

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

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				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 professional field; search for information 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 communication in Russian and foreign languages, functional styles of the native	express thoughts in Russian and a foreign language in business communication	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, requirements to business communication, modern means of information and communication 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 development, the basics of intercultural communication; the basic concepts of human interaction in the organization	competently, intelligibly present professional information in the process of intercultural interaction; observe ethical norms and human rights; analyze the features of social interaction taking into account national, ethno-cultural, professional features	Practical experience in productive interaction in the professional environment taking into account national, ethno-cultural, professional features overcoming communicative, educational, ethnic, professional 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 methodology 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

		<p>patients for the purpose of determining the diagnosis</p>	<p>in solving professional problems from the standpoint of evidence-based medicine. GPC-4.2 Knows the indications and contraindications to the appointment of instrumental, functional and laboratory methods of examination, possible complications during the examination, emergency care and their prevention GPC-4.3 Interprets the results of the most common methods of instrumental, laboratory and functional diagnostics to identify pathological processes. GPC-4.4 Owns methods of general clinical examination of a patient of various ages. GPC-4.5 Formulates a preliminary diagnosis and a clinical diagnosis according to the ICD.</p>	<p>complaints of patients (their legal representatives); examination procedure; and physical examination; clinical aspect, methods of diagnosis of the most common diseases; methods of laboratory and instrumental investigations to assess the state of health, medical indications for conducting research, rules for interpreting their international statistical classification of diseases and health-related problems (ICD); conditions requiring emergency medical care;</p>	<p>(their legal representatives), identify risk factors and causes of diseases; apply methods of examination and physical survey of patients; interpret the results of examination and physical examination of patients; diagnose the most common pathology among patients; formulate a preliminary diagnosis, to make a plan for conducting laboratory, instrumental and additional investigations of patients in accordance with the procedures for providing medical care,</p>	<p>patients (their legal representatives), identifying risk factors and causes of disease development; examination and physical survey of patients; diagnosis of the most common diseases; identification of risk factors for major oncological diseases; formulation of a preliminary diagnosis, drawing up a plan for instrumental, laboratory, additional investigations, consultations of specialist doctors; referral of patients for instrumental, laboratory, additional investigations, consultations of specialist doctors in accordance with the current procedures for providing</p>
--	--	--	--	--	---	---

				<p>procedure for the use of medical devices in accordance with the current procedures for providing medical care, clinical recommendations (treatment protocols) on the medical care delivery taking into account the standards of medical care</p>	<p>clinical recommendations taking into account the standards of medical care; to refer patients to laboratory, instrumental and additional investigations in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care; refer patients for consultations to medical specialists in accordance with the procedures of medical care, clinical recommendations taking into account the standards</p>	<p>medical care, clinical recommendations taking into account the standards of medical care; interpretation of data from additional (laboratory and instrumental) examinations of patients; making a preliminary diagnosis in accordance with the international statistical classification of diseases and problems related to health (ICD); differential diagnosis of diseases; recognition of conditions arising from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and requiring urgent medical care; the use of medical devices in accordance with current</p>
--	--	--	--	---	---	--

					<p>of medical care; to interpret and analyze the results of consultations by medical specialists of patients; to interpret and analyze the results of basic (clinical) and additional (laboratory, instrumental) examination methods; carry out differential diagnosis of diseases of patients; identify clinical signs of sudden acute diseases, conditions, exacerbations of chronic diseases without obvious signs of life-threatening, requiring medical care in an urgent form; use medical</p>	<p>medical procedures, clinical recommendations (treatment protocols) on the issues of medical care delivery, assistance taking into account the standards of medical care</p>
--	--	--	--	--	--	--

					devices in accordance with current medical procedures , clinical recommendations (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	<p>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.</p> <p>GPC-5.2 Knows etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, basic concepts of nosology</p> <p>GPC-5.3 Knows the indicators of morphofunctional, the physiological state of a healthy child and is able to measure them</p>	Anatomy, histology, embryology, topographic anatomy, physiology , pathological anatomy and physiology of child's organs and systems	Evaluate the basic morphological and functional data, physiological conditions and pathological processes in the child's body	Assessment of basic morphological 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	<p>GPS-7.1 Selects a drug based on the totality of its pharmacokinetic and pharmacodynamic characteristics for the treatment</p> <p>GPS-7.2 Selects the optimal minimum of the most effective means, using convenient ways of their application</p> <p>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</p> <p>GPC-7.4 Evaluates efficiency and safety drug therapy based on a combination of clinical laboratory, instrumental and other diagnostic methods</p>	<p>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 mechanism of their action, medical indications and contraindications to the prescription compatibility, possible complications, side effects, adverse reactions, including serious and unforeseen ; features of medical care in emergency forms</p>	<p>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 complications, side effects, adverse reactions, including unforeseen ones, resulting from diagnostic or therapeutic manipulations, the use of drugs and (or) medical devices, non-drug treatment</p>	<p>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</p>
7.	GPC-10	Able to understand	GPC-10.1 able to	the	apply	use of

		<p>the principles of modern information technologies and use them to solve the tasks of professional activity</p>	<p>solve standard tasks of professional activity with the possibility of preparing reviews, abstracts, scientific reports, publications and bibliographies on research work, taking into account the requirements of information security</p>	<p>capabilities of reference information systems and professional databases; methods of information retrieval, information and communication technologies; modern medical and biological terminology; fundamentals of information security in professional activities</p>	<p>modern information and communication technologies to solve the tasks of professional activity; carry out an effective search for information necessary to solve the tasks of professional activity using reference systems and professional databases; use modern medical and biological terminology; master and apply modern information and communication technologies in professional activity, taking into account the basic requirements of information security</p>	<p>modern information and bibliographic resources, the use of special software and automated information systems to solve standard tasks of professional activity, taking into account the basic requirements of information security</p>
--	--	---	---	---	--	---

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 generations	Establish contact with the child, the parents of the child to receive information about the presence of hereditary and chronic diseases in the immediate family and persons caring for the child	the methodology of collecting and evaluating data on the health status of the closest relatives and persons caring for the child (hereditary and chronic diseases)
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 information about diseases and surgical interventions (which and at what age); obtaining information about preventive vaccinations; assessing the condition and well-being 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	Examine and evaluate the skin, the severity of subcutaneous fat, nails, hair, visible mucous membranes, lymph nodes, organs and 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 index of a child of various ages, to assess

				course of diseases in young children	natural, mixed and artificial feeding receive information 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 pathomorphology, clinical aspect, differential diagnosis, clinical features, complications and outcomes of child's diseases; methods of laboratory and instrumental examinations for assessing the state of health, medical indications for conducting examinations, rules	analyze the results of the patient's examination, if necessary, justify and plan the scope of additional examinations; interpret the results of collecting information about the patient's disease; interpret the data obtained during the laboratory examination of the patient; interpret the data obtained	Make a diagnosis according to the ICD

				for interpreting their results; ICD	during the instrumental examination of the patient; interpret the data obtained during consultations 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 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	PC-8.1 Draws up a patient's treatment plan taking into account the diagnosis, the patient's age, the clinical picture of the disease, the presence of complications, concomitant pathology, in accordance with the current procedures for providing medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care PC-8.2 Prescribes medicines, and therapeutic	modern methods of using medicines, medical devices and therapeutic nutrition in diseases and conditions of the patient in accordance with the current procedures for medical care, clinical recommendations	draw up a treatment plan for the disease and the patient's condition taking into account the diagnosis, the patient's age, the clinical picture of the disease in accordance with the current procedures for providing medical care, clinical recommendations	Methods of analysis of evaluation of safety and effectiveness of pharmacotherapy

		<p>nutrition and other methods of treatment</p>	<p>nutrition, taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p>	<p>(treatment protocols) on the provision of medical care taking into account the standards of medical care; the mechanism of action of medicines, medical devices and therapeutic nutrition, medical indications and contraindications to their use; complications caused by their use; modern methods of non-drug treatment of diseases and conditions of the patient in accordance with</p>	<p>(treatment protocols) on the provision of medical care, taking into account the standards of medical care; prescribe medications, medical devices and therapeutic nutrition taking into account the diagnosis, age and clinical picture of the disease in accordance with the current medical care procedures, clinical recommendations (treatment protocols) on the provision of medical care taking into account the standards of medical care; prescribe non-drug treatment taking into account the diagnosis,</p>	
--	--	---	--	--	--	--

				current medical care procedures, clinical recommendations (treatment protocols) on the provision of medical care taking into account the standards of medical care; action mechanism of non-drug treatment ; medical indications and contraindications to its prescription; side effects, complications caused by its use	age and clinical picture of the disease in accordance with the current medical care procedures , clinical recommendations (treatment protocols) on issues related to the provision of medical care taking into account the standards of medical care; evaluate the effectiveness and safety of the use of medicines, medical devices and therapeutic nutrition	
--	--	--	--	---	--	--

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 semesters
	volume in credit units (CU)	volume in academic hours (AH)	XII
Classroom work, including	1	36	36

Lectures (L)		6	6
Laboratory practicum (LP)*			
Practicals (P)		15	15
Seminars (S)			
Student's individual work (SIW)		15	15
Mid-term assessment			
credit/exam (<i>specify the type</i>)			
TOTAL LABOR INTENSITY	volume in academic hours (AH)	36	36
	volume in credit units (CU)	1	1

5. 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.