Summary of the working program of the academic discipline

«PEDIATRICS»

(name of the academic discipline)

General Educational Program of higher education (specialist's degree programs): 31.05.01

GENERAL MEDICINE

Department: FACULTY AND POLYCLINIC PEDIATRICS

1. The purpose of mastering the discipline (participation in the formation of relevant competencies – specify the codes):

UC - 1, UC - 4, UC - 5 GPC - 4, GPC - 5, GPC - 7, GPC - 10 PC - 1, PC - 3, PC - 8, PC - 9

Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy (UC-1)

Able to apply modern communication technologies, including the use of a foreign language(s), for academic and professional interaction (UC-4)

Able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction (UC-5)

Able to apply medical products, provided by the order of healthcare delivery, as well as examine patients for the purpose of determining the diagnosis (GPC-4)

Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems (GPC-5)

Able to prescribe treatment and monitor its effectiveness and safety (GPC-7)

Able to understand the principles of modern information technologies and use them to solve the tasks of professional activity (GPC - 10)

Able to collect a genealogical history, get the necessary information about parents, next of kin and persons caring for a child (PC - 1)

Able to collect the anamnesis of life and the anamnesis of the child's disease (PC-3)

Able to: make a differential diagnosis with other diseases/conditions including emergencies, establish a diagnosis taking into account the current international statistical classification of diseases and related health problems (ICD) (PC-8)

Able to: develop a treatment plan for a disease or condition and prescribe medicine, medical devices, therapeutic nutrition and non-drug treatment taking into account the diagnosis, age and clinical picture in accordance with current **procedures** for the medical care delivery, **clinical recommendations** (treatment protocols) on the provision of medical care taking into account the **standards** of medical care and to evaluate the effectiveness and safety of the use of medicines, medical devices, therapeutic nutrition and other methods of treatment (PC-9)

2. Position of the academic discipline in the structure of the General Educational Program (GEP).

The discipline PEDIATRICS refers to the core part (or *the part formed by the participants of educational relations*) of Block 1 of GEP HE (Academic discipline index).

The discipline is taught in 12 semester/ 6 year of study.

3. Deliverables of mastering the academic discipline and metrics of competence acquisition

Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC) or/and professional (PC) competencies

	Competen	The content of the	Code and name of		of mastering t e students sho	the discipline, ould:
№	ce code	competence (or its part)	the competence acquisition metric	know	be able to	possess
1.	UC-1	Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy	UC-1.1 is able to search, critically analyze and synthesize information, apply a systematic approach to solving tasks UC-1.2 He is able to apply methods of collecting, collecting and processing information; performs critical analysis and synthesis of information obtained from various sources; applies a systematic approach to solving tasks. UC-1.3 Owns the methods of search, collection and processing, critical analysis and synthesis of information; the methodology of a systematic approach to solving the tasks.	methods of critical analysis and evaluation of modern scientific achievements; basic principles of critical analysis	gain new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related to the profession al field; search for informatio n and solutions based on action, experiment and experience	researching the problem of professional activity using analysis, synthesis and other methods of intellectual activity; developing an action strategy to solve professional problems
2.	UC-4	Able to apply modern communication technologies, including the use of a foreign language(s), for academic and professional interaction	UC-4.1 is able to work with literary sources in Russian and a foreign language UC-4.2 Build and maintain relationships with all members of the team, establish psychological and verbal contact with	the basics of oral and written communic ation in Russian and foreign languages, functional styles of the native	express thoughts in Russian and a foreign language in business communic ation	writing texts in Russian and foreign languages related to the professional activity; experience in translating medical texts from a foreign

			sick children and their parents; UC-4.3 Ability to carry out business communication in oral and written forms	language, requireme nts to business communic ation, modern means of information and communic ation technologies		language into Russian; experience in speaking Russian and foreign languages.
3.	UC-5	Able to analyze and take into account the diversity of cultures in the process of cross-cultural interaction	UC-5.1 He knows the patterns and features of the socio-historical development of various cultures in an ethical and philosophical context. UC-5.2 Understands and perceives the diversity of society in socio-historical, ethical and philosophical contexts UC-5.3 Has the skills of interaction in the world of cultural diversity using ethical norms of behavior; as well as the skills of tolerant perception of the intercultural diversity of society in socio-historical, ethical and philosophical contexts.	the main categories of philosophy, the laws of historical developme nt, the basics of intercultur al communic ation; the basic concepts of human interaction in the organization	competently, intelligibly present profession al information in the process of intercultur al interaction; observe ethical norms and human rights; analyze the features of social interaction taking into account national, ethnocultural, confession al features	Practic al experience in productive interaction in the professional environment taking into account national, ethnocultural, confessional features overcoming communicati ve, educational, ethnic, confessional and other barriers in the process of intercultural interaction
4.	GPC-4	Able to apply medical products, provided by the order of healthcare delivery, as well as examine	GPC-4.1 Uses modern medical technologies, specialized equipment and medical products, medicines,	The methodolo gy of collecting anamnesis of life and diseases,	Collect complaints , anamnesis of life and disease of patients	Collect complaints, anamnesis of life, including perinatal and disease of

patients for the in solving complaints (their legal patients of patients purpose of professional representat (their legal determining the (their legal ives), problems from the representativ diagnosis standpoint representat identify es), of evidence-based ives); risk factors identifying medicine. examinatio and causes risk factors GPC-4.2 Knows the of and causes of procedure; diseases; indications and disease contraindications to and apply development; the appointment of physical methods of examination instrumental, and physical examinatio examinatio functional and n; clinical survey laboratory methods aspect, physical patients; of examination, methods of survey of diagnosis of possible diagnosis patients; the most complications of the most interpret common during the common the results diseases; examination, diseases; of identification emergency methods of examinatio of risk care and their laboratory and factors for prevention and physical major GPC-4.3 Interprets instrument examinatio oncological the results of the of diseases; investigati patients; formulation most ons diagnose of common methods of instrumental, assess the the most preliminary laboratory and of diagnosis, state common functional drawing up a health, pathology diagnostics to medical among plan for identify indications patients; instrumental, pathological for formulate laboratory, processes. conducting additional GPC-4.4 Owns research, preliminar investigation methods of general rules for clinical diagnosis, consultations interpretin examination of a their to make a of specialist patient of various plan for doctors; results: internation conducting referral of ages. **GPC-4.5** al laboratory, patients for instrument Formulates a statistical instrumental, preliminary classificati laboratory, al and diagnosis and on of additional additional a clinical diagnosis diseases investigati investigation according to the and healthons of S, ICD. related patients in consultations problems accordance of specialist (ICD); with doctors conditions procedures accordance requiring for with the emergency providing current medical medical procedures care; care, for providing procedure clinical medical care. for the use recommen clinical of medical dations recommendat devices in taking into ions taking account accordance into account with the the the standards current standards of medical of medical procedures care: for care: interpretation providing refer of data from additional medical patients to care, laboratory, (laboratory clinical instrument and recommen al and instrumental) examinations dations additional investigati of patients; (treatment protocols) ons making in the accordance preliminary on diagnosis in medical with the care current accordance delivery procedures with the taking into international for account providing statistical classification medical the standards of diseases care, of medical clinical and problems related care recommen health (ICD); dations, taking into differential account diagnosis of the diseases; recognition standards of conditions of medical arising from care; refer sudden acute patients for consultatio diseases. exacerbation ns medical chronic of specialists diseases in without accordance obvious signs with the of a threat to procedures the patient's of medical life and care, requiring clinical urgent recommen medical care; dations the use taking into medical account devices in the accordance standards with current

		of medical	medical
		care; to	procedures,
		interpret	clinical
		and	recommendat
		analyze the	
		results of	
		consultatio	protocols) on
		ns by	the issues of
		medical	medical care
		specialists	delivery,
		of patients;	assistance
		to interpret	taking into
		and	account the
			standards of
		analyze the results of	medical care
		basic of	medical care
		(clinical) and	
		additional	
		(laboratory	
		,	
		instrument	
		al)	
		examinatio	
		n methods;	
		carry out	
		differential	
		diagnosis	
		of diseases	
		of patients;	
		identify	
		clinical	
		signs of	
		sudden	
		acute	
		diseases,	
		conditions,	
		exacerbati	
		ons of	
		chronic	
		diseases	
		without	
		obvious	
		signs of	
		life-	
		threatening	
		, requiring	
		medical	
		care in an	
		urgent	
		form; use	
		medical	
		medical	

					devices in accordance with current medical procedures, clinical recommen dations (treatment protocols) on the provision of medical care, assistance taking into account the standards of medical care	
5.	GPC-5	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	GPC-5.1 He knows the functional systems of the human body, their regulation and self-regulation when interacting with the external environment in normal and pathological processes. GPC-5.2 Knows etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, basic concepts of nosology GPC-5.3 Knows the indicators of morphofunctional, the physiological state of a healthy child and is able to measure them	Anatomy, histology, embryolog y, topographi c anatomy, physiology , pathologic al anatomy and physiology of child's organs and systems	Evaluate the basic morpholog ical and functional data, physiological conditions and pathological processes in the child's body	Assessment of basic morphologic al and functional data, physiological conditions and pathological processes in the child's body when solving professional problems

6.	GPC-7	Able to prescribe treatment and monitor its effectiveness and safety	GPS-7.1 Selects a drug based on the totality of its pharmacokinetic and pharmacodynamic characteristics for the treatment GPS-7.2 Selects the optimal minimum of the most effective means, using convenient ways of their application GPC-7.3 applies indicators of morphofunctional, physiological state and pathological process for examination of the child's body in order to establish a diagnosis, appointment treatment and monitoring of its effectiveness and safety GPC-7.4 Evaluates efficiency and safety drug therapy based on a combination of clinical laboratory, instrumental and other diagnostic methods	methods of drug and non-drug treatment, medical indications for the use of medical devices for the most common diseases; groups of drugs used to provide medical care in the treatment of the most common diseases; the mechanis m of their action, medical indications and contraindic ations to the prescriptio n compatibil ity, possible complicati ons, side effects, adverse reactions, including serious and unforeseen; features of medical care in emergency forms	develop a treatment plan for patients with the most common diseases in accordance with the procedures for providing medical care, clinical guidelines taking into account the standards of medical care; prevent or eliminate complicati ons, side effects, adverse reactions, including unforeseen ones, resulting from diagnostic or therapeutic manipulati ons, the use of drugs and (or) medical devices, non-drug treatment	developing a treatment plan for patients with the most common diseases in accordance with the current procedures for the provision of medical care, clinical guidelines, taking into account the standards of medical care; provision of emergency and urgent medical care to patients with the most common diseases
7.	GPC-10	Able to understand	GPC-10.1 able to	the	apply	use of

principles solve standard tasks capabilities modern modern modern information information of professional of informatio technologies activity with the and reference n and and use them to solve possibility of informatio communic bibliographic preparing reviews, tasks of resources, the n systems ation abstracts, scientific the use of professional activity and technologi profession reports, publications es to solve special and bibliographies al the tasks of software and on research work, databases; profession automated taking into account methods of al activity; information the requirements of informatio carry out systems to information security solve n retrieval, an standard informatio effective and search for tasks of professional communic informatio ation activity, n technologi necessary taking into account the es; modern to solve medical the tasks of basic and profession requirements biological al activity of terminolog information using reference security у; fundament systems als and informatio profession n security al in databases; profession use al activities modern medical and biological terminolog master y; and apply modern informatio n and communic ation technologi es profession al activity, taking into account the basic requiremen of informatio n security

8.	PC-1	Able to collect a genealogical history, get the necessary information about parents, next of kin and persons caring for a child	PC – 1.1 to compile a pedigree of the patient in order to identify monogenic and chromosomal diseases PC-1.2 carrying out a quantitative and qualitative assessment of the burden of genealogical history PC-1.3 the establishment of burden with the identification of predisposition to certain diseases	make a family tree within three generation s	Establish contact with the child, the parents of the child to receive informatio n about the presence of hereditary and chronic diseases in the immediate family and persons caring for the child	data on the health status of the closest relatives and
9.	PC-3	Able to collect the anamnesis of life and the anamnesis of the child's disease	PK-3.1 assess the clinical picture of diseases and conditions requiring emergency care for children PK-3.2 Assess the clinical picture of diseases and conditions requiring emergency care for children	Methods of collecting anamnesis of the child's life; obtaining informatio n about diseases and surgical interventio ns (which and at what age); obtaining informatio n about preventive vaccinatio ns; assessing the condition and wellbeing of the child; features of diagnosis and clinical	Receive information about the history of the child's life, including from which pregnancy and which child, about the outcomes of previous pregnancies, about the course of this pregnancy and childbirth, the condition of the child at birth and during the period of new birth, about the duration of	systems of the child's body, to assess compliance with the passport age of physical and psychomotor development of children; to determine body weight and height, body mass

				course of diseases in young children	natural, mixed and artificial feeding receive informatio n about complaints , the timing of the onset of the disease, the timing of the first and repeated treatment, conducted therapy	physical and psychomotor development of children
10.	PC-8	Able to: make a differential diagnosis with other diseases/conditions including emergencies, establish a diagnosis taking into account the current international statistical classification of diseases and related health problems (ICD)	PC-7.1 Performs early diagnosis of childhood diseases of internal organs PC-7.2 Establishes a diagnosis taking into account the current international statistical classification of diseases. PC -7.3 Performs differential diagnosis of child's diseases	etiology, pathogenes is and pathomorp hology, clinical aspect, differential diagnosis, clinical features, complicati ons and outcomes of child's diseases; methods of laboratory and instrument al examinatio ns for assessing the state of health, medical indications for conducting examinatio ns, rules	analyze the results of the patient's examinatio n, if necessary, justify and plan the scope of additional examinatio ns; interpret the results of collecting informatio n about the patient's disease; interpret the data obtained during the laboratory examinatio n of the patient; interpret the data obtained	Make a diagnosis according to the ICD

			for	during the	
			interpretin	instrument	
			g their	al	
			results;	examinatio	
			ICD	n of the	
			ICD		
				patient;	
				interpret	
				the data	
				obtained	
				during	
				consultatio	
				ns of the	
				patient by	
				medical	
				specialists;	
				to carry	
				out	
				differential	
				diagnostics	
				of diseases	
				of internal	
				organs	
				from other	
				diseases	
11. PC-9	Able to: develop a	PC-8.1 Draws up a	modern	draw up a	
	treatment plan for a	patient's treatment	methods	treatment	analysis of
	disease or condition	plan taking into	of using	plan for	
	and prescribe	account	medicine	the disease	safety and
	medicine, medical	the diagnosis, the	S,	and the	effectiveness
	devices, therapeutic	patient's age, the	medical	patient's	of
	nutrition and non-	clinical picture	devices	condition	pharmacothe
	drug treatment	of the disease, the	and	taking into	rapy
	taking into account	presence of	therapeut	account the	
	the diagnosis, age	complications,	ic	diagnosis,	
	and clinical picture	concomitant	nutrition	the	
	in accordance with	pathology, in	in	patient's	
	current procedures	accordance with the	diseases	age, the	
	for the medical care	current procedures	and	clinical	
	delivery, clinical	for providing	condition	picture of	
	recommendations	medical care,	s of the	the disease	
	(treatment	clinical	patient in	in	
	protocols) on the	recommendations	accordan	accordance	
	provision of	(treatment	ce with	with the	
	medical care taking	protocols) on the	the	current	
	into account the	provision of	current	procedures	
	standards of	medical care, taking	procedur	for	
	medical care and to	into account the	es for	providing	
	evaluate the	standards	medical	medical	
	effectiveness and	of medical care	care,	care,	
	safety of the use of	PC-8.2 Prescribes	clinical	clinical	
	medicines, medical	medicines,	recomme	recommen	
	devices, therapeutic	and therapeutic	ndations	dations	

nutrition and other methods of treatment nutrition, taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for providing care account the medical care, clinical recommendations, taking into account the standards the prescribe into account the standards medication	
treatment the diagnosis, age and clinical picture of the disease in accordance with the current procedures for providing care account the medical care, clinical recommendations, account the into account the standards medication treatment the diagnosis, age protocols on the provision of medical care, care, taking into of medical recommendations, account care; taking the prescribe into account the standards medication	
and clinical picture of the disease in accordance with the current procedures for providing care account the medical care, clinical into of medical recommendations, taking the into account the standards medication	
of the disease in accordance with the current procedures for providing care account the medical care, clinical recommendations, account care; taking into account the standards medical rescribe into account the standards medication	
accordance with the current procedures for providing care account the medical care, clinical into of medical recommendations, account care; taking the prescribe into account the standards medication	
current procedures for providing care account the medical care, clinical into of medical recommendations, account care; taking the prescribe into account the standards medication	
for providing care account the medical care, taking standards clinical into of medical recommendations, account care; taking the prescribe into account the standards medication	
medical care, taking standards of medical recommendations, account care; taking the prescribe into account the standards medication	
clinical into of medical recommendations, account care; taking the prescribe into account the standards medication	
recommendations, account care; taking the prescribe into account the standards medication	
taking the prescribe into account the standards medication	
into account the standards medication	
standards of of s, medical	
medical care medical devices	
care; the and	
mechanis therapeutic	
m of nutrition	
action of taking into	
medicine account the	
s, diagnosis,	
medical age and	
devices clinical	
and picture of	
therapeut the disease	
ic in	
nutrition, accordance	
medical with the	
indicatio current	
ns and medical	
contraind care	
ications procedures	
to their , clinical	
use; recommen	
complica dations	
tions (treatment	
caused protocols)	
by their on the	
use; provision	
modern of medical	
methods care taking	
of non- into	
drug account the	
treatment standards	
of of medical	
diseases care;	
and prescribe	
condition non-drug	
s of the treatment	
patient in taking into	
accordan account the	
ce with diagnosis,	

		current	age and
		medical	clinical
		care	picture of
		procedur	the disease
		es,	in
		clinical	accordance
		recomme	with the
		ndations	current
		(treatme	medical
		nt	care
		protocols	procedures
) on the	, clinical
		provision of	recommen
			dations
		medical	(treatment
		care	protocols)
		taking	on issues
		into	related to
		account	the
		the	provision
		standards	of medical
		of	care taking
		medical	into
		care;	account the
		action	standards
		mechanis	of medical
		m of	care;
		non-drug	evaluate
		treatment	the
		; medical	effectivene
		indicatio	ss and
		ns and	safety of
		contraind	the use of
		ications	medicines,
		to its	medical
		prescripti	devices
		on; side	and
		effects,	therapeutic
		complica	nutrition
		tions	
		caused	
		by its use	
 4 77 1 0 1	nie discipline and types of		<u> </u>

4. Volume of the academic discipline and types of academic work Total labor intensity of the discipline is 1 CU (36 AH)

Type of educational work	Labor intensity		Labor intensity (AH) in
	volume in	volume in	semesters
	credit	academic	XII
	units	hours	
	(CU)	(AH)	
Classroom work, including	1	36	36

Lectures (L)			6	6
Laboratory practic	um (LP)*			
Practicals (P)			15	15
Seminars (S)				
Student's individual		15	15	
Mid-term assessmen				
credit/exam (specij	fy the type)			
TOTAL LABOR	volume in		36	36
INTENSITY	academic hours			
	(AH)			
	volume in credit	1		1
	units (CU)			

5. Sections of the academic discipline and competencies that are formed

	3. Sections of the academic discipline and competencies that are formed		
№	Competence code	Section name of the discipline	
1.	UC - 1, UC - 4, UC- 5 GPC - 4, GPC - 5, GPC- 7, GPC- 10 PC - 1, PC - 3, PC - 8, PC - 9	Pulmonary System Pathology in Children. Clinical Features of Respiratory Failure. Causes of Acute Respiratory Failure in Children. Approach to the child with Respiratory Failure, pneumonia and chronic cough. Approach to newborns with Neonatal Jaundice, Asphyxia, Birth Trauma. Approach to infant child with protein-energy malnutrition, anemia, dermatitis, rickets.	
2.	UC - 1, UC - 4, UC- 5 GPC - 4, GPC - 5, GPC- 7, GPC- 10 PC - 1, PC - 3, PC - 8, PC - 9	Heart System Pathology in Children. Clinical Features of Cardiac Failure. Causes of Acute and Chronic Heart Failure in Children. Approach to the child with Congestive Heart Failure. Differential diagnosis diseases accompanied by heart failure and arthritis syndrome.	
3.	UC - 1, UC - 4, UC- 5 GPC - 4, GPC - 5, GPC- 7, GPC- 10 PC - 1, PC - 3, PC - 8, PC - 9	Renal System Pathology in Children. of acute kidney injury and chronic kidney disease. Clinical Features of acute kidney injury and chronic kidney disease. Approach to the child with acute kidney injury and chronic kidney disease. Differential diagnosis diseases accompanied by chronic kidney disease. Approach to child with leukocyturia, hematuria, proneinuria.	