, 5 credit ECTS / 45 hours	6	28	11	5 course IX / X semester	7	Differenti ated credit

Auditory load – 75%, Self stydy– 25%

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.

The final goals of the course "Pediatric Infectious Diseases" are based on the study goals defined in the educational program (SEP). They are defined as follows:

- 1. To determine the etiological and pathogenetic factors of the most common infectious diseases of childhood.
- 2. Classify and analyze a typical clinical picture of the most common infectious diseases of childhood.
- 3. Make a plan of examination and analyze the data of laboratory and instrumental

examinations in the typical course of the most common infectious diseases, to demonstrate mastery of the principles of treatment, rehabilitation and prevention of the most common infectious diseases of childhood.

- 4. Diagnose and provide emergency care for the most common infectious diseases of childhood.
- 5. Demonstrate mastery of the morally-deontological principles of a medical specialist and the principles of professional subordination in pediatrics.

# 1.2. The main tasks of studying the discipline "Children's infectious diseases" are:

- Acquiring basic theoretical knowledge of the most common non-communicable 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 Competences and learning** outcomes facilitated by discipline (relationship with the normative content of higher education applicants' training, formulated in terms of learning outcomes in the Higher Education Standard).

In accordance with the requirements of the Higher Education Standard, the discipline provides students with *competencies:* 

- common:
- Ability to think abstractly, analyze and synthesize.
- The ability to learn and master modern knowledge.
- Ability to apply knowledge in practical situations.
- Knowledge and understanding of the subject area and understanding of professional activity.
  - The ability to adapt and act in a new situation.
- Ability to make informed decisions –
- Ability to work in a team.
- Interpersonal skills.
- Information and communication technology skills.
- Determination and perseverance about the tasks and responsibilities.
- The ability to act socially responsible and consciously.
- Ability to act on the basis of ethical considerations (motives)

- identification, epidemiology, classification, etiology and pathogenesis of the most common infectious diseases of children;

- clinical manifestations in uncomplicated and complicated course of the most

<sup>-</sup>special (professional, subject):

common infectious diseases of children;

- criteria for establishing a preliminary clinical diagnosis in the most common noninfectious and infectious diseases of children;
- plan of laboratory and instrumental examination of children in the most common non-infectious infectious and diseases of childhood:
- differential diagnosis of the most common non- infectious and infectious diseases of children:
- criteria for establishing the final clinical diagnosis for the most common noninfectious and infectious diseases of children; treatment of the most common noninfectious and infectious diseases of children.
- the protocol of rendering of the first aid at the most widespread non-communicable and infectious diseases of children.
- prevention of the most common non-communicable and infectious diseases of children. Organization of anti-epidemic measures in the focus of the most common infectious diseases in children. Preventive vaccination calendar,
- prognosis for the most common non-infectious and infectious diseases of children;
- dispensary observation for the most common non-infectious and infectious diseases of children.
- basic principles of medical ethics and deontology in professional communication with the sick child and the persons providing care for the child.

Detailing competencies according to the CWD descriptors in the form of the "Competence Matrix".

Autonomy

acquisition of

knowledge.

modern

To be

#### **Competence Matrix**

№	Competence	Knowledge	Skill	Communication	and responsibility			
Int	egral competenc	e						
pro	the ability to solve complex specialized problems and practical problems in the field of professional activity 22 "Health care", which implies the application of certain theoretical knowledge, practical skills and methods of relevant professional direction							
General competencies								
1.	Ability to	Know the	Be able to	Make the right	Be responsible			
	think	methods of	analyze	connections to	for the timely			

modern knowledge

Be able to

information,

decisions, be

make informed

able to acquire

Make the right

meet your

goals.

synthesis and

further modern

analysis,

learning

Know the

abstractly,

synthesize

Ability to

2.

analyze and

	learn and master modern knowledge.	current trends of the industry and analyze them	analyze professional information, make sound decisions, acquire up-to- date	connections to meet your goals.	responsible for the timely acquisition of modern knowledge.
3.	Ability to apply knowledge in practical situations	Have specialized conceptual knowledge acquired in the learning process	Re able to solve complex problems and problems that arise in a professional activity.	Clear and unambiguous communication of their own conclusions, knowledge and explanations, which justify them, to specialists and non-specialists.	Responsible for decision-making under difficult circumstances
4.	Knowledge and understanding of the subject area and understanding of professional activity	Have deep knowledge of the structure of professional activity.	Be able to perform professional activities that require updating and integration of knowledge.	Ability to effectively shape communication strategy in professional activities	Be responsible for professional development, the ability to further vocational training with a high level of autonomy
5.	The ability to adapt and act in a new situation.	Know the types and ways of adaptation, principles of action in a new situation	Be able to apply self-regulation tools, be able to adapt to new situations (circumstances) of life and activity.	Make appropriate connections to achieve results.	. Be responsible for the timely use of self- regulation methods
7.	Ability to make an informed decision.  The ability to	Know the tactics and strategies of communication , the laws and methods of communicative behavior	Be able to make informed decisions, choose ways and strategies of communication to ensure effective teamwork  Be able to	Use communication strategies and interpersonal skills	Be responsible for the choice and tactics of the communication method  Be responsible

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	work as a team.	tactics and strategies of communication , the laws and methods of communicative behavior.	choose ways and strategies of communication to ensure effective teamwork	communication strategies	for the choice and tactics of the communication method
8.	Interpersonal skills	Know the laws and ways of interpersonal interaction	Be able to choose ways and strategies of communication for interpersonal interaction	Use interpersonal skills	Be responsible for the choice and tactics of the communication method
9.	Ability to communicate in the state language both verbally and in writing.	Have perfect knowledge of the official language	Be able to apply knowledge of the state language, both orally and in writing	Use in professional and business communication and in the preparation of documents the official language.	To be responsible for fluency in the state language, for the development of professional knowledge.
10	Ability to communicate in a foreign language	Have basic knowledge of a foreign language	Be able to communicate in a foreign language.	Use a foreign language in a professional activity	. Be responsible for the development of professional knowledge using a foreign language.
11	Skills in the use of information and communication technologies	Have deep knowledge in the field of information and communication technologies used in professional activity	Be able to use information and communication technologies in the professional field that requires updating and integration of knowledge.	To use information and communication technologies in professional activity	Be responsible for the development of professional knowledge and skills
12	Assertiveness and persistence in terms of tasks and	Know the responsibilities and ways of accomplishing	Be able to determine the purpose and objectives of	Establish close personal relationships for the	Responsible for the quality of the tasks

	responsibilities	the tasks	being	effective	
			persistent and	fulfillment of	
			conscientious	tasks and	
			in the	responsibilities	
			performance of		
			duties		
13	The ability to	Know your	Form your	Ability to	Responsible for
	act socially	social and	civic	convey your	your civic
	responsible and	community	consciousness,	social and	position and
	consciously	rights and	be able to act	social position	activities
		responsibilities	in accordance		
			with it		
14	The desire to	Know the	Be able to	Make	Be responsible
	preserve the	environmental	formulate	proposals to	for
	environment.	issues and how	requirements	the relevant	implementing
		to conserve	for yourself	authorities and	environmental
		them	and others for	agencies on	conservation
			environmental	conservation	measures
			protection	and	within your
				environmental	area of
				protection	competence.
				measures	
15	Ability to act	Know the	Be able to	Ability to	Be responsible
	on ethical	basics of ethics	apply ethical	convey to	for compliance
	considerations	and deontology	and	patients, their	with ethical
			deontological	family	and
			rules and	members,	deontological
			principles in	colleagues	norms and
			professional	their	principles in
			activity	professional	professional
				position	activity
Sn	ecial (professions	al) competence			

# Special (professional) competence

Ability to solve typical and complex specialized tasks and solve practical problems in health care professional work or in training that involves research and / or innovation and is characterized by the complexity and uncertainty of conditions and requirements.

1.	Patient survey	Have	Be able to	Effectively	Be responsible
	and clinical	specialized	interview the	formulate a	for the quality
	examination	knowledge	child and / or	communication	of the
	skills	about a person,	her parents	strategy when	information
		his organs and	(guardians),	communicating	collected
		systems,	based on	with the patient	through
		anatomical and	algorithms and	and / or his or	interviews,
		physiological	standards. Use	her parents	interviews,
		features of	the principles	(caregivers).	surveys,
		children of all	of	Provide	palpations,
		ages, know the	communication	information on	organ
		methods and	with parents of	your child's	percussion, and
		standard	children. Using	health with	systems and for

		survey	standard	appropriate	timely
		schemes,	techniques to	medical	assessment of
		physical	conduct a	records.	the child's
		examination of	physical	records.	health,
		the patient	examination of		psychomotor
		різного віку.	the patient. Be		and physical
		different ages.	able to		development of
		Know the	examine the		the child, and
		stages and	psychomotor		pre-natal
		methods of	and physical		development of
		examination of	development of		the fetus and
		psychomotor	the child.		taking
		and physical	Be able to		appropriate
		development of	evaluate the		measures.
		the child.	quality of care,		mousures.
			breastfeeding		
			and nutrition		
			for children.		
			Be able to		
			conduct a		
			comprehensive		
			assessment of		
			your child's		
			health.		
2.	Ability to	Have	Be able to	Form and	Be responsible
	determine the	specialized	analyze the	report to the	for deciding on
	required list of	knowledge of	results of	patient and / or	the evaluation
	laboratory and	the child, its	laboratory and	his or her	of laboratory
	instrumental	organs and	instrumental	parents	and
	studies and	systems,	studies and to	(guardians),	instrumental
	evaluate their	standard	evaluate	specialists, as	research results
	results.	methods of	information on	needed	
		laboratory and	the diagnosis	the list of	
		instrumental	of the patient	laboratory and	
		research (List	(by list 4)	instrumental	
		4).	D 11	studies (list 4).	01
3.	Ability to	Have	Be able to	On the basis of	Observe ethical
	establish a	specialized	carry out a	regulatory	and legal
	preliminary	knowledge of	physical	documents,	standards, be
	and clinical	the child, his	examination of	keep medical	responsible for
	diagnosis of	organs and	the patient; be	records of the	making sound
	the disease	systems;	able to make	patient (card of	decisions and
		standard	an informed	outpatient /	actions
		inspection	decision about	inpatient	regarding the
		mothoda	the colocter or		
		methods;	the selection of	patient, etc.).	correctness of
		algorithms for	a leading	patient, etc.).	the established
		·		patient, etc.).	

4.	The ability to determine the necessary mode of children in the treatment of diseases.	algorithms for highlighting leading symptoms or syndromes (listed in list 1); previous and clinical diagnoses (on list 2); methods of laboratory and instrumental examination (in list 3); knowledge of the assessment of the child's condition.  Have specialized knowledge about the child, its organs and systems, anatomical and physiological and age characteristics; ethical and legal norms; algorithms and standard regimens for the treatment regimen, based on the previous one and clinical diagnosis of the disease (list 2)	syndrome; be able to get a preliminary and clinical diagnosis of the disease (in list 2); appoint laboratory and instrumental examination of the patient (by list 3) using standard methods;  Be able to determine the necessary regimen for children on the basis of preliminary and clinical diagnosis, by making a reasonable decision in the treatment of the disease (in list 2)	Form and report to the patient and / or his or her parents (guardians) and specialists on the necessary regimen for the treatment of the disease (in list 2)	To be responsible for the validity of the regime's value in the treatment of the disease (list 2)
5.	The ability to determine the nature of the diet of children in the treatment of diseases	Have specialized knowledge about the child, its organs and systems, anatomic-	Be able to determine the nature of nutrition - based on the previous and clinical	Form and communicate to the patient and / or his or her parents (guardians), specialists,	Be responsible for the validity of the definition of nutrition - in the treatment of the disease (in

		physiological and age- specific features; algorithms and standard schemes for nutrition - in the treatment of diseases (in the list 2	diagnosis, the nature of nutrition in the treatment of diseases (on the list 2)	nutrition conclusions - in the treatment of diseases (in list 2)	the list 2)
6.	Ability to determine the principles and nature of the treatment of diseases	Have specialized knowledge of algorithms and standard treatment regimens (List 2)	Be able to determine the principles and nature of the disease (list 2)	Form and communicate to the patient and / or his or her parents (guardians), specialists, their own findings regarding the principles and nature of the treatment (list 2)	(за списком 2) Be responsible for deciding on the principles and nature of the disease (list 2)
7.	Ability to diagnose urgent conditions	Have specialized knowledge about a person, his organs and systems, standard methods of human examination (at home, on the street, in a healthcare facility) in the absence of information.	To be able, in the conditions of lack of information, using standard methods, by making an informed decision to assess a person's condition and determine the main clinical syndrome (or what is the severity of the condition of the victim / victim) (in list 3).	In all circumstances, in accordance with ethical and legal standards, make an informed decision about the assessment of the seriousness of a person's condition, diagnosis and organization of necessary medical measures depending on the human condition; fill in relevant	Be responsible for the timeliness and effectiveness of medical interventions for emergency diagnosis

				medical	
				records.	
8.	The ability to determine the tactics of emergency medical care	To know the legal basis for the provision of emergency medical aid, in particular the law of Ukraine "On emergency medical aid". Have specialized knowledge of urgent human conditions; principles of emergency medical care.	Be able to call non-urgent conditions (in list 3); principles and tactics of rendering extern medical care; to carry out organizational and diagnostic activities aimed at saving and preserving human life.	It is reasonable to formulate and communicate to the patient or his or her legal representative the need to provide immediate help and consent to medical intervention.	To be responsible for the correctness of the determination of the urgent condition, the degree of its severity and the so-called emergency provision medical care.
9.	Emergency care skills	Have specialized knowledge about the structure of the human body, its organs and systems; emergency care algorithms for emergency situations (List 3).	Be able to provide emergency medical assistance in an emergency (according to list 3).	Explain the need and procedure for emergency medical treatment.	. Be responsible for the timeliness and quality of emergency care.
10.	Ability to conduct evacuation activities	To know the stages of medical evacuation in an emergency, including in the field.  To know the system of alerting the population in conditions of extra-ordinary situations;  To know the methodological	Be able to organize and execute medical activities during the deployment of medical evacuation stages in an emergency, including in the field	Contact relevant officials to ensure conditions are met for medical evacuation steps	To be responsible for the timely and quality performance of medical duties during the deployment of medical evacuation stages in an emergency and martial law

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		guidelines			
		about the			
		doctor's actions			
		during the			
		deployment of			
		medical			
		evacuation			
		stages			
11.	Skills of	Have	Be able to	It is reasonable	To be
	performing	specialized	perform	to form and	responsible for
	medical	knowledge	medical	bring to the	the quality of
	manipulations	about the child,	procedures (in	patient, and / or	the
	-	its organs and	the list 5).	his parents	performance of
		systems,		(guardians),	medical
		anatomical and		specialists	procedures
		physiological		conclusions	(List 5).
		and age		about the	,
		characteristics;		necessity of	
		knowledge of		conducting	
		algorithms for		medical	
		performing		manipulations	
		medical		(in list 5)	
		manipulations		(111 1100 0)	
		(in list 5).			
12.	Ability to carry		Be able to form	Based on the	To be
12.	Ability to carry	To know the	Be able to form	Based on the results of the	To be responsible for
12.	out sanitary	To know the system of	groups of	results of the	responsible for
12.	out sanitary and hygienic	To know the system of sanitary-	groups of children for	results of the medical	responsible for the timely and
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and	groups of children for their medical	results of the medical examination	responsible for the timely and quality conduct
12.	out sanitary and hygienic	To know the system of sanitary-hygienic and preventive	groups of children for their medical examination.	results of the medical examination and analysis of	responsible for the timely and quality conduct of health
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures	groups of children for their medical examination. Have the skills	results of the medical examination and analysis of the child's	responsible for the timely and quality conduct of health assessment
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the	groups of children for their medical examination. Have the skills of analyzing	results of the medical examination and analysis of the child's health, the state	responsible for the timely and quality conduct of health assessment activities for
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed	groups of children for their medical examination. Have the skills of analyzing the health	results of the medical examination and analysis of the child's health, the state of the	responsible for the timely and quality conduct of health assessment activities for children, the
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of	groups of children for their medical examination. Have the skills of analyzing the health status of	results of the medical examination and analysis of the child's health, the state of the production and	responsible for the timely and quality conduct of health assessment activities for children, the improvement
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population.	groups of children for their medical examination. Have the skills of analyzing the health status of population	results of the medical examination and analysis of the child's health, the state of the production and the	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through	results of the medical examination and analysis of the child's health, the state of the production and the environment,	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment,
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of diseases and
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population groups. Know	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and preventive	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local authorities and	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population groups. Know the metrics of	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local authorities and health are	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of diseases and
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population groups. Know the metrics of the	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and preventive measures.	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local authorities and health are known;	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of diseases and
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population groups. Know the metrics of the organization's	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and preventive measures.	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local authorities and health are known; business	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of diseases and
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population groups. Know the metrics of the organization is evaluation and	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and preventive measures.  Have the skills to compile	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local authorities and health are known; business executives on	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of diseases and
12.	out sanitary and hygienic and preventive	To know the system of sanitary-hygienic and preventive measures among the fixed contingent of the population. To know the principles of organization of dispensary serialization of different population groups. Know the metrics of the organization's	groups of children for their medical examination. Have the skills of analyzing the health status of population groups through the results of medical examination and development of medical and preventive measures.	results of the medical examination and analysis of the child's health, the state of the production and the environment, the principles of the submission of analytical information to the local authorities and health are known; business	responsible for the timely and quality conduct of health assessment activities for children, the improvement of the environment, the promotion of healthy spa life, the primary prevention of diseases and

		. C (1	41 1 141 C	.1''	
		of the	the health of	eliminate the	
		dispensary.	children,	harmful effects	
		Know the	depending on	on children's	
		methodological	factors of	health. Use the	
		approaches for	production and	local press for	
		assessing the	the	publications on	
		state of the	environment.	activities on	
		environment	Be able to	issues promote	
		and the	organize the	health and the	
		presence of	propaganda of	environment,	
		factors that	healthy	use radio,	
		affect the	lifestyles,	television,	
		health of the	primary	lectures and	
		population in	prophylaxis of	interviews.	
		these	infections and		
		conditions	injuries.		
13.	Ability to plan	To know the	Be able to plan	To inform the	To be
10.	and carry out	principles and	measures to	population,	responsible for
	preventive and	systems of	prevent the	heads of	the qualitative
	anti-epidemic	planning and	spread of	relevant	analysis of
	measures for	carrying out	infectious	institutions and	indicators of
	infectious	preventive and	diseases on the	enterprises	infectious
	diseases	anti-epidemic	basis of	about timely	morbidity of
	uiseases	measures for		I -	_
			epidemiologica	carrying out of	the population,
		infectious	1 analysis,	preventive and	timely
		diseases in	using	anti-epidemic	implementation
		typical	prophylactic	measures,	of appropriate
		conditions and	and anti-	vaccinations,	preventive and
		in epidemic	epidemic	etc.	anti-epidemic
		conditions	methods (list 2)		measures.
		based on the	Be able to		
		results of	organize		
		analysis, data	preventive and		
		from the center	anti-epidemic		
		of infectious	measures for		
		diseases.	infectious		
		Know the	diseases in		
		methods of	healthcare		
		detection and	facilities,		
		early diagnosis	among the		
		of infectious	fixed		
		diseases,	population and		
		organization of	in the centers		
		primary anti-	of infectious		
		epidemic	diseases		
		cpiacinic	GIBCUBCB		
1		measures in the	diseases based		
		-			

		center. Know the prophylactic and anti- epidemic methods of organizing measures to prevent the spread of infectious diseases.	l analysis by risk groups, territory of risk, time and risk factors.		
14.	Ability to keep medical records	Know the system of official workflow in likari, including modern computer information technology	Be able to determine the source and location of the desired information, depending on its type; Be able to process information and analyze the information received	Obtain the necessary information from a specific source and draw relevant conclusions from its analysis	Be responsible for the completeness and quality of the analysis of information and conclusions based on its analysis.
15.	Ability to conduct epidemiologica I and medicalstatistical surveys of public health; processing of state, social, economic and medical information	To know methods of epidemiologica I and medicalstatistical researches; requirements for diagnostic tests that can be applied to screening tests; risk indicators and methods of their calculation. Know the standard methods, including state-	Have standard methods of descriptive, analytical epidemiologica I and medicalstatistical studies. Be able to evaluate in the dynamics and when comparing with the average data the incidence rates, including chronic noncommunica ble diseases,	To formulate conclusions about the state of health of the population on the basis of data from epidemiologica I and medical statistics. Engage with information and analysis specialists to obtain public health data. Draw conclusions based on	Be responsible for the validity of the conclusions on the state of health of the population; high-quality and timely implementation of statistical processing and analysis of information received

		of-the-art computer information technology, government, social and medical information processing	disability, mortality, integrated health indicators;	analysis and statistical processing	
16.	to analyze the activities of a physician, unit, healthcare facility, conduct quality assurance and safety measures, and improve the use of medical resources	Know the key indicators that characterize the activities of health care facilities / units; medical and organizational factors affecting the activity of the unit physician, health care institution; characteristics of quality of care; components of improving the quality of care; basic requirements for standardization of care. To know the effectiveness of different forms of medical care organization;	Be able to calculate the key indicators of the activity of the doctor, unit, health care institution and evaluate them in dynamics. Be able to identify defects in the activity and causes of their formation. Be able:  • choose the appropriate standardized clinical protocol for the provision of medical care,  • Develop a general scheme for a local protocol of care delivery;  • calculate indicators of structure, process and performance;	Obtain information from relevant sources regarding the activities of a physician, unit, health care facility, and inform relevant officials to ensure conditions for the provision of quality and safe medical care. Formulate conclusions on justification of the form of organization of medical care,	Be responsible for the validity of decisions to improve the activities of a physician, healthcare facility / unit; increase the efficiency of use of available resources of the unit, institution, health care system
17.	Ability to undertake activities to organize and	Have specialized knowledge of the health care	Be able to organize their own work, work in a team	Interact, including informationally , with	To be responsible for the validity of the conclusions

integrate care delivery for the pediatric population and to market health care services system, its goals. functions, general organization principles, key components, types of care, and main types of health care facilities providing different types of medical aid, their structure, functions, forms and methods of organization of work, the sphere of competence of doctors of different specialties and forms of coordination of their activity with other Specialists. Знати основні принципи та умови інтеграції медичної допомоги Know the basic principles and conditions for integrating care Know the basics of marketing and tools for promoting medical

services in the

market

with junior medical staff or in an interdisciplinar y team; coordinate activities with other specialists of the unit, health care institution; to determine the rational medical route of the patient by the structural units of the institution or the various health care institutions involved in the provision of medical care. To be able to choose the tools of promotion of medical services in the market based on the analysis of needs and demand of the population

colleagues at their institution and other health care facilities, subordinates and leaders Engage with organizations and institutions outside the healthcare sector. Generate and communicate to the public the feasibility of using the proposed health care services.

on improving the organization, routing and integration of care; validity of decisions regarding the use of selected tools for promotion of medical services. Ability to participate in the formation of collective responsibility for performance

#### **LEARNING RESULTS:**

## Distribution of learning outcomes by types of learning activities

The competencies that the applicant must master	Program learning outcomes	Name of academic disciplines, practitioners
PC2, PC3, PC14, PC20	PP2, PP3, PP14.1, PP14.2, SC20.2	Infectious diseases Pediatric infectious diseases

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

- 8. Identify different clinical options and complications of the most common infectious diseases of childhood;
- 9. To plan the examination of a sick child and to interpret the results obtained in the most common infectious diseases of childhood;
- 10. To carry out differential diagnostics and to make preliminary clinical diagnosis of the most common infectious diseases of childhood;
- 11. Determine the tactics of patient management for the most common infectious diseases of childhood;
- 12. Demonstrate the ability to keep medical records in the pediatric infectious disease clinic;
- 13. Diagnose and provide emergency care for major emergencies in pediatric infectious disease clinics.

### **Learning outcomes for the discipline:**

- 1. Be able to collect data on patient complaints, medical history, medical history, conduct and evaluate the results of physical examination.
- 2. Evaluate diagnosis information using a standard procedure based on laboratory and instrumental findings.
- 3. Highlight a leading clinical symptom or syndrome. Establish the most probable or syndromic diagnosis of the disease. To appoint laboratory and / or instrumental examination of the patient. To carry out differential diagnostics of diseases. Establish a preliminary and clinical diagnosis.
- 4. Determine the necessary regimen for the treatment of the disease.
- 5. To determine the necessary nutrition in the treatment of the disease.
- 6. To determine the principles and nature of the treatment of the disease.
- 7. Determine emergency care tactics based on diagnosis, emergency status.
- 8. Perform medical manipulation
- 9. Plan measures to prevent the spread of infectious diseases. Conduct detection and early diagnosis of infectious diseases; primary anti-epidemic measures in the cell of infectious disease. Identify risk groups, territories of risk, time of risk, risk factors and carry out epidemiological analysis of infectious morbidity of the population.
- 10. Determine the tactics of examination and secondary prevention of patients to be supervised; tactics of examination and primary prevention of healthy persons subject to dispensary supervision; calculate and assign the necessary food to children in the first year of life
- 11. Conduct screening to identify major non-communicable diseases; to evaluate incidence rates, integrated health indicators; identify risk factors for the occurrence and course of diseases.
- 12. Use uniform clinical protocols for the delivery of evidence-based medical care;

develop and use local health care delivery protocols.

13. Observe the requirements of ethics, bioethics and deontology in their professional activity.

#### 1. INFORMATION SCOPE OF THE EDUCATION

The study of the discipline is given 1.5 credits ECTS 45 hours.

*If there is a need to structure the discipline into content modules:* 

# Content module 1. Pediatric drip (respiratory) infections

### **Specific goals:**

- 1. Determine the place of infant droplets in the structure of infectious morbidity in children.
- 2. To determine the etiology, features of the epidprocess, the main stages of disease pathogenesis.
- 3. Conduct a clinical examination of a sick child, identify the symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of urgent conditions.
- 4. Develop a survey plan, evaluate the results of the survey.
- 5. Determine indications for hospitalization, prescribe treatment.
- 6. Develop a plan for anti-epidemic measures at the outbreak of infection.

# Topic 1. Acute respiratory viral infections (influenza, parainfluenza, adenovirus, respiratory syncytial, rhinovirus infection)

Etiology, epidemiological features, pathogenesis. Clinical forms. Complication. Diagnosis. Principles of treatment and prevention.

# Topic 2. Diphtheria. Mumps infection. Whooping cough.

Etiology, epidemiology, pathomorphological features of different forms. Classification, clinic of typical forms and complications. Diagnosis. Principles of treatment. Specific prevention and anti-epidemic measures at the outbreak of infection.

#### Topic 3. Scarlet fever. Pseudotuberculosis. Infectious mononucleosis.

Etiology, epidemiology, pathogenesis, clinic of typical forms, complications. Principles of treatment. Anti-epidemic measures at the outbreak of infection.

## Topsc 4. Measles. Rubella. Varicella. Shingles.

Etiology, epidemiology, pathogenesis, clinic of typical forms, complications.

Congenital rubella. Principles of treatment. Specific prevention.

Anti-epidemic measures at the outbreak of infection.

# 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 epidprocess, the main stages of the pathogenesis of the disease.
- 3. Conduct a clinical examination of a sick child, identify the symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of urgent conditions.

- 4. Develop a survey plan, evaluate the results of the survey.
- 5. Determine indications for hospitalization, prescribe treatment.
- 6. Develop a plan for anti-epidemic measures at the outbreak of infection.

### Topic 5. Meningococcal infection. Poliomyelitis. Enterovirus infection.

Etiology, epidemiology, pathogenesis. Classification. Clinic of various forms. Complication. Diagnosis. Consequences. Principles of treatment. Specific prevention and anti-epidemic measures at the outbreak of infection.

# Content module 3. Acute intestinal infections

### **Specific objectives of the content module:**

- 1. To 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 epidprocess, the main stages of the pathogenesis of the disease.
- 3. Conduct a clinical examination of a sick child, identify the symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of urgent conditions.
- 4. Develop a survey plan, evaluate the results of the survey.
- 5. Determine indications for hospitalization, prescribe treatment.
- 6. Develop a plan for anti-epidemic measures at the outbreak of infection.

# Topic 6. Acute intestinal infections. Shigellosis. Salmonellosis. Escherichiosis. Intestinal yersiniosis. Rotavirus infection.

Etiology, epidemiology, pathogenesis. Classification. Clinic of typical forms in children of all ages. Complication. Laboratory diagnostics. Principles of treatment and prevention.

### Тема 7. Вірусні гепатити A, B, C, D та інші.

# Topic 7. Viral hepatitis A, B, C, D and others.

Etiology, epidemiological features, pathogenesis. Classification. Clinic of various forms. Laboratory diagnostics. Principles of treatment and prevention.

# Content module 4. HIV / AIDS, opportunistic AIDS infections, TORCH-infections

# Specific objectives of the content module:

- 1. To determine the place of HIV / AIDS, AIDS-opportunistic infections, TORCH-infections in the structure of infectious morbidity in children.
- 2. To determine the etiology, features of the epidprocess, the main stages of the pathogenesis of the disease.
- 3. Conduct a clinical examination of a sick child, identify the symptoms and syndromes that characterize an infectious disease, establish a clinical diagnosis, assess the severity of the disease, the presence of urgent conditions.
- 4. Develop a survey plan, evaluate the results of the survey.
- 5. Determine indications for hospitalization, prescribe treatment.
- 6. Develop a plan for anti-epidemic measures at the outbreak of infection.

# Topic 8. HIV / AIDS in children. AIDS-opportunistic infections (pneumocystis, candidiasis, cryptococcal infection and others)

The topic is presented for self-study

Epidemiological features in children. Clinical and laboratory diagnostics of AIDS-opportunistic infections. Principles of treatment. Prevention of congenital HIV infection.

**Topic 9. TORCH infections (toxoplasmosis, cytomegalovirus, herpes infection).** The topic is presented for self-study

Etiology, epidemiology, pathogenesis. Clinic of acquired and inborn forms. Laboratory diagnostics. Principles of treatment and prevention.

# 3. The structure of the discipline "Pediatric infectious diseases"

Торіс	Lectu res	Prac tical class es	Self Study	Individual work
Content module 1. Pediatric drip (respiro	tary) in		ns	Independent
Topic 1. Influenza, parainfluenza,				examination of the
adenovirus, respiratory syncytial,		4	1	child, identification
rhinovirus infection				of characteristic
<b>Topic 2. Diphtheria, mumps infection,</b>			1	symptoms and
whooping cough	2	4	1	syndromes of
• 0 0				infectious disease,
Topic 3. Scarlet fever,				evaluation of research results
pseudotuberculosis, infectious		4	1	Обґрунтування
mononucleosis				клінічного
Topic 4: measles, rubella, chicken pox,	2	4	1	діагнозу.
herpes zoster	2	4	1	Призначення
Together for Content Module 1	4	16	4	терапії
Content module 2. Infectious diseases of t	he nerv	ous sy	stem	Substantiation of
in children	•			clinical diagnosis.
Topic 5. Meningococcal infection, polio,	2	4	1	The purpose of
enterovirus infection		7	1	therapy. Drawing
Content module 3. Acute intestinal infecti	ons and	l viral		up a plan of anti- epidemic measures
hepatitis				at the outbreak of
Topic 6. Shigellosis, salmonellosis,				infection.
Escherichiosis, intestinal yersiniosis,		4	1	Registration of the
rotavirus infection		2	1	medical history.
Topic 7. Viral hepatitis		2	1	
3 Together for content module 3		8	2	
Content section 5. HIV / AIDS, AIDS-opportunistic infection	s TOI	CU		
infections	15, 1 Or			
(self-study)				
Topic 8. HIV / AIDS (pneumocystis,				
candidiasis, cryptococcal infection)		_	1	
caracians, er, proceedi inicettori)				

Topic 9. TORCH infections (rubella,			
toxoplasmosis, cytomegalovirus, herpes		-	1
infection)			
Patient curation and history writing			3
illness (individual work).			
Disease protection, test control (format A)			
by topics of content modules. Disease		2	
protection, test control (format A) by topics			
of content modules.			
<b>Total:</b> ECTS credits - 1.5; hours - 45	6	28	11
hours;			

# 4. Thematic plan of lectures of the discipline "Pediatric infectious diseases"

№	<b>№</b> The name of the topic	
1	Infectious diseases with tonsillitis syndrome in children. Diphtheria.	2
2	Infectious diseases with exanthema syndrome in children	2
3	Infectious diseases of the nervous system in children	2
Total		6

# 4. Thematic plan of practical training of the discipline "Pediatric infectious diseases" (no seminars and laboratory classes are provided)

№	The name of the topic	Hours
1.	Influenza, parainfluenza, adenoviral infection, rhinovirus infection, RS infection. Croup syndrome. Laboratory diagnostics. Treatment. Prevention planned and at the outbreak of infection	4
2.	<b>Diphtheria. Mumps infection. Whooping cough.</b> Etiology, epidemiology, pathogenesis, classification, complications, treatment. Differential diagnosis of diphtheria with infectious mononucleosis, acute tonsillitis in children. Prevention.	4
3.	Scarlet fever. Pseudotuberculosis. Infectious mononucleosis. Etiology, epidemiology, pathogenesis, classification, complications, treatment.	4
4.	Diseases accompanied by exanthema syndrome: <b>measles</b> , <b>rubella</b> , <b>chicken pox</b> , <b>shingles</b> . Diagnosis, treatment. Differential diagnostics. Prevention planned and at the outbreak	4

	of infection.	
5.	<b>Meningococcal infection</b> in children: etiology, pathogenesis, clinical forms, diagnosis. Enterovirus infections. Poliomyelitis.	4
	Aseptic meningitis. Treatment. Intensive therapy of infectious-	
	toxic shock, brain edema. Prevention.	
6.	Intestinal infections: Shigellosis, Salmonellosis,	4
	Escherichiosis, Yersiniosis, Rotavirus infection. Etiology,	
	epidemiology, pathogenesis, clinic, laboratory diagnostics and	
	treatment. Prevention. Toxemia and toxicosis, neurotoxicosis.	
	Clinic, diagnosis, intensive care.	
7.	Viral hepatitis A, B, C, D, E: etiology, epidemiology,	4
	pathogenesis, clinical manifestations. Features in children.	
	Differential diagnosis of hepatitis. Prevention planned and	
	emergency.	
	Supervision of patients and writing of medical history	
	(individual independent work).	
	Total current educational activity	28

# 6. Thematic plan of students' independent work

№	TOPIC	Кількість годин	type of control
	Influenza, parainfluenza, adenoviral infection, rhinovirus infection, PC infection. Croup syndrome		
2.	Diphtheria. Mumps infection. Whooping cough.	1	Ongoing control over
3.	Scarlet fever. Pseudotuberculosis. Infectious mononucleosis.	1	practical classes
4.	Measles, rubella, chicken pox, shingles.	1	
5.	Meningococcal infection in children. Enterovirus infections. Poliomyelitis.	1	The question of
6.	Intestinal infections: shigellosis, salmonellosis, Escherichiosis, yersiniosis, rotavirus infection	1	the processed independent
7.	Viral hepatitis A, B, C, D, E.	1	the material is
8.	HIV / AIDS (pneumocystis, candidiasis, cryptococcal infection)	1	included in the semester control tests
9.	TORCH infections (rubella, toxoplasmosis, cytomegalovirus, herpes infection)	1	control tests
10.	Patient curation and writing medical history	2	Protection of medical history is spent on the last lesson
	TOTAL	11	

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 Danil Halytsky LNMU" of October 24, 20, protocol №4.

#### 7. Individual tasks

**Individual assignment - case history** (scheduled for the academic year)

Individual research assignment is a form of organization of study at the university, which aims to deepen, summarize and consolidate the knowledge gained by students in the learning process, as well as to apply this knowledge in practice. An individual task at the Department of Pediatric Infectious Diseases involves writing a student's educational history of the disease, performed by students under the guidance of a teacher

The purpose of the individual educational research task - independent study of part of the program material, systematization, deepening, generalization and practical application of the student's knowledge from the educational course, development of skills of independent work. The completed individual assignment has a cover letter, the content of the individual assignment, theoretical and practical component, conclusion, list of used literature. Disclosure of an individual assignment should have practical orientation, communication with a specific object of activity (patient), which is in-patient treatment in one of the children's wards of the regional infectious clinical hospital. The design of the work is carried out in accordance with the guidelines for writing student medical history.

### 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  $N_{\rm D}$  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.

#### **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.

Send feedback

History

Saved

Community

#### **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.

9. 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 (to choose: credit, differentiated credit) is carried out upon completion of studying the block of relevant topics in the last lesson in the form of differential credit.

Semester differentiated credit is a form of final control, which consists in the assessment of the student's learning of the educational material on the basis of current control and completed individual test tasks in the last lesson.

A student is considered to be admitted to the semester examination in a

discipline, if he has attended all the prescribed curriculum for the discipline of classroom training, completed all types of work provided by the work program of this discipline and in its study during the semester scored less than 72 points.

The examination form is standardized and includes control of theoretical and practical training. The maximum number of points that a student can score in the examination is 80. The minimum number of points in the examination - at least 50.

The differential credit lasts 2 academic hours and is carried out according to the following rules.

Stage 1 - Test control - 30 test tasks, carried out for 30 min.

The maximum score is 30 (1 point for 1 correct answer). The minimum criterion for successful completion of the test control is the result of 50% correct answers (15 tests).

- **Stage 2** Solving a complex situational problem, including determining the previous clinical diagnosis, interpretation of laboratory and instrumental research data, determining therapeutic tactics, prescribing treatment. Carried out for 30 minutes The maximum score is 25 for one task.
- **Stage 3** interpretation of laboratory data (general, biochemical, serological blood tests, analysis of cerebrospinal fluid, urine, coprogram, immunological markers for the diagnosis of infectious diseases) 10 minutes are spent. The maximum score is 5.
- **Stage 4** 4 short descriptive theoretical questions on the topic of the program 30 minutes. The maximum score is 20.

# 12. The scheme of calculation and distribution of points received by students:

For disciplines, the form of final control is the examination (differential test): The maximum number of points that a student can earn for his / her current study activities for admission to the examination (differential test) is 120 points.

**The minimum number of points** that a student must earn for his / her current study activities for admission to the examination (differential test) is 72 points.

*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

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

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-
point	point
scale	scale
5	120
4.95	119
4.91	118
4.87	117
4.83	116
4.79	115
4.75	114
4.7	113
4.66	112
4.62	111
4.58	110
4.54	109
4.5	108

4-	200-
point	point
scale	scale
4.45	107
4.41	106
4.37	105
4.33	104
4.29	103
4.25	102
4.2	101
4.16	100
4.12	99
4.08	98
4.04	97
3.99	96
3.95	95

200-
point
scale
94
93
92
91
90
89
88
87
86
85
84
83
82

4-	200-
point	point
scale	scale
3.37	81
3.33	80
3.29	79
3.25	78
3.2	77
3.16	76
3.12	75
3.08	74
3.04	73
3	72
Less 3	Not
	enough

*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

<sup>\*</sup> 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 <b>ECTS</b>	Statistics
A	Top 10% of students
В	The next 25% are students
С	The next 30% are students
D	The next 25% are students
Е	The last 10% of students

Ranking with assignment of grades "A", "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	Оцінка за 4-ри бальною шкалою
Від 170 до 200 балів	5
Від 140 до 169 балів	4
Від 139 балів до мінімальної кількості балів, яку повинен набрати студент	3
Нижче мінімальної кількості балів, яку повинен набрати студент	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** 

- 1. 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.
- 2. 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. https://aidsinfo.nih.gov/understanding-hiv-aids/fact-sheets/21/57/hiv-and-immunizations
- 6. https://www.cdc.gov/vaccines/adults/rec-vac/health-conditions/hiv.html
- 7. https://www.cdc.gov/vaccines/vac-gen/imz-basics.htm
- 8. https://medlineplus.gov/immunization.html