# Danylo Halytskyy Lviv National Medical University Pediatrics Infectious Diseases Department

APPROVED

First Vise-Rector for Scientific and Pedagogical Affairs

Danylo Halytsky Lyiv National Medical University
Prof. M.R. Gzhehotskyy

2021 y



# STUDY PROGRAM OF THE DISCIPLINE

## " 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" individual profile course of choice "Obstetrics and Gynecology"

at the methodological meeting of the Pediatric Infectious Diseases Department Protocol № 225
of "8" February 2021
Head of the Department Assoc. Prof. Lytvyn H.O.

Justes

APPROVED
At the meeting of the specialized methodical committee on pediatric disciplines Protocol No. 2
of "2" March 2021
Head of the specialized methodical commission
Prof. L.V. Besh

Lviv 2021 - 2022

## **PROGRAMMERS:**

Lytvyn H .O, PhD MD, Associate Professor, Head of the Pediatric Infectious Diseases Department; Pokrovska T.V., PhD MD, Associate Professor, head teacher of the Pediatric Infectious Diseases Department.

## **REVIEWERS:**

D.A. Dobryanskyy, professor, MD PhD of Pediatric's № 2 Department of Danylo Halytsky Lviv National Medical University.

## The program of study of discipline

## "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

## **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	of credits, hours, of them			Year of study	Number Practical	type of control
	Total	Auditori	um	Self		classes	
		Lecture	Practical	study			
		S	classes				
"Pediatric	2, 5						
infectious	credit				6 course		
diseases"	ECTS /		48	27	XI / XII	8	credit
Content modules 3	75 hours				semester		

Auditory load – 64%, Self stydy– 36%

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, a	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 "Pediatric 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)

-special (professional, subject):

- identification, epidemiology, classification, etiology and pathogenesis of the most common infectious diseases of children;
- clinical manifestations in uncomplicated and complicated course of the most common infectious diseases of children;
- criteria for establishing a preliminary clinical diagnosis in the most common non-infectious and infectious diseases of children;
- plan of laboratory and instrumental examination of children in the most common

non-infectious and infectious 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 non-infectious and infectious diseases of children; treatment of the most common non-infectious 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".

Skill

Communication

Autonomy

and responsibility

knowledge.

## **Competence Matrix**

Knowledge

№

Competence

In	tegrai competenc	ee						
	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							
kn	knowledge, practical skills and methods of relevant professional direction							
Ger	neral competenci	ies						
1.	Ability to think abstractly, analyze and synthesize	Know the methods of analysis, synthesis and further modern learning	Be able to analyze information, make informed decisions, be able to acquire modern knowledge	Make the right connections to meet your goals.	Be responsible for the timely acquisition of modern knowledge.			
2.	Ability to learn and master modern knowledge.	Know the current trends of the industry and analyze them	Be able to analyze professional information, make sound	Make the right connections to meet your goals.	To be responsible for the timely acquisition of modern			

decisions,

acquire up-to-

			date		
			knowledge		
3.	Ability to apply knowledge in practical situations	Have specialized conceptual knowledge acquired in the learning process	Be 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
6.	Ability to make an informed decision.	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	Use communication strategies and interpersonal skills	Be responsible for the choice and tactics of the communication method
7.	The ability to work as a team.	Know the tactics and strategies of communication , the laws and methods of communicative	Be able to choose ways and strategies of communication to ensure effective	Use communication strategies	Be responsible for the choice and tactics of the communication method

		behavior.	teamwork		
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 responsibilities	Know the responsibilities and ways of accomplishing the tasks	Be able to determine the purpose and objectives of being persistent and conscientious in the performance of duties	Establish close personal relationships for the effective fulfillment of tasks and responsibilities	Responsible for the quality of the tasks
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 preserve the environment.	Know the environmental issues and how to conserve them	Be able to formulate requirements for yourself and others for environmental protection	Make proposals to the relevant authorities and agencies on conservation and environmental protection measures	Be responsible for implementing environmental conservation measures within your area of competence.
15	Ability to act on ethical considerations	Know the basics of ethics and deontology	Be able to apply ethical and deontological rules and principles in professional activity	Ability to convey to patients, their family members, colleagues their professional position	Be responsible for compliance with ethical and deontological norms and principles in professional activity

## **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.

| Patient survey | Have | Reable to | Effectively | Responsible | Reable to | R

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		health,
		the patient	examination of		psychomotor
		різного віку.	the patient. Be		and physical
		different ages.	able to		development of

		Know the stages and methods of examination of psychomotor and physical development of the child.	examine the psychomotor and physical development of the child. Be able to evaluate the quality of care, breastfeeding and nutrition for children. Be able to conduct a comprehensive assessment of your child's health.		the child, and pre-natal development of the fetus and taking appropriate measures.
2.	Ability to determine the required list of laboratory and instrumental studies and evaluate their results.	Have specialized knowledge of the child, its organs and systems, standard methods of laboratory and instrumental research (List 4).	Be able to analyze the results of laboratory and instrumental studies and to evaluate information on the diagnosis of the patient (by list 4)	Form and report to the patient and / or his or her parents (guardians), specialists, as needed the list of laboratory and instrumental studies (list 4).	Be responsible for deciding on the evaluation of laboratory and instrumental research results
3.	Ability to establish a preliminary and clinical diagnosis of the disease	Have specialized knowledge of the child, his organs and systems; standard inspection methods; algorithms for diagnosis of diseases; algorithms for highlighting leading symptoms or syndromes (listed in list 1); previous	Be able to carry out a physical examination of the patient; be able to make an informed decision about the selection of a leading clinical symptom or the syndrome; be able to get a preliminary and clinical diagnosis of the disease (in list 2); appoint	On the basis of regulatory documents, keep medical records of the patient (card of outpatient / inpatient patient, etc.).	Observe ethical and legal standards, be responsible for making sound decisions and actions regarding the correctness of the established preliminary and clinical diagnosis of the disease

4.	The ability to determine the necessary mode of children in the treatment of diseases.	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	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-physiological and age-specific features; algorithms and standard schemes for	Be able to determine the nature of nutrition - based on the previous and clinical diagnosis, the nature of nutrition in the treatment of diseases (on the list 2)	Form and communicate to the patient and / or his or her parents (guardians), specialists, nutrition conclusions - in the treatment of diseases (in list 2)	Be responsible for the validity of the definition of nutrition - in the treatment of the disease (in the list 2)

6.	Ability to determine the principles and nature of the treatment of diseases	nutrition - in the treatment of diseases (in the list 2  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 medical records.	Be responsible for the timeliness and effectiveness of medical interventions for emergency diagnosis
8.	The ability to determine the tactics of emergency medical care	To know the legal basis for the provision of emergency medical aid, in	Be able to call non-urgent conditions (in list 3); principles and	It is reasonable to formulate and communicate to the patient	To be responsible for the correctness of the determination

		particular the law of Ukraine "On emergency medical aid". Have specialized knowledge of urgent human conditions; principles of emergency medical care.	tactics of rendering extern medical care; to carry out organizational and diagnostic activities aimed at saving and preserving human life.	or his or her legal representative the need to provide immediate help and consent to medical intervention.	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 guidelines about the doctor's actions during the deployment of medical evacuation	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

		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
	r	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			
		(in list 5).			
12.	Ability to carry	To know the	Be able to form	Based on the	To be
	out sanitary	system of	groups of	results of the	responsible for
	and hygienic	sanitary-	children for	medical	the timely and
	and preventive	hygienic and	their medical	examination	quality conduct
	measures	preventive	examination.	and analysis of	of health
		measures	Have the skills	the child's	assessment
		among the	of analyzing	health, the state	activities for
		fixed	the health	of the	children, the
		contingent of	status of	production and	improvement
		the population.	population	the	of the
		To know the	groups through	environment,	environment,
		principles of	the results of	the principles	the promotion
		organization of	medical	of the	of healthy spa
		dispensary	examination	submission of	life, the
		serialization of	and	analytical	primary
		different	development of	information to	prevention of
		population	medical and	the local	diseases and
		groups. Know	preventive	authorities and	injuries.
		the metrics of	measures.	health are	
		the		known;	
		organization's	Have the skills	business	
		evaluation and	to compile	executives on	
		the	analytical	how to take	
		effectiveness	information on	action to	
		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	interviews.	
		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
		measures for	epidemiologica	carrying out of	the population,
		infectious	l 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		
		measures in the	diseases based		
		infectious	on		
		diseases	epidemiologica		
		center. Know	l analysis by		
		the	risk groups,		
		prophylactic	territory of		
		and anti-	risk, time and		
		epidemic	risk factors.		
		methods of			
		organizing			

14.	Ability to keep medical records	measures to prevent the spread of infectious diseases.  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 medical-statistical 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-of-the-art computer information technology, government, social and medical	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, disability, mortality, integrated health indicators;	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 analysis and statistical processing	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

		information 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 integrate care delivery for the pediatric population and to market health care services	Have specialized knowledge of the health care system, its goals, functions, general organization principles, key components,	Be able to organize their own work, work in a team with junior medical staff or in an interdisciplinar y team; coordinate activities with	Interact, including informationally , with colleagues at their institution and other health care facilities, subordinates and leaders	To be responsible for the validity of the conclusions on improving the organization, routing and integration of care; validity of decisions

	.1	T 1.3	44
types of care,	other	Engage with	regarding the
and main types	specialists of	organizations	use of selected
of health care	the unit, health	and institutions	tools for
facilities	care institution;	outside the	promotion of
providing	to determine	healthcare	medical
different types	the rational	sector.	services.
of medical aid,	medical route	Generate and	Ability to
their structure,	of the patient	communicate	participate in
functions,	by the	to the public	the formation
forms and	structural units	the feasibility	of collective
methods of	of the	of using the	responsibility
organization of	institution or	proposed	for
work, the	the various	health care	performance
sphere of	health care	services.	
competence of	institutions		
doctors of	involved in the		
different	provision of		
specialties and	medical care.		
forms of	To be able to		
coordination of	choose the		
their activity	tools of		
with other	promotion of		
Specialists.	medical		
Знати основні	services in the		
принципи та	market based		
умови інтег-	on the analysis		
рації медичної	of needs and		
допомоги	demand of the		
Know the basic	population		
principles and			
conditions for			
integrating care			
Know the			
basics of			
marketing and			
tools for			
promoting			
medical			
services in the			
market			

## 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:

- 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 based on the results of laboratory and instrumental studies.
- 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 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;
- 4. To determine the tactics of the patient with the most common infectious diseases of childhood;
- 5. Demonstrate the ability to keep medical records in the clinic of children's infectious diseases;
- 6. Diagnose and provide emergency care for major emergencies in the clinic of pediatric infectious diseases (shock (TSS, hypovolemic), coma, allergic reactions, asphyxia, cerebral edema, convulsive syndrome).

## 1. INFORMATION SCOPE OF THE EDUCATION

The study of the discipline is given 2,5 credits ECTS <u>/75</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 and emergencies in influenza and ARVI in children (influenza, parainfluenza, adenoviral, respiratory syncytial (RS), rhinovirus infection, COVID-19. Whooping cough (pertussis). Etiological, epidemiological, pathogenetic features, leading clinical symptoms and complications of these infections in children. Emergency states that may occur in these diseases (hyperthermic syndrome, Croup syndrome, apnea with whooping cough, etc.), providing medical care for them. Patients management with respiratory diseases and pertussis, their prevention and immunoprophylaxis
- **Topic 2.** Differential diagnosis of tonsil diphtheria, infectious mononucleosis and diseases accompanied by acute tonsillitis syndrome in children. Clinical features of tonsillitis of various etiologies (streptococcal, staphylococcal, Vincent, s tonsillitis, viral, fungal). Etiological, epidemiological, pathogenetic features, leading clinical

symptoms and complications of the above infections in children. Classification of diphtheria and tonsillitis. Patient management. Emergency states (conditions) that may occur in these diseases (hyperthermic syndrome, diphtheria croup, toxic shock syndrome (TSS) in diphtheria), providing medical care for them. Prevention and immunoprophylaxis.

**Topic 3.** 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. Severe atypical forms of chickenpox. Patients management, organization of antiepidemic measures in the center of infection in diseases with exanthema syndrome. Immunoprophylaxis. Rubella as a TORCH infection. Clinic and prevention of congenital rubella in children.

## 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 4.** Differential diagnosis of meningococcal 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. Emergency states (conditions) in neuroinfections: toxic shock syndrome (TSS) in meningococcal infection, edema of the brain, cerebral coma.

**Topic 5.** Differential diagnosis of encephalitis in children, classification, clinical features, diagnosis, treatment. Enterovirus infection, polio, mumps infection. Etiological, epidemiological, pathogenetic features, leading clinical symptoms. Clinical forms, diagnosis, complications and residual effects, treatment, prevention. Emergencies: cerebral coma and care for this condition. Tactics of patient management. Prevention and immunoprophylaxis.

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

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

- 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 survey 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 6.** 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 GIT infections among themselves and with diseases of the gastrointestinal tract of non-infectious origin, surgical pathology. Patients management with GIT infections (diagnosis, indications for hospitalization, treatment). Anti-epidemic measures in the center of infection. Emergencies in GIT infections in children (toxicosis, dehydration, hypovolemic shock, neurotoxicosis, TSS, HUS), medical care.

**Topic 7.** 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 with viral hepatitis. Antiepidemic measures in the center of infection. Diagnostic markers of hepatitis. Acute liver failure in VH in children, clinical symptoms, assessment of severity and prognosis of VH, taking into account laboratory tests. Patients management with VH with a syndrome of acute liver failure. Providing emergency care. Emergency immunoprophylaxis of HCV 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.).

**Topic 8.** HIV infection in children. Prevention of HIV infection, prevention of mother-tochild transmission, diagnosis, treatment of HIV-infected children. TORCH infections in children. Leading clinical symptoms of acquired and congenital forms of toxoplasmosis, cytomegalovirus and herpes infections. Laboratory diagnostics. Patients management. Prevention of congenital forms. Immunoprophylaxis of infectious diseases in children. Types of vaccines. Vaccination protocol. Mandatory and recommended vaccinations. Contraindications to vaccination. Post-vaccination events, their diagnosis and treatment. Anaphylactic shock, diagnosis and emergency care.

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

Topic	Lectu	Practi	Self	Individual
	res	cal	Study	work
		classes	-	
Content module 1. Pediatric drip (respi	Independent			
<b>Topic 1.</b> Differential diagnosis and		6	3	examination of the
emergencies in influenza and ARVI in				child, identification of
children (influenza, parainfluenza,				characteristic
adenoviral, respiratory syncytial (RS),				symptoms and
rhinovirus infection, COVID-19).				syndromes of
Whooping cough (pertussis).				infectious diseases,
<b>Topic 2</b> . Differential diagnosis of tonsil		6	3	evaluation of
diphtheria, infectious mononucleosis and				laboratory results.
diseases accompanied by acute tonsillitis				Rationale for clinical
syndrome in children.				diagnosis.
Topic 3. Differential diagnosis of		6	3	Appointment of
infections with exanthema syndrome.				therapy.
Rubella as a TORCH infection. Clinic				writing microcracy on
and prevention of congenital rubella in				the patient. Drawing
children.				up a plan of anti-
Content module 2. Infectious diseases of	f the ne	rvous sy	stem	epidemic measures in
<b>Topic 4</b> . Differential diagnosis of		6	3	the center of infection.
meningococcal infection in children				Compilation of tables
Aseptic meningitis in children.				for the differential
Emergencies in neuroinfections.				diagnosis of
<b>Topic 5</b> . Differential diagnosis of			3	symptoms, individual
encephalitis in children.				symptoms, laboratory
Content module 3. Differential diagnosis	is of inf	ectious l	lesions	indicators of the
of the gastrointestinal tract (GIT) and				disease (rash, plaque,
in children				jaundice, defecation,
<b>Topic 6.</b> Differential diagnosis of		6	3	hemogram,
gastrointestinal tract (GIT) infections in				cerebrospinal fluid).
children. Emergencies in GIT in				Lumbar puncture on a
children, medical care.				mannequin.
				Preparation of a report
<b>Topic 7.</b> Differential diagnosis and		6	3	for classes on the
emergencies in viral hepatitis (VH) in				topic of independent
children. Acute liver failure in VH in				work.
children.				
<b>Topic 8.</b> HIV infection in children.		6	3	
Immunoprophylaxis of infectious				
diseases in children.				
Test control (format A) on the topics of			3	
classes, situational solutions				
tasks				
<b>Total</b> : credits ECTS – 2,5;		48	27	
hours – 75;				
4 Thomatic plan of la	<u> </u>			<u> </u>

## Lectures are not provided by the Educational Program

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

№	Theme	Hours
1.	Differential diagnosis and emergencies in influenza and ARVI in	6
	children (influenza, parainfluenza, adenoviral, respiratory	
	syncytial (RS), rhinovirus infection, COVID-19. Whooping cough	
	(pertussis). Etiological, epidemiological, pathogenetic features,	
	leading clinical symptoms and complications of these infections in	
	children. Emergency states that may occur in these diseases	
	(hyperthermic syndrome, Croup syndrome, apnea with whooping	
	cough, etc.), providing medical care for them. Patients management	
	with respiratory diseases and pertussis, their prevention and	
	immunoprophylaxis	
2.	Differential diagnosis of tonsil diphtheria, infectious	6
	mononucleosis and diseases accompanied by acute tonsillitis	
	syndrome in children. Clinical features of tonsillitis of various	
	etiologies (streptococcal, staphylococcal, Vincent's tonsillitis, viral,	
	fungal). Etiological, epidemiological, pathogenetic features, leading	
	clinical symptoms and complications of the above infections in	
	children. Classification of diphtheria and tonsillitis. Patient	
	management. Emergency states (conditions) that may occur in these	
	diseases (hyperthermic syndrome, diphtheria croup, toxic shock	
	syndrome (TSS) in diphtheria), providing medical care for them.	
	Prevention and immunoprophylaxis.	
3.	Differential diagnosis of infections with exanthema syndrome.	6
	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. Severe atypical forms	
	of chickenpox. Patients management, organization of anti-epidemic	
	measures in the center of infection in diseases with exanthema	
	syndrome. Immunoprophylaxis.	
	Rubella as a TORCH infection. Clinic and prevention of	
	congenital rubella in children.	
4.	Differential diagnosis of meningococcal infection in children.	6
	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.	
	Emergency states (conditions) in neuroinfections: toxic shock	
	syndrome (TSS) in meningococcal infection, edema of the brain,	
	cerebral coma.	
5.	Differential diagnosis of encephalitis in children, classification,	6
	clinical features, diagnosis, treatment.	
	Enterovirus infection, polio, mumps infection. Etiological,	
	epidemiological, pathogenetic features, leading clinical symptoms.	
	Clinical forms, diagnosis, complications and residual effects,	
	treatment, prevention.	
	Emergencies: cerebral coma and care for this condition. Tactics of	
	patient management. Prevention and immunoprophylaxis.	
6	Differential diagnosis of gastrointestinal tract (GIT) infections in	6
	<b>children.</b> 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 GIT infections	
	among themselves and with diseases of the gastrointestinal tract of	
	non-infectious origin, surgical pathology. Patients management with	
	GIT infections (diagnosis, indications for hospitalization, treatment).	
	Anti-epidemic measures in the center of infection. Emergencies in GIT	
	infections in children (toxicosis, dehydration, hypovolemic shock,	
	neurotoxicosis, TSS, HUS), medical care.	
7	Differential diagnosis and emergencies in viral hepatitis (VH) in	6
	<b>children.</b> 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 with viral hepatitis. Anti-epidemic	
	measures in the center of infection. Diagnostic markers of hepatitis.	
	Acute liver failure in VH in children, clinical symptoms, assessment	
	of severity and prognosis of VH, taking into account laboratory tests.	
	Patients management with VH with a syndrome of acute liver failure.	
<u> </u>	·	

	Providing emergency care.	
	Emergency immunoprophylaxis of HCV 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.).	
8	HIV infection in children. Prevention of HIV infection, prevention	6
	of mother-to-child transmission, diagnosis, treatment of HIV-	
	infected children.	
	TORCH - infections in children. Leading clinical symptoms of	
	acquired and congenital forms of toxoplasmosis, cytomegalovirus and	
	herpes infections. Laboratory diagnostics. Patients management.	
	Prevention of congenital forms.	
	Immunoprophylaxis of infectious diseases in children. Types of	
	vaccines. Vaccination protocol. Mandatory and recommended	
	vaccinations. Contraindications to vaccination. Post-vaccination	
	events, their diagnosis and treatment. Anaphylactic shock, diagnosis	
	and emergency care.	
		Total:
		48
İ		

## 6. Thematic plan of students' self-study

Nº	TOPIC	Number of hours	type of control		
1.	Helminthiasis in children. Diagnosis. Treatment.	1			
2.	Chronic Viral hepatitis B. Diagnosis. Treatment.	1	Ongoing		
3.	Toxocariasis. Clinic. Diagnosis. Treatment.	1	control over		
4.	Whooping cough in newborns.	1	practical classes		
5.	Felinosis (bortenellosis). Clinical signs. Diagnosis. Treatment.	1			
6.	. Cytomegalovirus (CMV) infection	1			
7.	Tetanus. Clinic. Diagnosis. Treatment	1	The question of		
8.	Antiviral drugs for the treatment of infectious diseases in children	1	the processed independent the material is		
9.	Botulism. Features of clinical symptoms	1	included in the semester control tests		
10.	Individual VTS: curation of patients, writing microcuration of the patient. Compilation of	9	Student report at a practical lesson		

	tables on differential diagnosis, analysis of clinical cases and speeches at clinical conferences		and / or practical conference
11.	Preparation for practical classes	9	
12.	TOTAL	27	

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 No4.

### 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 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

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

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

200-
point
scale
107
106
105
104
103
102
101
100
99
98
97
96
95

4-	200-
point	point
scale	scale
3.91	94
3.87	93
3.83	92
3.79	91
3.74	90
3.7	89
3.66	88
3.62	87
3.58	86
3.54	85
3.49	84
3.45	83
3.41	82

1-	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
200 2	Not
Less 3	enough
3.37 3.33 3.29 3.25 3.2 3.16 3.12 3.08 3.04	81 80 79 78 77 76 75 74 73 72 Not

*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	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

- 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