FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
«AMUR STATE MEDICAL ACADEMY»
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

AGREED
Vice-Rector for Academic Affairs,

_____N.V. Loskutova

April 17, 2025

Decision of the CCMC
April17, 2025

Protocol No. 7

APPROVED
by decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation
April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation

_____I.V. Zhukovets

April 22, 2025

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 50AB224604E64520B5261 4FA420034A
Владелец: Жуковец Ирина Валентиновна
Действителен: с 15.04.2025 до 09.07.2026

EDUCATIONAL PROGRAM

discipline «Pediatrics»

Specialty: 31.05.01 General Medicine
Course: 4-5
Semester: 8-10
Total hours: 324 hrs.
Total credits: 9 credit units
Control form: examination, 10 semester

Blagoveshchensk, 2025

The educational program of the discipline is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by the order of the Ministry of Education and Science of Russia dated 08.12.2020 No. 988 (registered with the Ministry of Justice of Russia on 08.26.2020 No. 59493), BPEP HE (2021).

Authors:
Head of the Department of Pediatric Diseases, Holder of an Advanced Doctorate in Medical Sciences, Professor, E.B. Romantsova
Assistant of the Department of Pediatric Diseases, Ph.D.of Medical Sciences, E.L. Chupak
Assistantof the Department of Childhood diseases, Ph.D. of Medical Sciences, O.V. Shanova

Reviewers:
Head of the Department of Pediatrics of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy, Ph.D. of Medical Sciences, Associate Professor, V.V. Shamraeva
Chief Physician of the State Autonomous Healthcare Institution of the Amur Regio "Children's City Clinical Hospital", I.N. Molchanova

APPROVED at a meeting of the Department of Pediatric Diseases,
Protocol No. 8 dated March 26, 2025

Head of the Department, Holder of an Advanced Doctorate in Medical Sciences, Professor _____ **E.B. Romantsova**

Conclusion of the Expert Commission on the review of the Educational Programs:
Protocol No. 1 dated April 16, 2025

Expert of the expert commission,
Holder of and Advanced Doctorate in Medical Sciences, Associate Professor
_____ **E.E. Molchanova**

APPROVED at the meeting of the CMC No. 3:
Protocol No. 6 dated April 17, 2025

Chairman of the CMC No. 3
Holder of the Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Professor _____ **V.V. Voitsehovsky**

AGREED: Dean of the Faculty of Medicine,
Ph.D. of Medical Sciences, Associate Professor
_____ **N.G. Brush**

April 17, 2025

CONTENT

1	**Explanatory note**	**4**
1.1.	Characteristics of the discipline	**4**
1.2.	Objectives and tasks of the discipline	**4**
1.3.	The place of the discipline in the structure of the OPOEP of HE	**5**
1.4	Requirements for students	**5**
1.5	Interdisciplinary links with subsequent disciplines	**8**
1.6	Requirements for the results of mastering the discipline	**9**
1.7	Stages of competencies formation and description of assessment scales	**17**
1.8	Forms of organization of training and types of control	**1 8**
2	**Structure and content of the discipline**	**1 9**
2.1	Scope of the discipline and types of educational activities	**1 9**
2.2	Thematic plan of lectures and their summary	**20**
2.3	Thematic plan of clinical practical classes and their content	**27**
2.4	Interactive forms of learning	**46**
2.5	Criteria for assessing students' knowledge	**48**
2.6	Independent work of students: in-class and out-of-class	**51**
2.7	Research (project) work	**56**
3	**Educational, methodological, logistical and informational support of the discipline**	**57**
3.1	Main literature	**57**
3.2	Further reading	**57**
3.3	Educational and methodological support for the discipline, prepared by the department staff	**57**
3.4	Equipment used for the educational process	**59**
3.5	Professional databases, information and reference systems, electronic educational resources	**60**
3.6	Licensed and freely distributed software used in the educational process	**63**
3.7	Resources of the information and telecommunications network "Internet"	**64**
4	**Evaluation Fund**	**65**
4.1	Current test control (input, initial, final), final	**65**
4.1.1	Examples of test tasks for entrance knowledge control (with standard answers)	**65**
4.1.2	Examples of test tasks for initial knowledge assessment (with standard answers)	**66**
4.1.3	Examples of test tasks for the final knowledge assessment (with standard answers)	**71**
4.1.4	Examples of test tasks for the final knowledge assessment (with standard answers)	**76**
4.2	Situational tasks (with standard answers)	**78**
4.2.1	Examples of situational tasks of current (output) control (with standard answers)	**78**
4.2.2	Examples of situational tasks of the boundary control (with standard answers)	**82**
4.3	List of practical skills that a student should have after mastering the discipline	**91**
4.4	List of questions for the exam	**92**

1 . EXPLANATORY NOTE

1. 1. Characteristics of the discipline

Over the last decade, stable negative trends have formed in the health of children and adolescents - the prevalence of risk factors for the formation of health and development, an increase in morbidity and disability. The solution to the problem of maintaining and strengthening the health of children from 0 to 18 years old is possible only with the organization of constant monitoring of their health and development, regular comprehensive medical, health-improving and rehabilitation measures. The most important principle of domestic pediatrics and at the same time its priority is the preventive direction, which is most fully implemented in the system of medical examination of healthy and sick children.

When presenting a lecture course of a discipline, the connection between the topics and sections of the program is emphasized, while ensuring the perception of the discipline as a single, integral science.

Classes in pediatrics are held in 3 semesters: 10 clinical practical classes in the 8th semester, 10 classes in the 9th semester, 10 classes in the 10th semester and 54 hours of lectures.

The work program contains the following sections:

1. Pathology of young children.
2. Pathology of older children.
3. Infectious diseases in children.
4. Children's clinic.

In the 10th semester, an exam (midterm assessment) is held, consisting of a theoretical part - testing in the Moodle system , a survey of the student on tickets. Classes on the discipline are held in accordance with the curriculum in classrooms, hospital wards, and an accreditation and simulation center.

1.2. Objectives and tasks of the discipline

The purpose of teaching the discipline Pediatrics is to train professional activities: preventive, diagnostic, therapeutic, rehabilitation, psychological and pedagogical, scientific research.

Learning objectives of the discipline:

1. To teach students to implement measures to form a motivated attitude of children and adolescents to maintaining and strengthening their health and the health of others; preventive and anti-epidemic measures aimed at preventing the occurrence of infectious diseases; measures for hygiene education and disease prevention among children and adolescents; dispensary observation of children and adolescents taking into account age, gender and initial health status; collection and medical and statistical analysis of information on health indicators of children and adolescents of various age and gender groups.
2. To teach students to diagnose the most common diseases and pathological conditions in children and adolescents; diagnose emergency conditions in children and adolescents; treat children and adolescents; provide medical care to children and adolescents in emergency conditions.
3. To teach students how to conduct rehabilitation activities among children and adolescents who have suffered from a somatic disease; the use of therapeutic exercise, physiotherapy, non-traditional methods of therapy and the main resort factors in children and adolescents who need rehabilitation.
4. To teach students how to develop positive behavior in children and adolescents aimed at maintaining and improving health; motivation to implement elements of a healthy lifestyle.
5. To teach students to analyze scientific literature and official statistical reviews; prepare abstracts on modern scientific problems; participate in solving individual research and applied scientific problems in diagnostics, treatment, rehabilitation and prevention of diseases.

1.3. The place of the discipline in the structure of the main professional educational program of higher education

In accordance with the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine (2020) The discipline "Pediatrics" belongs to Block 1 (B 1 .B.36) "Basic Part". The total workload is 9 ZE (324 hours).

1.4. Requirements for students

To study the discipline, knowledge, skills and abilities formed by previous disciplines are necessary:
Latin
Knowledge **:** basic medical and pharmaceutical terminology in Latin.
Skills: be able to apply knowledge for communication and obtaining information from medical literature, medical documentation. (II - III level)
Skills **:** applies medical and pharmaceutical terminology in Latin in professional activities
Professional foreign language
Knowledge: basic medical and pharmaceutical terminology in a foreign language. (II - III level)
Skills **:** be able to apply knowledge for communication and obtaining information from foreign sources.
Skills: applies medical and pharmaceutical terminology in a foreign language in professional activities
History of Medicine
Knowledge: outstanding figures in medicine and healthcare, Nobel laureates, outstanding medical discoveries in the field of medical genetics, the influence of humanistic ideas on medicine. (II - III level)
Skills: be able to competently and independently present and analyze the contribution of domestic and foreign scientists to the development of medical genetics.
Skills: ability to competently conduct a scientific discussion on the most important issues of the general history of medicine
Bioethics
Knowledge: moral and ethical standards, rules and principles of professional medical conduct, rights of the patient and the doctor, basic ethical documents regulating the activities of the doctor . (II - III level)
Skills: be able to build and maintain working relationships with patients and other team members.
Skills: skills of argumentation, conducting discussions, resolving complex ethical and legal situations.
Anatomy
Knowledge: Age-related anatomical features of organs and systems of children and adolescents.
Skills: use knowledge of the anatomical features of a child's body at different age periods
Skills: apply terminology in the field of structure and topography of organs and tissues, organ systems and apparatus of the human body.
Histology, embryology, cytology
Knowledge: Gametogenesis, fertilization. Cell structure. Spermatogenesis, oogenesis and their stages. Critical periods for the formation of organs and systems during embryogenesis. (II - III level)
Skills: be able to determine and predict the impact of a teratogenic factor on fetal development depending on the duration of exposure.
Skills: use histo -functional characteristics of the main systems of the body, patterns of their embryonic development, as well as functional, age-related and protective-adaptive changes in organs and their structural elements.
Biology
Knowledge: laws of genetics and its importance for medicine; patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary

and multifactorial diseases; biosphere and ecology, the phenomenon of parasitism and bioecological diseases (II - III level).
Skills: be able to analyze patterns of heredity and variability in the development of diseases of internal organs in children.
Skills: To master the basics of parasitism in children as an ecological phenomenon, the specifics of the parasite habitat, to study the phenomenon of parasitism and the basics of medical parasitology in the ecological aspect
Microbiology, virology
Knowledge: The importance of microbial genetics in the development of general genetics. Microbiological diagnostics of infectious diseases. (Level II)
Skills: be able to analyze the results of diagnostics of infectious diseases;
Skills: application of laboratory diagnostic methods for infectious diseases, interpretation of results obtained during microbiological, molecular biological and immunological studies of biological fluids, virus-containing materials and pure microbial cultures.
Physics, Mathematics. Medical informatics. Medical biophysics
Knowledge: mathematical methods for solving intellectual problems and their application in medicine; theoretical foundations of informatics, collection, storage, search, processing, transformation, distribution of information in medical and biological systems, use of information computer systems in medicine and health care; principles of operation and design of equipment used in medicine, foundations of physical and mathematical laws reflected in medicine (II - III level).
Skills: be able to use educational, scientific, popular science literature, the Internet for professional activities, work with equipment taking into account safety regulations **.**
Skills: works with computer technology to perform calculations using formulas, performs statistical processing of experimental results.
Bioorganic chemistry in medicine
Knowledge : chemical and biological essence of processes occurring in a living organism at the molecular and cellular levels . Mechanisms of biochemical homeostasis, main indicators of metabolism in norm and pathology, modern methods of biochemical research in the clinic . (II - III level).
Skills : be able to analyze the contribution of chemical processes to the pathogenesis of somatic pathology.
Skills: apply chemical and physicochemical methods of analysis in medicine
Biochemistry
Knowledge: structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation; the role of cellular membranes and their transport systems in metabolism.
Skills: be able to analyze the contribution of biochemical processes to the pathogenesis of diseases, interpret the results of the most common laboratory diagnostic methods .
Skills: independent search for information in the field of clinical biochemistry, conducting scientific analysis and using the acquired knowledge in practice
Pathophysiology, clinical pathophysiology
Knowledge: Main links in the pathogenesis of diseases, hemostasis disorders, types of allergic reactions.
Skills : be able to analyze the links of pathogenesis .
Skills: conducting pathophysiological analysis of data on pathological syndromes, pathological processes, conditions and reactions, forms of pathology and individual diseases.
Pathological anatomy, clinical pathological anatomy
Knowledge: Pathological processes of diseases.
Skills: Be able to analyze the significance of environmental factors for the formation of pathology.
Skills: clinical and anatomical analysis based on comparison of morphological and clinical

manifestations of diseases at all stages of their development.
Propaedeutics of internal diseases
Knowledge: collection of complaints, anamnesis of life and disease, physical examination
Skills: be able to interpret complaints, life and disease history, physical examination data (II - III level).
Skills: application of methods of direct examination of the patient (questioning, examination, palpation, percussion, auscultation, measurement of blood pressure, examination of the properties of the arterial pulse, etc.).
Pharmacology
Knowledge : mechanism of action and side effects of various drugs on the body. (II - III level).
Skills: be able to write prescriptions for prescribed medications, know the indications and contraindications for their use.
Skills: prescription document management.
Hygiene
Knowledge: The influence of social and environmental factors on children's health. Physical development, its assessment. Age-related morphofunctional features of the child's body. The influence of social and environmental factors on children's health. Physical development, assessment. Hygienic principles of the daily routine at different age periods of childhood. Optimal need for proteins, fats, carbohydrates for child development. Needs for water, vitamins, salts. Child's energy expenditure. Determining readiness for school based on medical and psychophysiological criteria. Organization of meals.
Skills: be able to assess a child's physical development and conduct anthropometry.
Skills: Environmental Factors Research
Immunology
Knowledge: development of immunity. Congenital, acquired immune deficiency.
Skills: prescribe an immune test
Skills: using modern methods of research and diagnostics of the state of immunological reactivity in norm and pathology in children, interpretation of immunograms .
Medical genetics
Knowledge: Methods of diagnostics of hereditary diseases, gene, chromosomal, multifactorial diseases. Prevention and principles of treatment of hereditary pathology.
Skills: determine indications for prescribing DNA diagnostic methods to a child
Skills: application of methods and technologies for gene and genome analysis used in medical genetics; the latest achievements in fundamental areas of medical and clinical genetics and their implementation in relation to diagnostics, treatment and prevention of hereditary diseases
Faculty therapy
Knowledge: Etiology, pathogenesis, clinical picture, methods of diagnosis and treatment of somatic diseases.
Skills: identify pathological symptoms and syndromes
Skills: carrying out a full range of treatment, rehabilitation and preventive measures for patients with the most common diseases of internal organs.
Neurology, neurosurgery
Knowledge: Anatomical and physiological features of the structure and function of the nervous system and sense organs in children and adolescents. Development of static and mental functions, perinatal damage to the nervous system, damage to the nervous system in diseases (blood diseases, viral and bacterial infections, collagenoses, rheumatic fever).
Skills: examine the child's psychoneurological status.
Skills: application of general clinical neurological examination.
Otorhinolaryngology and ophthalmology
Knowledge: Etiology, pathogenesis, clinical picture, methods of diagnosis and treatment of diseases of the ENT organs and the ocular apparatus.
To be able to: identify symptoms of damage to the ENT organs and the ocular apparatus.

Skills: application of general clinical ophthalmological and otolaryngological examination.
Public health and healthcare, health economics
Knowledge: Indicators and structure of childhood morbidity and mortality.
Be able to: calculate childhood morbidity and mortality rates
Skills: using statistical indicators to assess the health status of the child population.

1.5. Interdisciplinary links with subsequent disciplines

The knowledge and skills acquired in the discipline "Pediatrics" are necessary for studying subsequent disciplines

"Interdisciplinary links with subsequent disciplines "

№ p /p	Name of subsequent disciplines	Section/module numbers of this discipline, required for studying subsequent disciplines			
		1	2	3	4
1	Dermatovenereology	+	+	+	
2	Hospital therapy	+	+		+
3	Phthisiology	+	+		+
4	Outpatient therapy	+			+
5	Hospital surgery, pediatric surgery	+	+	+	
6	Obstetrics and gynecology	+	+	+	+
7	Infectious diseases	+	+	+	+
8	Anesthesiology, resuscitation, intensive care	+	+	+	+

1.6 . Requirements for the results of mastering the discipline

The study of the discipline "Pediatrics" is aimed at the formation/improvement of the following competencies: universal (UK 9), general professional (OPK 1, 2, 5, 8, 11) and professional (PC 1, 2, 3, 5, 9, 12).

No. p /p	Code and name of competence	Code and the name of the indicator of achievement of competence	As a result of studying the academic discipline, the student must:		
			Know	**Be able to**	**To own**
Universal competencies					
1	**UC-9** Able to use basic defectological knowledge in social and professional spheres	**AI UC-9.1.** Has an understanding of the principles of non-discriminatory interaction in communication in various areas of life, taking into account the socio-psychological characteristics of persons with disabilities.	- socio-psychological characteristics of people with disabilities - principles of non-discriminatory interaction in communication	- identify people with disabilities	- communication skills, non-discriminatory interaction with persons with disabilities
General professional competencies					
2	**GPC-1** Able to implement moral and legal norms, ethical and deontological principles in professional activities	**AI GPC-1.1** Carries out professional activities in accordance with ethical standards and moral principles.	- ethical and deontological aspects of the relationship "doctor-doctor", "doctor-patient"	- conduct a physical examination of the patient taking into account ethical and deontological principles	- have communication skills with the patient and relatives colleagues, junior staff
3	**GPC-2** Capable of conducting and monitoring the effectiveness of measures to prevent, promote a healthy lifestyle and educate the population about health and hygiene	**AI GPC-2.2** Promotes a healthy lifestyle aimed at improving sanitary culture and preventing diseases of patients (population); organizes events on sanitary and hygienic education and the formation of healthy lifestyle	- questions of the etiology of the disease and factors contributing to the development of the disease, with questions of prevention of the identified deviations	- draw up a plan for the dispensary observation of a healthy and sick child	- skills in working with medical standards

		skills **AI GPC-2.6** Assesses the characteristics of population health and environmental factors that impact the body, and knows the biophysical mechanisms of such impact.			
4	**GPC-5** Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	**AI GPC-5.2** Knows the etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, and the basic concepts of nosology. **AI GPC-5.3** Knows the indicators of the morphofunctional and physiological state of a healthy person and can measure/determine them. **AI GPC-5.4** Uses indicators of morphofunctional, physiological state and pathological process to examine the human body in order to establish a diagnosis, prescribe treatment and monitor its effectiveness and safety.	- etiopathogenesis of various diseases - indicators of the morphofunctional, physiological state of a healthy child	- to recognize the pathological process in the child's body - use indicators of morphofunctional, physiological state and pathological process to examine the child's body	- skills in diagnosing various pathologies

5	**GPC-8** Capable of implementing and monitoring the effectiveness of medical rehabilitation of the patient, including the implementation of individual rehabilitation and habilitation programs for the disabled, and assessing the patient's ability to perform work activities	**AI GPC-8.2** Identifies risk groups for the purpose of improving health and determining rehabilitation potential for subsequent restorative treatment and rehabilitation of patients. **AI GPC-8.3** organizes a plan of medical rehabilitation activities for patients, including non-drug treatment methods (natural healing factors, physical and reflexology, therapeutic exercise)	- risk groups for the occurrence of diseases taking into account risk factors - methods of medical rehabilitation	up a plan of medical rehabilitation measures for patients, including non-drug treatment methods (natural healing factors, physical and reflexology, therapeutic exercise) - prescribe rehabilitation measures to the patient taking into account the clinical picture	- skills in drawing up and prescribing rehabilitation measures, including spa treatment for various pathologies in children
6	**GPC-11** Capable prepare and apply scientific, scientific-	**AI GPC-11.3.** Interprets and applies data physical, chemical,	– mathematical methods for solving intellectual problems and their application in the medical	– use medical equipment; – make calculations based on research results;	– the main scientific methods of cognition used in medicine;

	production, design, organizational-managerial and regulatory documentation in the healthcare system	mathematical and other natural sciences concepts and methods solutions to professional problems. **AI GPC-11.4.** Conducts scientific and practical research, analyzes information using the historical method and prepares publications based on the results research.	education system; – the basic laws of physics, physical phenomena and patterns underlying the processes occurring in the human body; – basic methodological approaches to working with educational, scientific, reference, medical literature, including on the Internet	– carry out basic statistical processing of data. – protect the educational medical history	– basic technologies for information transformation: text, spreadsheet editors, Internet search – a systematic approach to presenting information
Professional competencies					
7	**PC-1** Able to provide medical care in urgent and emergency situations	**AI PC - 1.1** Identifies clinical signs of conditions requiring emergency medical care **AI PC -1.2** Provides emergency medical care to patients with sudden acute illnesses, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life	- issues related to the provision of emergency care for sudden acute illnesses, conditions, exacerbation of chronic diseases without obvious signs of a threat to life in children	- provide emergency care for sudden acute illnesses, conditions, exacerbation of chronic diseases without obvious signs of a threat to life in children	- skills to provide emergency care for sudden acute illnesses, conditions, exacerbation of chronic diseases without obvious signs of a threat to life in children in accordance with professional standards and clinical guidelines
8	**PC-2** Able to collect and analyze complaints, life history and medical history of the patient in order to establish a	**AI PC-2 .1** Establishes rapport with the patient. **AI PC-2 .2** Collects complaints, specifies them, highlighting	- methods of collecting complaints, life history, disease	- analyze complaints, medical history, illnesses, dates of first and repeated requests for medical care, volume of therapy, its effectiveness, data on	- skills to establish contact with the patient or his parents, collect complaints, life history, disease

	diagnosis	the main and secondary ones. **AI PC-2 .3** Collects and analyzes information about the onset of the disease, the presence of risk factors, the dynamics of the development of symptoms and the course of the disease. **AI PC-2 .4** Analyzes the timing of the first and repeated requests for medical care, the volume of therapy provided, and its effectiveness. **AI PC-2.5** Collects and evaluates information about the patient's medical history, including data on past illnesses, injuries and surgeries, hereditary, professional, and epidemiological history		previous illnesses, injuries and surgeries, hereditary, allergic and epidemiological history	
9	**PC-3** Able to conduct a physical examination of a patient, analyze the results of additional examination methods in order to establish a diagnosis	**AI PC-3.1** Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets its results **AI PC-3.4** Interprets and analyzes the results of collecting	- methods of physical examination of children (inspection, palpation, percussion, auscultation)	- conduct a complete physical examination of children (inspection, palpation, percussion, auscultation)	- skills of interpretation and analysis of the results of collecting information about the patient's disease, data obtained during laboratory and instrumental examinations and during consultations with the patient by medical specialists, - skills of justifying and

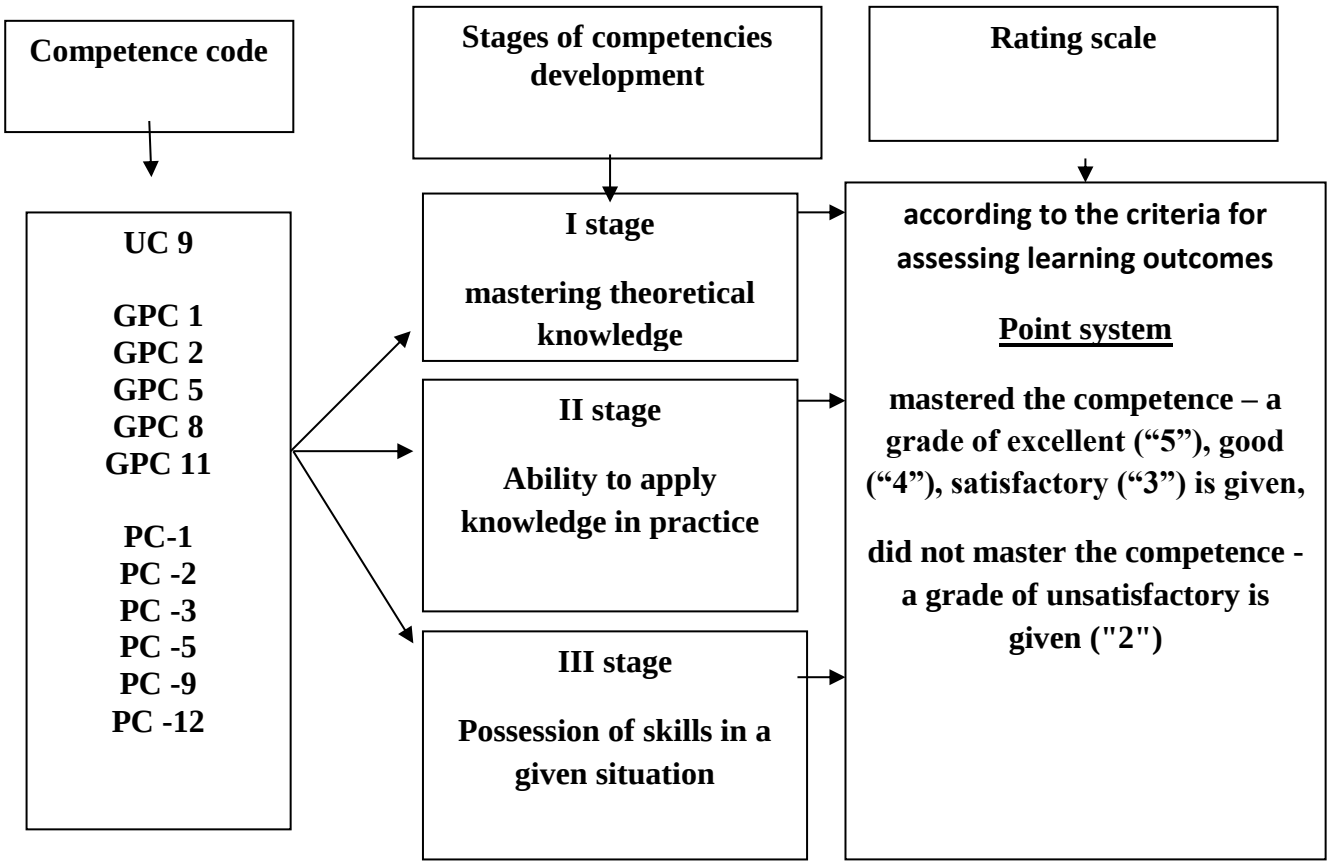
		information about the patient's disease, data obtained during laboratory and instrumental examinations and during consultations with specialist doctors, and, if necessary, justifies and plans the scope of additional research			planning the scope of additional research
10	**PC-5** Capable prescribe treatment to patients	**AI PC- 5.2** Prescribes medications, medical devices and therapeutic nutrition taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care **AI PC- 5.3** Prescribes non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care	- mechanism of action of prescribed drugs, indications and contraindications	- to substantiate the need for etiotropic, pathogenetic and symptomatic therapy of diseases in children	- the ability to prescribe medications, medical devices and therapeutic nutrition taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care - the ability to prescribe non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care
11	**PC-9** C a p o n to conduct preventive medical examinations , dispensary supervision , and carry out	**AI PC-9.1** Organizes and conducts medical examinations taking into account age, health status, profession in accordance with current	- current regulatory legal acts and other documents	- carry out medical examinations of children and adolescents - carry out dispensary observation of children and adolescents with	- technologies for conducting medical examinations and medical check-ups of children and adolescents

	dispensary observation of patients with chronic diseases	regulatory legal acts and other documents **AI PC-9.3** Provides outpatient monitoring of patients with identified chronic non-communicable diseases		identified chronic non-communicable diseases	
12	**PC-12** Ready to maintain medical records, including in electronic form	**AI PC-12.1** Fills out medical documentation, including in electronic form **AI PC-12.2** Works with personal data of patients and information constituting a medical secret	- main medical documents of outpatient and inpatient medical institutions	- work with personal data of patients and information constituting a medical secret	- filling out medical documentation, including in electronic form

Section of discipline and code of the competence being formed

№ p /p	**Section name**	**Code of the competence being formed**
1	Pathology of young children.	UC-9 GPC 1,2,5,8,11 PC 1,2,3,5,9,12
2	Pathology of older children.	UC-9 GPC 1,2,5,8,11 PC 1,2,3,5,9,12
3	Infectious diseases in children.	GPC 2,5,11 PC 1,2,3,5,12
4	Children's clinic.	UC-9 GPC 1,2,5,8,11 PC 1,2,3,5,9,12

1.7 . Stages of competencies formation and description of assessment scales



1.8 Forms of training organization and types of control

Form of organization of students' training	**Brief characteristic**
Lectures	The lecture material contains key and most problematic issues of the discipline, which are most significant in the training of a specialist.
Practical classes	They are intended for the analysis (reinforcement) of theoretical principles and monitoring their assimilation with subsequent application of the acquired knowledge during the study of the topic.
Interactive forms of education	solving situational problems with subsequent discussion, clinical analysis of thematic patients; interactive survey; completing tasks, small group method, discussions, online course of the discipline in the Moodle system , testing in the Moodle system .
Participation in the department's research work, student circle and conferences	preparation of oral presentations and poster reports for presentation at a student club or scientific conference; writing theses and abstracts on the chosen scientific field; preparation of a literature review using educational, scientific, reference literature and Internet sources.
Types of control	**Brief description**
Incoming inspection	Testing theoretical knowledge, skills and abilities formed by previous disciplines The entrance knowledge control includes: testing in the Moodle system (test of incoming knowledge control) The results of the incoming inspection are systematized, analyzed and used by the teaching staff of the department to develop measures to improve and update the teaching methods of the discipline.
Current control	Current knowledge control includes: checking the solution of situational problems and assignments completed independently (extracurricular independent work); assessment of the assimilation of theoretical material (oral survey); control over the supervision of thematic patients during practical classes and the preparation of medical documentation; testing in the Moodle system on all topics of the discipline (tests include questions of a theoretical and practical nature); individual assignments (practical and theoretical) for each topic of the discipline being studied.
Border control	The final assessment of knowledge includes: testing in the Moodle system in all sections of the discipline (tests include questions of a theoretical and practical nature) (semesters 8, 9, 10); verification of solutions to situational problems; defense of medical history (9th semester)
Final control	The final knowledge assessment includes: testing in the Moodle system for all disciplines in semester 10
Intermediate	The midterm assessment is represented by an exam at the end of the

certification	10th semester. The exam includes the following stages: assessment of knowledge of theoretical material (oral survey and interview);

2. STRUCTURE AND CONTENT OF THE DISCIPLINE

2.1. Scope of the discipline and types of educational activities

Sections of the discipline	Total hours	Semesters		
		VIII	IX	X
Lectures	**54**	**20**	**20**	**14**
Practical classes	**138**	**52**	**52**	**34**
Independent work of students	**96**	**36**	**36**	**24**
Exam	**36**			**36**
Total labor intensity in hours	**324**	**108**	**108**	**108**
Total workload in credit units	**9**	**3**	**3**	**3**

Explanation: The curriculum for the discipline "Pediatrics" includes theoretical (lecture course) and practical training (practical classes). The training is conducted over 3 semesters (VIII , IX , X) and includes 54 hours of lectures (20 hours in the VIII semester, 20 hours in the IX semester and 14 hours in the X semester), 138 hours of classroom practical training (52 hours in the VIII semester, 52 hours in the IX semester and 34 hours in the X semester), 96 hours of independent work in Pediatrics (36 hours in the VIII semester, 36 hours in the IX semester and 24 hours in the X semester), the type of midterm assessment is an exam (36 hours in the X semester).

2.2.Thematic plan of lectures and their summary

№ p /p	Lecture topics and their summary	Codes of formed competencies	Labor intensity (hours)
	VIII semester		
	Section 1. Pathology of young children		
1.	**History of pediatrics, organization of maternal and child health care in Russia. Physical and neuropsychic development of children at different age periods.** Main stages of development and formation of domestic pediatrics. The role of S.F. Khotovitsky , N.A. Kisel, V.I. Molchanov , M.S. Maslov, A.A. Koltypin , G.N. Speransky, N.F. Filatov, Yu.F. Dombrovskaya, A.F. Tura, L.A. Isaeva, I.M. Vorontsov, V.A. Tabolin, A.A. Baranov and other scientists in the development of pediatrics. The system of maternal and child health care in Russia. The most important decrees, laws and regulations on maternal and child health care. Basic principles of organizing medical and preventive care for children and adolescents in Russia. Preventive direction of pediatrics. Forms of medical care for the child population. The role of a doctor in improving the health of the child population. Issues of deontology, medical ethics and bioethics in pediatrics. Periods of childhood. Intra- and extrauterine stages of development. Physical and neuropsychic development of children at different age periods (newborn, breastfeeding, pre-school , pre-school, junior and senior school). Variants of somatotypes , psychological characteristics, morbidity.	**GPC**-1 **GPC** -2 PC-2	2
2 .	**Anatomical and physiological characteristics of the child's body. Development of immunity in children.** Anatomical and physiological characteristics and semiotics of lesions of the respiratory system, cardiovascular system, urinary system, nervous system, musculoskeletal system, hematopoietic system, digestive system, skin. Development of immunity in children. Features of the immune system in childhood. Immunodeficiency states (congenital and acquired) . Hardening of young children. The importance of genetic and hereditary factors in childhood pathology. Features of age-related pathology.	**GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-5 PC-9	2
3 .	**Feeding infants during the first year of life. Feeding children over one year of age.** Advantages of breastfeeding. Introducing complementary foods. Classification of infant formulas for artificial feeding. Rules for artificial feeding, volume of food during artificial feeding during the first year of life. Mixed feeding **.** Hypogalactia , its causes. Prevention of hypogalactia , methods of increasing lactation. Signs of malnutrition in a child. Indications for mixed feeding. Rules for mixed feeding. Infant formulas used as supplementary feeding. Feeding children over one year of age.	**GPC** -1 **GPC** -2 PC-2 PC-9	2

4 .	**Neonatology: newborn baby, premature baby. Pathology of the neonatal period.** Introduction to neonatology. Criteria for live birth and viability. Criteria for full-term , preterm and post-term babies . Criteria for morphofunctional maturity. Newborns with extremely low body weight. Structure of perinatal and neonatal morbidity and mortality. Early neonatal adaptation, metabolic and clinical aspects. Physiological (borderline) states of the adaptation period. Clinical manifestations. Prevention and correction measures. Perinatal encephalopathy. Birth injury. Etiology, pathogenesis, clinical forms of birth injury. Outcomes. Prognosis. Bronchopulmonary dysplasia of newborns and premature babies. Neonatal jaundice.	UC-9 **GPC** -1 **GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-9	2
5 .	**Intrauterine infections.** Congenital infections. Concept of embryo- and fetopathies . Concept of intrauterine (ante- and intranatal) infection. Cytomegalovirus infection, herpesvirus infection, rubella, chlamydia, mycoplasmosis, listeriosis , toxoplasmosis. Prevalence. Features of infection. Pathogenesis. Clinical picture. Course. Diagnostics, immunological diagnostic methods. Differential diagnosis. Treatment. Localized inflammatory diseases of the skin and subcutaneous tissue. Vesiculopustulosis , pemphigus, abscesses, exfoliative dermatitis, phlegmon. Etiology. Clinical picture. Diagnostics. Differential diagnosis. Treatment. Prevention. Diseases of the umbilical cord, umbilical wound and umbilical vessels. Omphalitis, thrombophlebitis, arteritis of the umbilical vessels, gangrene of the umbilical cord. Etiology. Clinic. Diagnostics. Treatment. Prevention. Sepsis of newborns. Ulcerative necrotic enterocolitis.	**GPC** -1 **GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-9	2
6 .	**Constitutional anomalies. Atopic dermatitis.** Clinical manifestations of allergic, lymphatic, neuro-arthritic diathesis. Medical tactics. The influence of metabolic anomalies on the course of various diseases in childhood. The role of constitutional anomalies, heredity and environmental factors in the formation and development of allergic diseases in children. Variants of allergic reactions in children at different ages. Clinic, treatment, prevention. Atopic dermatitis.	**GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-9	2
7.	**Chronic nutritional disorders and hypovitaminosis in children.** Protein -energy deficiency. Etiology, pathogenesis, characteristics of various forms of nutritional disorders , principles of treatment and prevention. Hereditary metabolic disorders, malabsorption syndrome .	**GPC** -1 **GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-5 PC-9	2
8 .	**Rickets and rickets-like diseases. Hypervitaminosis D.** Current data on calcium and phosphorus metabolism, metabolism and action of vitamin D. The role of vitamin D , parathyroid hormone, thyrocalcitonin and citrates in maintaining phosphorus-calcium homeostasis under physiological conditions. Pathogenesis of rickets. Classification.	**GPC** -1 **GPC** -2 **GPC** -5	2

	Clinical and biochemical manifestations depending on the severity, period of the disease and the nature of the process. Criteria for rickets diagnosis. Features of the course of modern rickets. Prevention in full-term and premature babies. Treatment of rickets. Differential diagnosis of rickets with rickets-like diseases. Hypervitaminosis D. Spasmophilia. Principles of treatment and prevention.	**GPC** -8 PC-2 PC-5 PC-9	
9 .	**Deficiency anemias, iron deficiency anemia.** Deficiency anemias. Classification. Etiology, pathogenesis. Clinical and hematological characteristics of anemias. The proportion and features of anemia in young children. Iron deficiency anemia: causes, clinical picture, diagnostics, principles of treatment and prevention of iron deficiency anemia in children. Differential diagnosis with hemolytic anemia , hypoplastic anemia.	**GPC** -1 **GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
1 0 .	**Acute pneumonia in young children.** Frequency of prevalence in early childhood and factors predisposing to the development of pneumonia. Etiology. Pathogenesis. Clinical forms, classification, diagnostics, differential diagnosis, complications, principles of treatment and prevention of pneumonia.	**GPC** -1 **GPC** -2 **GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
	IX semester		
	Section 2. Pathology of older children		
1 1 .	**Chronic respiratory diseases. Bronchial asthma in children.** Frequency of chronic bronchitis in children. Causes. Pathogenesis and pathomorphological changes in the bronchial system. Classification. Clinical picture. Differential diagnosis with pulmonary cystic fibrosis, congenital malformations, hypersensitivity pneumonitis . Treatment, prevention of chronic bronchitis. Tuberculosis infection and incidence in children. Clinical manifestations of individual forms most common in children today. Modern tuberculin diagnostics . Treatment. Prevention. Vaccination and revaccination. Bronchial asthma. Prevalence, **etiology** of bronchial asthma. Classification. Features of the clinical course of bronchial asthma in children and adolescents. Pathogenesis. Diagnostics and differential diagnostics of bronchial asthma with malformations of the bronchopulmonary system, cystic fibrosis , foreign bodies of the trachea and bronchi, hypersensitivity pneumonitis , chronic bronchitis and other diseases. Staged treatment. Basic therapy, controlled bronchial asthma. Emergency measures during an attack. Prevention. Prognosis. Asthma school work .	UC-9 **GPC** -5 **GPC** -8 PC-1 PC-2 PC-3 PC-5 PC-9	2

12.	**ARI, herpes infection, chickenpox, infectious mononucleosis.** ARI (flu, parainfluenza , adenovirus infection, respiratory syncytial infection, rhinovirus infection). Etiology, epidemiology, pathogenesis, clinical picture, complications, diagnostics, differential diagnostics, treatment, prevention. Herpes infection (type 1,2). Etiology, epidemiology, pathogenesis, classification, clinical picture, forms (lesions of the skin, mucous membrane, eyes, genitals, nervous system, generalized form) diagnostics, differential diagnostics, treatment, prevention, prognosis . Chickenpox , epidemiology, pathogenesis, clinical picture, classification, diagnostics, differential diagnostics, treatment, prevention, prognosis. Viral infectious mononucleosis (Einstein-Barr virus) - epidemiology, pathogenesis, clinical features, classification, complications, diagnostics, differential diagnostics, treatment, prevention, prognosis.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
13.	**Rheumatic fever. Chronic juvenile arthritis.** Rheumatic fever. Prevalence in childhood. Etiology and pathogenetic mechanisms of disease development, features of the pathomorphological picture and clinical course in children. Classification. Diagnostic criteria. Differential diagnosis with congenital heart defects, infectious myocarditis, bacterial endocarditis, chronic non-rheumatic carditis and functional disorders of cardiac activity. Principles of staged treatment and prevention (primary, secondary, tertiary). Juvenile rheumatoid arthritis in children, etiology, pathogenesis, clinical picture, diagnostics. Differential diagnosis with reactive arthritis, osteochondropathy , dysmetabolic arthropathies , specific joint lesions (tuberculosis, yersiniosis , brucellosis), inflammatory diseases of periarticular tissues. Principles of treatment and prevention. Prognosis. Clinical examination and rehabilitation of children with juvenile rheumatoid arthritis.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
14.	**Systemic connective tissue diseases** . **Systemic vasculitis .** Etiology. Pathogenesis. Classification. Features of the course of systemic lupus erythematosus, dermatomyositis, systemic scleroderma in children. Diagnostic criteria. Cardiovascular system damage. Antiphospholipid syndrome in the genesis of systemic connective tissue diseases. Differential diagnostics of systemic connective tissue diseases with rheumatic fever, periarteritis nodosa, subsepsis Wiesler-Fanconi , muscular dystrophies, diffuse eosinophilic fasciitis , Buschke's scleroderma. Principles of treatment of individual diseases. Prognosis. Primary and secondary prevention. Medical, professional and psychological aspects of rehabilitation of patients with systemic connective tissue diseases. Systemic vasculitis : etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, complications, treatment, prevention.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
15.	**Autonomic dysfunction syndrome. Juvenile arterial hypertension. Heart rhythm and conduction disorders.** Autonomic dysfunction syndrome: modern aspects of etiopathogenesis, classification, main clinical syndromes, diagnostics, differential diagnostics, treatment, prevention. Juvenile arterial hypertension: modern aspects of etiopathogenesis, classification, diagnostics, differential diagnostics, treatment, prevention, clinical examination.	**GPC** -5 **GPC** -8 PC-2 PC-3	2

	Heart rhythm and conduction disorders: modern aspects of etiopathogenesis, classification, diagnostics, treatment, prevention, clinical examination.	PC-5 PC-9	
16.	**Kidney diseases in children.** Pyelonephritis: etiology, pathogenesis, classification, features of pyelonephritis course in young and older children, clinical and laboratory syndromes, differential diagnosis, complications, etiotropic and pathogenetic therapy, prevention, clinical examination. Glomerulonephritis : etiology, pathogenesis, clinical and morphological classification, course variants, differential diagnosis, principles of treatment and prevention, prognosis, clinical examination. Acute and chronic renal failure: causes, diagnostic criteria, emergency care. Modern methods of conservative therapy of chronic renal failure, indications for hemodialysis, for transplantation. Brief characteristics of congenital and hereditary nephropathies.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
17.	**Chronic diseases of the gastrointestinal tract. Gastritis, duodenitis, peptic ulcer. Chronic enterocolitis. Irritable bowel syndrome.** Prevalence. Classification of gastrointestinal diseases in children. Gastritis, duodenitis, gastric ulcer and duodenal ulcer, features of the course in children. Etiology, pathogenesis, clinical picture, differential diagnostics, classification, treatment, prevention, rehabilitation. Chronic enterocolitis: etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, principles of treatment and prevention. Diseases of the pancreas: clinical and diagnostic criteria, treatment, prevention. Irritable bowel syndrome: causes, classification, modern methods of clinical, instrumental and laboratory diagnostics, principles of treatment and prevention.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
18.	**Dysfunction of the hepatobiliary system. Chronic hepatitis. Autoimmune hepatitis.** Dysfunction of the hepatobiliary system: etiology, pathogenesis, modern diagnostic methods, classification, differential diagnosis, principles of treatment, prevention, medical examination. Chronic hepatitis: etiology, pathogenesis, modern diagnostic methods, classification, differential diagnosis, principles of treatment, prevention, clinical examination. Autoimmune hepatitis: etiology, pathogenesis, modern diagnostic methods, differential diagnosis, principles of treatment, prevention, clinical examination.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
19.	**Hemorrhagic diathesis. Hemoblastoses . Leukemoid reactions. Lymphogranulomatosis.** Etiology, pathogenesis, classification of hemorrhagic diathesis. Thrombocytopenic purpura: clinical manifestations, diagnostic criteria, differential diagnosis, principles of treatment, indications for splenectomy , prevention, clinical examination. Hemophilia: clinical presentation, diagnostics, differential diagnostics, inhibitory hemophilia, treatment, prevention of relapses, complications, clinical examination, rehabilitation. Hemoblastoses . Leukemoid reactions. Lymphogranulomatosis. Causes. Pathogenesis. Classification of leukemia in children. Variants of the clinical picture of acute forms of leukemia in children. Lymphoblastic leukemia. Clinical picture, diagnostics, differential diagnostics. Modern methods of treatment. Prevention of neuroleukemia . Prognosis. Rehabilitation of patients with leukemia. Chronic forms of leukemia in children. The concept of leukemoid reactions. Lymphogranulomatosis.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
20.	**Endocrine diseases. Diabetes mellitus, hypothyroidism, diffuse toxic goiter, disorders of sexual development,**	**GPC** -5	2

	growth disorders. Prevalence. Etiology, pathogenesis, clinical picture, treatment of diabetes mellitus, hypothyroidism, diffuse toxic goiter, disorders of sexual development, growth disorders in children. Complications of diabetes mellitus. Emergency care for diabetic and hypoglycemic coma, thyrotoxic crisis. Prevention of endocrine pathology. Prognosis.	**GPC** -8 PC-1 PC-2 PC-3 PC-5 PC-9	
	X semester		
	Section 3. Infectious diseases in children		
21.	**Rash and anginal infections in children.** Etiology, pathogenesis, epidemiology, classification, clinical picture, diagnostics, differential diagnosis, treatment, prevention of measles, rubella, mumps. Measures in the infection focus. Features of the clinical picture and course of diseases in modern conditions. Anginal infections in children: Etiology, pathogenesis, epidemiology, classification, clinical picture, diagnostics, differential diagnosis, treatment, prevention of scarlet fever, diphtheria, whooping cough. Measures in the infection focus . Features of the clinical picture and course of diseases in modern conditions.	**GPC** -5 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
22.	**Enterovirus infections. Poliomyelitis. Meningococcal infection in children.** Etiology, epidemiology, pathogenesis, classification, forms, complications, diagnostics, differential diagnostics, treatment, prevention, prognosis. Emergency care for infectious toxic shock and cerebral edema.	**GPC** -5 **GPC** -8 PC-1 PC-2 PC-3 PC-5 PC-9	2
23.	**Acute viral hepatitis in children. Intestinal infections. Helminthiasis.** Etiology, epidemiology, pathogenesis, classification, forms, complications, diagnostics, differential diagnostics, treatment, prevention, prognosis. Work of the infectious diseases office. Intestinal toxicosis with exicosis . Types of dehydration. Emergency therapy.	**GPC** -5 **GPC** -8 PC-1 PC-2 PC-3 PC-5 PC-9	2
24.	**Principles of providing emergency care to children in the work of a district physician.** Toxicosis, hyperthermia, convulsions, acute abdomen, acute bronchial obstruction, cardiovascular and respiratory failure, anaphylactic shock, acute adrenal insufficiency, burns, frostbite, electrical injury , acute poisoning. Brief clinical characteristics. Syndromic therapy.	**GPC** -5 PC-1 PC-2 PC-3	2
	X semester		

	Section 4. Children's Clinic		
25.	**Children's polyclinic. Comprehensive assessment of the health of children of different ages. Medical examination of a healthy child. Medical care for children and adolescents in preschool educational institutions. Organization of preventive examinations.** Structure. Organization of preventive examinations. Comprehensive assessment of the health of children of different ages. Medical examination of a healthy child. Medical care for children in children's educational institutions. Work of the medical and social department : structure , organization, principles of work.	**GPC** -2 **GPC** -8 PC-9 PC-12	2
26.	**Lecture 26. Outpatient observation and rehabilitation of children with chronic diseases. Observation of disabled children.** Types and methods of rehabilitation treatment in rehabilitation departments, rehabilitation centers. Observation of disabled children. Problems of school medicine. Health-saving technologies at school. Medical-psychological-pedagogical correction of disorders. Work of the pediatric, school and preschool department. Work of the medical and social department. Observation of disabled children.	UC-9 **GPC** -1 **GPC** -2 **GPC** -8 PC-9 PC-12	2
27.	**Lecture 27. Frequently ill children. Prevention of morbidity in children and adolescents (primary, secondary, tertiary). Vaccination.** Frequently ill children: definition and general characteristics of the frequently ill children group, criteria for including children in the frequently ill children group, classification, infection index, resistance index, risk factors, groups, preventive measures, immunorehabilitation , dispensary observation. Prevention of morbidity in children: primary, secondary, tertiary. Organization of vaccination against infectious diseases in children: purpose of vaccination, vaccination room and its documentation, national calendar of preventive vaccinations, contraindications to vaccination, vaccination of special groups, complications during vaccination.	**GPC** -2 **GPC** -8 PC-2 PC-3 PC-5 PC-9	2
Total hours			54

2.3.Thematic plan of clinical practical classes and their content

Practical classes in the discipline "Pediatrics" are a mandatory section and represent a type of educational activity directly focused on the professional training of students. During practical classes, students acquire knowledge of etiology, pathogenesis, classification, clinical symptoms, diagnostic criteria, differential diagnostics, treatment, provision of assistance in emergency conditions and prevention of major diseases of internal organs, skills in working with regulatory documents (standards of specialized medical care - Orders of the Ministry of Health of the Russian Federation, protocols) within the studied nosological forms, and also consolidate and improve the skills of examining patients with pathology, develop skills in assessing the results of clinical and laboratory , instrumental examination methods, making a clinical diagnosis, drawing up a plan for the examination and treatment of patients with pathology, providing emergency care in urgent conditions, drawing up an educational medical history.

In order to activate students' cognitive activity, active and interactive teaching methods (SAC, discussions, case history analysis) are widely used, as well as supervision of thematic patients, students' participation in the rounds of the head of the department, participation in the work of the functional department, clinical and biochemical laboratory, X-ray room , and scientific research work of the department.

em No	Name of the topics of practical classes	Contents of topics for practical classes or clinical practical classes	Codes of formed competencies and indicators of their achievement	Types of control	Labor intensity (hours)
X III semester					
Pathology of young children					
1	**Organization and principles of work of children's hospital. Collection of anamnesis. Methods of examination of a child.**	**Theoretical part:** 1) Organization and principles of work of a children's hospital. 2) Anatomical and physiological features of a child's body. **Practical part :** 1) Introduction to the organization and principles of operation of a children's hospital. 2) Independent collection of anamnesis by a student from mothers of sick and healthy children in a hospital, at an outpatient appointment using a case history scheme and observing the principles of ethics and deontology. 3) Completing the main sections of the child's case history (development). Case history as a scientific, medical and legal document. 4) General examination of a healthy and sick child. 5) Solving situational problems, completing assignments according to a sample, working with handouts, scientific medical and reference literature.	**GPC** -1 (AI 1.1) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
2	**Physical and neuropsychic development of children.**	**Theoretical part:** 1) Age-related features of weight gain, length and other body parameters. 2) Semiotics of growth and development disorders. 3) Criteria and age-related features of children's neuropsychic development. 4) Influence of environment, routine and upbringing on children's neuropsychic development, children's daily routine in different periods of childhood. **Practical part :** 1) Supervision of children of the first year and other age periods. 2) Assessment of the child's physical and neuropsychic development, determination of the somatotype . 3) Assessment of the influence of the environment, nutrition, regimen and upbringing on the physical and neuropsychic development of children. 4) Drawing up a daily routine for the supervised children. 5) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature. 6) Filling in the main sections of the child's development history.	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4)	Current Testing Frontal survey Interactive survey	5.2
3	**Feeding a healthy baby in the first year**	**Theoretical part:** 1) Advantages of natural feeding. 2) Principles of successful breastfeeding. 3) Measures to stimulate lactation and prevent hypogalactia . 4) Formulas for calculating the volume of food	**GPC** -2 (AI 2.2, 2.6) **GPC** -11 (AI 11.3,	Current Testing Frontal	5.2

	of life. Principles of mixed and artificial feeding. Nutrition of children over one year old.	for a 1-year-old child. 5) Features of feeding premature babies. 6) Time and technique for introducing complementary foods. 7) Reasons for transferring a child to mixed and artificial feeding. 8) Characteristics of milk formulas used for complementary feeding and artificial feeding. 9 **)** Nutrition of healthy children from 1 to 3 years old. Requirements for the food of children over 1 year old (volume, food groups, methods of culinary processing of products, taste and appearance of food, table setting, etc.). 10) Write out a recipe for a milk kitchen. **Practical part :** 1) Supervision of children in the first year of life who are on natural, artificial and mixed feeding. 2) Assessment of the correctness of feeding. 3) Introduction of complementary foods taking into account the child's age, calculation of the volume of food (daily, one-time). 4) Create a nutrition menu for the supervised child . 5) Recommendations to the mother on the prevention of hypogalactia . 6) Solving situational problems, completing assignments according to the sample, working with handouts, scientific medical and reference literature , the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	11.4) PC-2(AI 2.1 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-9 (AI 9.1, 9.3)	survey Interactive survey	
4	**Newborn baby. Prematurity. Diseases of newborns.**	**Theoretical part:** 1) Anatomical and physiological characteristics of the newborn. 2) Transitional states of the neonatal period. 3) Perinatal encephalopathy, causes, pathogenetic factors, classification, clinical syndromes, diagnostics, treatment, outcomes. 4) Hemolytic disease of the newborn, causes, pathogenesis, classification, clinical picture, diagnostics, treatment, prevention. 5) Intrauterine infections, classification, clinical features, diagnostics, treatment, prevention. Pneumonia of the newborn. 6) Bronchopulmonary dysplasia. 7) Purulent inflammatory diseases, sepsis. Etiology. Clinic. Diagnostics. Treatment. Remote consequences, prevention. 8) Risk groups of newborns, health groups. 9) Premature baby, children with extremely low body weight. Anatomical and physiological features, degrees of prematurity, causes of miscarriage, features of nursing, feeding, care, prognosis. **Practical part :** 1) Care of patients with consequences of perinatal encephalopathy, intrauterine infection. 2) Reinforcing skills in examining newborns, assessing their development. 3) Determining the risk group and health group of newborns. 4) Drawing up a plan for staged treatment and observation, preventive measures. 5) Solving situational problems, completing assignments according to the model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2

5	**anomalies . Atopic dermatitis. Immunodeficiency states.**	**Theoretical part:** 1) Peculiarities of the development of the immune system in children. 2) Anomalies of the constitution (diathesis) as a predisposition to the pathological process. 3) Neuroarthritic diathesis, etiopathogenesis, clinical picture, diagnostics, treatment, outcomes. 4) Lymphatic-hypoplastic diathesis, etiopathogenesis, clinical picture, diagnostics, treatment, outcomes. 5) Atopic dermatitis, etiopathogenesis, classification, clinical picture, diagnostics, treatment, prevention. 6) Immunodeficiency states, causes, classification, clinical picture, diagnostics, treatment, prevention. **Practical part :** 1) Supervision of patients with constitutional abnormalities, atopic dermatitis, immunodeficiency state with consolidation of skills in examination of skin, subcutaneous fat, mucous membranes, lymph nodes. 2) Solving situational problems, completing tasks according to the model, working with handouts, scientific medical and reference literature. 3) Write a prescription for an antihistamine	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
6	**Chronic nutritional disorders. Hypovitaminosis in children.**	**Theoretical part:** 1) The main etiological factors in the development of chronic eating disorders and hypovitaminosis. 2) Classification of chronic eating disorders and hypovitaminosis in children. 3) Criteria and algorithm for diagnosing chronic eating disorders (hypotrophy, hypostatura , paratrophy) and hypovitaminosis in children. 4) Differential diagnosis of chronic eating disorders with malabsorption syndrome, hereditary or congenital enzymopathies, endocrine diseases. 5) Basic principles of treatment, rational diet therapy and prevention of chronic eating disorders and hypovitaminosis in children. 6) Dispensary observation of children with chronic eating disorders and hypovitaminosis. **Practical part :** 1) Supervision of patients with hypotrophy, hypostatura , paratrophy , identification of signs of hypovitaminosis. 2) Identify in the anamnesis factors leading to the development of dystrophies and hypovitaminosis. 3) Diagnose the leading symptoms of dystrophies and hypovitaminosis. 4) Assess physical and psychomotor development, nutritional status, tissue turgor, elasticity, moisture of the skin. 5) Make a plan for diagnosis and treatment using the example of supervised patients. 6) Assess the correctness of the nutrition received by the child and if necessary, make adjustments. 7) Calculate nutrition depending on the degree of hypotrophy and paratrophy , the stage of treatment. 8) Make a plan of preventive measures at the stage of	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2

		dispensary observation. 9) Solving situational problems, completing tasks according to the sample, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) . . .			
7	**Rickets. Spasmophilia. Hypervitaminosis D.**	**Theoretical part:** 1) Rickets: etiopathogenesis, classification, clinical picture at different periods of the disease, diagnostics, differential diagnosis with rickets-like diseases, treatment, prevention, outcomes. 2) Hypervitaminosis D : causes, clinical picture, treatment, outcomes, prevention. 3) Spasmophilia, etiopathogenesis, clinical picture, emergency care. **Practical part :** 1) Supervision of patients with signs of rickets, rickets-like diseases with consolidation of skills of examination and assessment of the state of muscular and skeletal systems. 2) Evaluation of results of biochemical blood tests in order to clarify the period and severity of rickets. 3) Drawing up a treatment plan and preventive measures for the supervised patient. 4) Give recommendations for observation in the clinic. 5) Solving situational problems, completing assignments according to the sample , working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) . 6) Write a prescription for vitamin D.	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
8	**Iron deficiency anemia.**	**Theoretical part:** 1) Features of hematopoiesis in children. 2) Peripheral blood standards in children of different ages. 3) Iron deficiency anemia , causes, classification, main clinical syndromes, diagnostics, differential diagnosis with other types of anemia, treatment, diet features, prevention, dispensary observation. 4) Sideropenic syndrome. 5) Latent iron deficiency. **Practical part : 1)** Supervision of patients with iron deficiency anemia with consolidation of skills of examination of skin and its appendages. 2) Calculation of color index and assessment of level of hemoglobin, erythrocytes, reticulocytes . 3) Interpretation of parameters of iron metabolism (level of serum iron, ferritin , KNT, OTZHSS, LFSS). 4) Drawing up a plan of preventive and therapeutic measures for supervised patient, a plan of dispensary observation of children at risk. 5) Solving situational problems , performing tasks according to the sample, working with handouts, scientific medical and reference literature, standard of specialized medical care, Procedure of rendering medical care, clinical recommendations (protocols) . 6) Write a prescription for iron supplements.	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI D 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2

9	**Acute pneumonia and bronchitis in young children.**	**Theoretical part: 1)** Methods of examining the respiratory organs in children. 2) Pneumonia in children: etiology, pathogenesis, classification, features of the clinical course and radiological changes in pneumonia, taking into account the etiological characteristics (pneumococcus, proteus, pseudomonas aeruginosa, klebsiella, staphylococcus, chlamydia, mycoplasma), differential diagnosis, complications, treatment, indications for hospitalization, outcomes, prevention. 3) Bronchitis in children: etiology, classification , clinical picture, diagnostics, differential diagnosis (bronchiolitis), treatment, prevention. 4) Rehabilitation measures for bronchopulmonary pathology. **Practical part : 1)** Monitoring patients with pneumonia, bronchitis with consolidation of skills of physical examination (examination, percussion, auscultation) of respiratory organs taking into account the patient's age, examination of the pharynx and mucous membranes and assessment of the degree of respiratory failure. 2) Drawing up a plan of diagnostic, therapeutic and preventive measures for examined patients. 3) Draw up a plan of dispensary observation and rehabilitation measures for bronchopulmonary pathology in children. 4) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
10	**Control lesson on the section**	Checking the acquisition of competencies (testing, interviews on situational tasks).	**GPC** -1 (AI 1.1) **GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Rubicon	5.2
IX semester					

	Pathology of older children				
11	**Chronic bronchopulmonary diseases in children.**	**Theoretical part: 1)** Causes and factors contributing to the development of chronic bronchopulmonary pathology. 2) Congenital malformations of the bronchopulmonary system (clinic, diagnostics, differential diagnosis, treatment principles, medical examination, rehabilitation methods). 3) Cystic fibrosis (clinic, diagnostics, differential diagnosis, treatment principles, medical examination, rehabilitation methods, ethical aspects in hereditary pathology). 4) Hypersensitivity pulmonitis (fibrosing and exogenous allergic alveolitis) (clinic, diagnostics, differential diagnosis, treatment principles, medical examination, rehabilitation methods). 5) Chronic bronchitis (clinic, diagnostics, differential diagnosis, treatment principles, medical examination, rehabilitation methods) . **Practical part :** 1) Supervision of patients with chronic bronchopulmonary diseases with consolidation of skills of examination of the respiratory system and observance of ethical and deontological principles of work with patients suffering from chronic diseases. 2) Assessment of the functional state of external respiration in children with respiratory pathology. 3) Draw up a plan of dispensary observation and rehabilitation measures for chronic bronchopulmonary pathology in children. 4) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -5(AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
12	**Bronchial asthma.**	**Theoretical part: 1)** Bronchial asthma: etiology, pathogenesis, classification. 2) Peculiarities of the clinical picture and course of bronchial asthma in children, phenotypes of bronchial asthma. 3) Diagnostics and differential diagnostics of bronchial asthma. 4) Staged treatment of bronchial asthma, basic therapy, drugs of basic therapy. 5) Criteria of controlled bronchial asthma. 6) Prevention of exacerbations. 7) Medical examination, rehabilitation, work of asthma school. Forecast. **Practical part :** 1) Monitoring patients with bronchial asthma with consolidation of skills of physical examination of chest organs, evaluation of results of functional examination and chest radiographs. 2) Drawing up a plan of examination, staged treatment and preventive measures. 3) Providing emergency care for bronchial obstruction. 4) Drawing up a plan of dispensary observation and rehabilitation, recommendations for parents. 5) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2

		literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .			
13	**Vegetative dysfunction syndrome. Arterial hypertension. Rhythm and conduction disturbances.**	**Theoretical part: 1)** SVD: causes, classification, clinical features in children, diagnostics, differential diagnosis, treatment, prevention. 2) Arterial hypertension in children: causes, classification, clinical features in children, diagnostics, differential diagnosis, treatment, prevention. 3) Rhythm and conduction disorders in children: causes, classification, clinical features in children, diagnostics, differential diagnosis, treatment, prevention. **Practical part : 1)** Supervision of patients with SVD, rhythm and conduction disorders, hypertension with consolidation of skills of physical examination of the cardiovascular system and evaluation of ECG data, cardiac ultrasound, Holter monitoring . 2) Conducting a clinoorthostatic test. 3) Drawing up a treatment plan and preventive measures for the supervised patient. 4) Draw up a plan for dispensary observation of children with SVD, hypertension, rhythm and conduction disorders. 5) Relieve a hypertensive crisis (using a mannequin , in the simulation and certification center). 6) Solving situational problems, completing assignments according to the sample, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) . 7) Writing an educational case history for the supervised patient.	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
14	**Non-rheumatic carditis, infective endocarditis. Congenital heart defects.**	**Theoretical part: 1)** Non-rheumatic carditis: causes, pathogenetic mechanisms, classification, clinical course in children, diagnostics, differential diagnosis, treatment, prevention, follow-up. 2) Infective endocarditis: causes, pathogenetic mechanisms, clinical course in children, diagnostics, differential diagnosis, treatment, prevention, follow-up. 3) Congenital heart disease: causes, pathogenetic mechanisms, classification, clinical course in children, diagnostics, differential diagnosis, treatment, prevention, follow-up. **Practical part : 1)** Supervision of patients with congenital heart disease with consolidation of skills of physical examination of the cardiovascular system and evaluation of ECG, ultrasound, Holter monitoring data . 2) Drawing up a treatment plan and preventive measures for the supervised patient. 3) Give recommendations for dispensary observation in the clinic, rehabilitation. 4) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for	UC-9 (AI 9.1) **GPC** -1 (AI 1.1) **GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3)	Current Testing Frontal survey Interactive survey	5.2

		the provision of medical care, clinical recommendations (protocols) .	PC-12 (AI 12.1, 12.2)		
15	**Rheumatic fever in children. Juvenile rheumatoid arthritis. Systemic connective tissue diseases, systemic vasculitis .**	**Theoretical part: 1)** Rheumatic fever: etiopathogenetic mechanisms, features of the pathomorphological picture, classification of rheumatic fever, features of the clinical picture, variants of the course of rheumatic fever in children, major and minor diagnostic criteria of rheumatic fever, differential diagnosis, principles of staged treatment and prevention. 2) Systemic diseases of connective tissue in children: classification, features of the course of systemic lupus erythematosus, dermatomyositis, systemic scleroderma in children, diagnostic criteria of systemic lupus erythematosus, systemic scleroderma and dermatomyositis, antiphospholipid syndrome in the genesis of systemic connective tissue diseases, differential diagnosis of systemic connective tissue diseases, principles of treatment of systemic diseases, prognosis, primary and secondary prevention, medical, professional and psychological aspects of rehabilitation of patients with systemic connective tissue diseases. 3) Juvenile rheumatoid arthritis in children: classification, clinical features of the course of joint syndrome and visceral lesions in children, diagnostic criteria (clinical, laboratory, radiological, immunogenetic) of juvenile rheumatoid arthritis in children, differential diagnosis with reactive arthritis, osteochondropathy , dysmetabolic arthropathies , specific joint lesions (tuberculosis, yersiniosis , brucellosis), inflammatory diseases of periarticular tissues. Principles of treatment and prevention. Forecast. 4) Systemic Vasculitis in children. Hemorrhagic vasculitis, periarteritis nodosa. Clinical picture. Treatment principles. Medical examination and rehabilitation. **Practical part : 1)** Supervision of patients with consolidation of skills of examination of the musculoskeletal system. 2) Definition of diagnostic criteria using clinical, laboratory, instrumental data. 3) Establishment of possible etiological factors and leading pathogenetic mechanisms, degree of activity of rheumatic fever and degree of circulatory failure. 4) Drawing up a plan of staged treatment and preventive (primary and secondary) measures for the supervised patient. 5) Solving situational problems, performing tasks according to the model , working with handouts, scientific medical and reference literature, standard of specialized medical care, Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
16	**Kidney diseases in children:**	**Theoretical part:** 1) Pyelonephritis: etiopathogenesis, features of acute and chronic	**GPC** -5 (AI 5.2, 5.3, 5.4)	Current Testing Frontal	5.2

	pyelonephritis, glomerulonephritis . Acute and chronic renal failure.	pyelonephritis in young and older children; clinical syndromes of pyelonephritis; the concept of bacteriuria in children of different ages; diagnostic criteria for pyelonephritis; differential diagnosis of pyelonephritis with urinary tract infection, interstitial nephritis, glomerulonephritis , cystitis; complications of pyelonephritis. etiotropic and pathogenetic therapy of pyelonephritis; prevention; prognosis; rehabilitation; medical examination. 2) Glomerulonephritis : etiopathogenetic mechanisms of glomerulonephritis development; clinical and morphological classification of the disease; variants of glomerulonephritis course in children; diagnostic criteria of acute glomerulonephritis; criteria of transition of acute glomerulonephritis to chronic; differential diagnosis of glomerulonephritis with pyelonephritis, interstitial nephritis, hereditary nephritis, hereditary tubulopathies , renal amyloidosis; principles of treatment and prevention, clinical examination. 3) Acute and chronic renal failure: causes, classification; main diagnostic criteria; stages of acute renal failure; uremic coma, emergency care; modern methods of conservative therapy of chronic renal failure, indications for hemodialysis; plan of dispensary observation. **Practical part :** 1) Treatment of patients with acute and chronic pyelonephritis, urinary tract infection, dysmetabolic nephropathy with consolidation of the skills of examination of the urinary system. 2) Identification of the main clinical and laboratory syndromes that allow diagnosing renal pathology. 3) Identification of the role of congenital pathology (anatomical anomalies and malformations of the urinary system, metabolic disorders), infectious and other agents in the formation of the corresponding pathology. 4) Drawing up a plan for examination and treatment (regimen, diet , drugs), dispensary observation, rehabilitation. 5) Consolidation of the skills of interpreting urine tests, biochemical parameters (urea, creatinine , CF). 6) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	survey Interactive survey	
17	**Chronic diseases of the gastrointestinal tract in children: gastroduodenitis, peptic ulcer. Dysfunctions of the**	**Theoretical part:** 1) Acute and chronic gastritis, duodenitis: etiopathogenesis, features of the course in children, modern methods of diagnosis, treatment, prevention and rehabilitation. 2) Gastric ulcer and duodenal ulcer: etiopathogenesis, features of the course in children, modern methods of diagnosis, treatment, prevention and rehabilitation. 3) Gastroesophageal reflux disease: modern methods of clinical, instrumental and laboratory diagnostics; principles of treatment,	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4)	Current Testing Frontal survey Interactive survey	5.2

	hepatobiliary system. Irritable bowel syndrome. Chronic nonspecific colitis.	prevention and rehabilitation. 4) Dysfunctions of the hepatobiliary system: **etiology** , pathogenesis, differential diagnostic criteria of hyper- and hypokinetic forms of dysfunction, modern methods of diagnosis, differential diagnostics, principles of treatment, prevention, clinical examination and rehabilitation. 5) Irritable bowel syndrome: classification, differential diagnostic criteria, modern methods of diagnosis, differential diagnostics, principles of treatment, prevention, clinical examination and rehabilitation. 6) Chronic nonspecific colitis: features of the clinical picture and course in children, modern methods of diagnosis, treatment, issues of prevention, medical examination and rehabilitation in a polyclinic setting **Practical part :** 1) Treatment of patients with gastroduodenitis, peptic ulcer, hepatobiliary dysfunction , cholecystitis, dyspancreatism , irritable bowel syndrome, colitis with consolidation of gastrointestinal tract examination skills . 2) Determination of the main clinical syndromes of gastrointestinal tract lesions. 3) Establishment of possible etiological and predisposing factors in the development of gastrointestinal tract diseases. 4) Interpretation of data from laboratory, functional and instrumental examination methods for patients with gastrointestinal diseases . 5) Drawing up a treatment plan (diet, regimen, non-drug and drug therapy). 6) Drawing up a plan for dispensary observation, preventive and rehabilitation measures for supervised patients. 7) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)		
18	**Hemorrhagic diathesis. Leukemia. Leukemoid reactions. Lymphogranulomatosis.**	**Theoretical part:** 1) Types of bleeding, their characteristics. 2) Hemorrhagic diathesis (thrombocytopenic purpura, hemophilia): etiology, pathogenesis, classification, main clinical manifestations, features of the course in children, differential diagnostic criteria, principles of treatment, indications for splenectomy , prevention, medical examination, rehabilitation. 2) Hemoblastoses : etiopathogenesis, classification, main clinical and laboratory syndromes, treatment protocols, medical examination. 3) Leukemoid reactions: etiology, diagnostic criteria. 4) Lymphogranulomatosis: main diagnostic criteria, classification, diagnostic methods, differential diagnosis, treatment, medical examination. **Practical part :** 1) Supervision of patients with thrombocytopenia , hemophilia, thrombocytopathy , leukemoid reactions with	**GPC** -1 (AI 1.1) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4)	Current Testing Frontal survey Interactive survey	5.2

		consolidation of skills and abilities in examination of the skin, mucous membranes, lymph nodes, liver, spleen and implementation of ethical and deontological principles. 2) Conducting vascular-endothelial tests. 3) Determination of the main clinical and laboratory syndromes in supervised patients. 4) Conducting differential diagnostics for the leading clinical and laboratory syndromes. 5) Drawing up a plan of treatment and preventive measures. 6) Analysis of the educational medical history of a patient with acute lymphoblastic leukemia. 7) Solving situational problems, completing assignments using a sample, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .			
19	**Acute respiratory infections. Chickenpox. Infectious mononucleosis.**	**Theoretical part:** 1) Acute respiratory infections (influenza, parainfluenza , adenovirus infection, rhinovirus infection, respiratory syncytial virus infection): differential diagnostic criteria of acute respiratory viral infections, complications, laboratory diagnostics, treatment, prevention. 2) Acute obstructive laryngotracheitis: etiology, classification, clinical presentation, emergency care. 3) Chickenpox: etiology, clinical picture, complications, treatment, prevention. 4) Infectious mononucleosis: etiology, classification, diagnostic criteria, laboratory diagnostics, treatment, prevention. **Practical part : practicing the SIM "Acute stenosing laryngotacheitis " based on the SAC:** 1) Collecting anamnesis (parents). 2) Assessing the patient's condition with determination of the severity of laryngeal stenosis according to the Westley scale . 3) Algorithm for providing emergency care to a child with grade II laryngeal stenosis . 4) Assessing the effectiveness of therapy. 5) Solving situational problems, completing assignments according to the model, working with handouts , scientific medical and reference literature , the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI (1.1) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	5.2
20	**Control lesson on the section**	Checking the acquisition of competencies (testing, interviews on situational tasks).	UC-9 (AI 9.1) **GPC** -1 (AI 1.1) **GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3,	Rubicon	5.2

			2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)		
X semester					
Infectious diseases in children					
21	**Scarlet fever. Diphtheria. Whooping cough.**	**Theoretical part:** 1) Scarlet fever: etiopathogenesis, clinical presentation, features of the course in children, diagnostic criteria, treatment, prevention, measures at the site of infection, complications. 2) Diphtheria : etiopathogenesis, classification, features of the clinical presentation and course of diphtheria, differential diagnostics, rare forms of diphtheria, treatment and prevention, measures at the site of infection, criteria of true croup, emergency care. 3) Whooping cough: etiology, pathogenesis, classification, features of the clinical presentation in children, diagnostic criteria, complications, differential diagnostics, immunological diagnostic methods, principles of treatment and prevention. 4) Measures in relation to persons who have communicated with infectious patients in the family and a child care institution. **Practical part :** 1) Supervision of patients with cough syndrome with consolidation of skills of examination of respiratory system organs. 2) Analysis of educational case histories with consolidation of practical skills of assessment of rash, mucous membrane of tonsils, lymph nodes from a photo album and establishment of clinical diagnosis according to classification. 3) Drawing up a plan of anti-epidemic measures in the focus of diphtheria, scarlet fever, whooping cough. 4) Drawing up a plan of therapeutic measures for diphtheria, scarlet fever, whooping cough. 5) Drawing up a plan of active immunization against diphtheria, whooping cough in supervised patients. 6) Solving situational problems, completing assignments according to the sample, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4
22	**Measles. Rubella. Mumps.**	**Theoretical part:** 1) Measles: etiology, epidemiology, classification, clinical features, complications, differential diagnostics, immunological diagnostic methods, principles of treatment and prevention. 2) Rubella: etiology, epidemiology, classification, clinical features, complications, differential diagnostics, immunological	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -11 (AI 11.3, 11.4)	Current Testing Frontal survey Interactive survey	3.4

		diagnostic methods, principles of treatment and prevention. 3) Epidemic mumps: etiology, epidemiology, classification, clinical features, complications, differential diagnostics, immunological diagnostic methods, principles of treatment and prevention. 4) Measures regarding persons who have interacted with infectious patients in the family and in a child care institution. **Practical part :** 1) Monitoring patients with rashes, reinforcing the skills of examining the skin, mucous membranes, and lymph nodes. 2) Analysis of educational case histories, reinforcing practical skills of assessing rashes, mucous membranes of the tonsils, and lymph nodes using a photo album and establishing a clinical diagnosis using classification. 3) Drawing up a plan for anti-epidemic measures at the site of infection. 4) Drawing up a plan for therapeutic measures for measles, rubella, and mumps. 5) Drawing up a plan for active immunization against measles, rubella, and mumps. 6) Solving situational problems, completing assignments using a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the Provision of Medical Care, and clinical guidelines (protocols) .	PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)		
23	**Enterovirus infections. Poliomyelitis. Meningococcal infection.**	**Theoretical part: 1)** Enterovirus infections: etiology, epidemiology, clinical features in young children, treatment, prevention. 2) Poliomyelitis: etiology, pathogenesis, classification, clinical picture, variants of poliomyelitis course, diagnostic criteria, features of poliomyelitis in vaccinated people, differential diagnosis, complications and outcomes, principles of treatment and prevention. 3) Meningococcal infection: etiology, pathogenesis, classification, clinical forms and complications, differential diagnosis of meningococcal meningitis with meningitis of other etiologies, treatment, prevention . 4) Measures in relation to persons who have communicated with infectious patients in the family and a child care institution. **Practical part :** 1) Analysis of educational case histories with consolidation of practical skills of assessment of rash, mucous membranes, lymph nodes, neurological status from a photo album and establishment of clinical diagnosis according to classification. 2) Drawing up a plan of anti-epidemic measures in the center of infection. 3) Drawing up a plan of treatment measures for enterovirus infections, poliomyelitis, meningococcal infection. 4) Drawing up a plan of active immunization against meningococcal infection, poliomyelitis. 5) Solving situational problems, completing assignments according to the model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for	**GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4

		the provision of medical care, clinical recommendations (protocols) .			
24	**Acute and chronic viral hepatitis. Autoimmune hepatitis. Intestinal infections. Helminthiasis.**	**Theoretical part:** 1) Viral hepatitis: etiopathogenesis, classification, clinical picture, differential diagnosis of jaundice ; treatment, predictors of treatment effectiveness; prevention, outcomes, complications. 2) Autoimmune hepatitis: predisposing factors, clinical and diagnostic criteria, treatment, outcomes, medical examination. 3) Intestinal infections **(** dysentery, salmonellosis, escherichiosis , rotavirus infection) in children: features of the course of intestinal infections in young children, differential diagnosis with diarrhea of non-infectious genesis, treatment, prevention. 4) Work of the infectious diseases office (keeping medical records). 5) Intestinal toxicosis with exsicosis : classification by severity, features of the clinical picture in children , types of dehydration, emergency measures depending on the type of dehydration. 6) Helminthiasis: etiology, classification, clinical picture, diagnostics, treatment, prevention. **Practical part :** 1) Examination of convalescents in the kennel and work with educational case histories, consolidation of skills in examination of the gastrointestinal tract. 2) Drawing up a plan for observation, examination and treatment (diet, regimen, non-drug and drug therapy) with an assessment of predictors of treatment effectiveness in the kennel . 3) Drawing up a plan for anti-epidemic measures in the source of infection. 4) Solving situational problems, completing assignments according to the model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4
		Children's clinic			
25	**Organization of work of children's polyclinic. Comprehensive assessment of children's health.**	**Theoretical part:** 1) Tasks and structure of the children's clinic. 2) Regulatory documents governing the provision of medical care to children at the outpatient and polyclinic stage. 3) Comprehensive assessment of children's health. 4) Health groups, medical groups for physical education. 5) Risk groups for newborns. 6) Work of the healthy child's office. **Practical part :** 1) Examination of children with a comprehensive assessment of their health status, determination of their health group and preparation of a plan for dispensary observation. 2) Solving situational problems, completing tasks according to a sample, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -2 (AI 2.2, 2.6) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4
26	**Outpatient**	**Theoretical part:** 1) Rehabilitation: types and methods of	**GPC** -2 (AI 2.2, 2.6)	Current	3.4

	observation and rehabilitation of children with chronic diseases	rehabilitation, basic principles and forms of organizing rehabilitation of children with chronic diseases in a polyclinic setting. 2) Outpatient observation of children with pathologies of the respiratory system, cardiovascular system, digestion, urinary system, blood diseases. **Practical part :** 1) Monitoring patients with chronic pathology with consolidation of skills in monitoring children with chronic pathology, assessment of factors influencing the chronicity of pathological processes. 2) Drawing up a rehabilitation plan for children with chronic diseases. 3) Determining indications and contraindications in observed children for spa treatment (local and specialized resorts). 4) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature , the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Testing Frontal survey Interactive survey	
27	**Frequently ill children. Prevention of morbidity in children and adolescents (primary, secondary, tertiary). Vaccine prevention.**	**Theoretical part:** 1) Frequently ill children: definition, clinical variants, dispensary observation, rehabilitation. 2) Prevention of morbidity in children and adolescents (primary, secondary, tertiary). 3) Vaccination: vaccination, national calendar of preventive vaccinations . post -vaccination reactions and complications, the importance of vaccination in preventing vaccine-preventable infections. **Practical part :** 1) Examination of children before vaccination with consolidation of skills of examination of organs and systems. 2) Supervision of frequently ill children with preparation of a plan of observation and preventive vaccinations. 3) Solving situational problems, completing tasks according to the model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -2 (AI 2.2, 2.6) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4
28	**Work of the medical and social department. Observation of disabled children** .	**Theoretical part:** 1) Medical and social department: tasks, functions, organization of work 2) Medical documents regulating the rights of disabled children. 3) The procedure for referring children to the Medical and Social Expertise, grounds for recognizing a child as disabled. 4) Definition of the concept of " habilitation ". 5) Directions (medical, psychological and pedagogical, professional, social) and types of rehabilitation and habilitation of disabled children. 6) Stages (recovery, socialization or resocialization , social integration or reintegration) of the rehabilitation process of a disabled child . **Practical part :** 1) Supervision of disabled children with consolidation of skills in determining the grounds for recognizing a child as disabled **.** 2) Drawing up a plan of rehabilitation measures for disabled children . 3) Patronage of children observed in the medical and social	UC-9 (AI 9.1) **GPC** -1 (AI 1.1) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4

		department. 4) Solving situational problems, completing tasks according to a model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .			
29	**Medical care for children and adolescents in preschool educational institutions**	**Theoretical part:** 1) Medical support for preschoolers: rules for registering a child in a preschool educational institution, preparing children for entering school, determining a child's readiness for school. 2) Medical support for schoolchildren: organizing medical examinations, issues of adaptation and maladaptation , organizing classes, medical supervision of physical and labor education, student nutrition, medical and professional counseling. **Practical part :** 1) Examination of children in preschool and school institutions with consolidation of skills in determining the adaptation of children and adolescents to general educational institutions 2) Drawing up a plan for medical-psychological-pedagogical correction of disorders in the health of children of school and preschool age. 3) Solving situational problems, completing assignments according to the model, working with handouts, scientific medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) .	**GPC** -2 (AI 2.2, 2.6) **GPC** -11 (AI 11.3, 11.4) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Current Testing Frontal survey Interactive survey	3.4
30	**Control lesson by sections. Final testing in the discipline**	Checking the acquisition of competencies (testing, interviews on situational tasks).	UC-9 (AI 9.1) **GPC** -1 (AI 1.1) **GPC** -2 (AI 2.2, 2.6) **GPC** -5 (AI 5.2, 5.3, 5.4) **GPC** -8 (AI 8.2, 8.3) **GPC** -11 (AI 11.3, 11.4) PC-1 (AI 1.1, 1.2) PC-2 (AI 2.1, 2.2, 2.3, 2.4, 2.5) PC-3 (AI 3.1, 3.4) PC-5 (AI 5.2, 5.3) PC-9 (AI 9.1, 9.3) PC-12 (AI 12.1, 12.2)	Rubicon	3.4

2. 4. Interactive forms of learning

In order to activate students' cognitive activity, interactive teaching methods (discussions, interactive surveys, classes in the SAC, etc.) are widely used in practical classes.

Item No.	Topic practical classes , lectures	Labor intensity in hours	Interactive form training	Labor intensity in hours, in % of the lesson
1	2	3	4	5
VIII semester				
1	Organization and principles of work of children's hospital. Collection of anamnesis. Methods of examination of a child.	5.2	Interactive survey	30 minutes (0.52 hours) / 10%
2	Physical and neuropsychic development of children.	5.2	Peer review of notes	30 minutes (0.52 hours) / 10%
3	Feeding a healthy baby in the first year of life. Principles of mixed and artificial feeding. Nutrition of children over one year old.	5.2	Brainstorming.	30 minutes (0.52 hours) / 10%
4	Newborn baby. Prematurity. Diseases of newborns.	5.2	Small group method	30 minutes (0.52 hours) / 10%
5	Constitutional anomalies. Atopic dermatitis. Immunodeficiency states.	5.2	Interactive survey	30 minutes (0.52 hours) / 10%
6	Chronic nutritional disorders. Hypovitaminosis in children.	5.2	Role play	30 minutes (0.52 hours) / 10%
7	Rickets. Spasmophilia. Hypervitaminosis D.	5.2	Peer review of notes	30 minutes (0.52 hours) / 10%
8	Iron deficiency anemia.	5.2	Brainstorming.	30 minutes (0.52 hours) / 10%
9	Acute pneumonia and bronchitis in young children.	5.2	Role play	30 minutes (0.52 hours) / 10%
10	Control lesson on the section	5.2	Defense of a clinical case study	30 minutes (0.52 hours) / 10%
IX semester				
11	Chronic bronchopulmonary diseases in children.	5.2	Interactive survey.	30 minutes (0.52 hours) / 10%
12	Bronchial asthma.	5.2	Brainstorming	30 minutes (0.52 hours) / 10%
13	Vegetative dysfunction syndrome. Arterial hypertension. Rhythm and conduction disorders.	5.2	Computer simulations Work on a simulator, a dummy	30 minutes (0.52 hours) / 10%
14	Non-rheumatic carditis, infective endocarditis. Congenital heart defects.	5.2	Interactive survey.	30 minutes (0.52 hours) / 10%
15	Rheumatic fever in children. Juvenile rheumatoid arthritis. Systemic connective tissue diseases, systemic vasculitis .	5.2	Role play	30 minutes (0.52 hours) / 10%
16	Kidney diseases in children: pyelonephritis, glomerulonephritis . Acute and chronic renal failure.	5.2	Small group method.	30 minutes (0.52 hours) / 10%
17	Chronic gastrointestinal diseases in children: gastroduodenitis, peptic ulcer. Dysfunctions of the	5.2	Peer review of notes	30 minutes (0.52 hours) / 10%

	hepatobiliary system. Irritable bowel syndrome. Chronic nonspecific colitis.			
18	Hemorrhagic diathesis. Leukemia. Leukemoid reactions. Lymphogranulomatosis.	5.2	Interactive survey	30 minutes (0.52 hours) / 10%
19	Acute respiratory infections. Chickenpox. Infectious mononucleosis.	5.2	Computer simulations Work on a simulator, a dummy	30 minutes (0.52 hours) / 10%
20	Control lesson on the section	5.2	Defense of the educational medical history	30 minutes (0.52 hours) / 10%
X semester				
21	Scarlet fever. Diphtheria. Whooping cough.	3.4	Role play	20 minutes (0.32 hours) / 10%
22	Measles. Rubella. Mumps.	3.4	Role play	20 minutes (0.32 hours) / 10%
23	Enterovirus infections. Poliomyelitis. Meningococcal infection.	3.4	Interactive survey.	20 minutes (0.32 hours) / 10%
24	Acute and chronic viral hepatitis. Autoimmune hepatitis. Intestinal infections. Helminthiasis.	3.4	Peer review of notes	20 minutes (0.32 hours) / 10%
25	Organization of work of children's polyclinic. Comprehensive assessment of children's health.	3.4	Small group method	20 minutes (0.32 hours) / 10%
26	Outpatient observation and rehabilitation of children with chronic diseases.	3.4	Brainstorming	20 minutes (0.32 hours) / 10%
27	Frequently ill children. Prevention of morbidity in children and adolescents (primary, secondary, tertiary). Vaccine prevention.	3.4	Role play	20 minutes (0.32 hours) / 10%
28	Work of the medical and social department. Observation of disabled children.	3.4	Working with the child's developmental history	20 minutes (0.32 hours) / 10%
29	Medical care for children and adolescents in preschool educational institutions.	3.4	Working with children in a kindergarten group	20 minutes (0.32 hours) / 10%
30	Control lesson by sections	3.4	Defense of a clinical case study	20 minutes (0.32 hours) / 10%

2.5 . Criteria for assessing students' knowledge

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria:

- completeness and correctness:
- correct, precise answer;
- correct but incomplete or imprecise answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors;
- minor errors;

– shortcomings.

Distribution of marks in practical classes

VIII semester

No. p /p	Topic of the practical lesson	Theoretical part	Practical part	Overall rating
1	Organization and principles of work of children's hospital. Collection of anamnesis. Methods of examination of a child.	2-5	2-5	2-5
2	Physical and neuropsychic development of children.	2-5	2-5	2-5
3	Feeding a healthy baby in the first year of life. Principles of mixed and artificial feeding. Nutrition of children over one year old.	2-5	2-5	2-5
4	Newborn baby. Prematurity. Diseases of newborns.	2-5	2-5	2-5
5	Constitutional anomalies. Atopic dermatitis. Immunodeficiency states.	2-5	2-5	2-5
6	Chronic nutritional disorders. Hypovitaminosis in children.	2-5	2-5	2-5
7	Rickets. Spasmophilia. Hypervitaminosis D.	2-5	2-5	2-5
8	Iron deficiency anemia.	2-5	2-5	2-5
9	Acute pneumonia and bronchitis in young children.	2-5	2-5	2-5
10	**Control lesson on the section**	2-5	2-5	2-5

IX semester

No. p /p	Topic of the practical lesson	Theoretical part	Practical part	Overall rating
1	Chronic bronchopulmonary diseases in children.	2-5	2-5	2-5
2	Bronchial asthma.	2-5	2-5	2-5
3	Vegetative dysfunction syndrome. Arterial hypertension. Rhythm and conduction disorders.	2-5	2-5	2-5
4	Non-rheumatic carditis, infective endocarditis. Congenital heart defects.	2-5	2-5	2-5
5	Rheumatic fever in children. Juvenile rheumatoid arthritis. Systemic connective tissue diseases, systemic vasculitis .	2-5	2-5	2-5
6	Kidney diseases in children: pyelonephritis, glomerulonephritis . Acute and chronic renal failure.	2-5	2-5	2-5
7	Chronic gastrointestinal diseases in children: gastroduodenitis, peptic ulcer. Dysfunctions of the hepatobiliary system. Irritable bowel syndrome. Chronic nonspecific colitis.	2-5	2-5	2-5
8	Hemorrhagic diathesis. Leukemia. Leukemoid reactions. Lymphogranulomatosis.	2-5	2-5	2-5
9	Acute respiratory infections.	2-5	2-5	2-5

	Chickenpox. Infectious mononucleosis.			
10	**Control lesson on the section**	2-5	2-5	2-5
	Study medical history			2-5

X semester

No. p /p	Topic of the practical lesson	Theoretical part	Practical part	Overall rating
1	Scarlet fever. Diphtheria. Whooping cough.	2-5	2-5	2-5
2	Measles. Rubella. Mumps.	2-5	2-5	2-5
3	Enterovirus infections. Poliomyelitis. Meningococcal infection.	2-5	2-5	2-5
4	Acute and chronic viral hepatitis. Autoimmune hepatitis. Intestinal infections. Helminthiasis.	2-5	2-5	2-5
5	Organization of work of children's polyclinic. Comprehensive assessment of children's health.	2-5	2-5	2-5
6	Outpatient observation and rehabilitation of children with chronic diseases.	2-5	2-5	2-5
7	Frequently ill children. Prevention of morbidity in children and adolescents (primary, secondary, tertiary). Vaccine prevention.	2-5	2-5	2-5
8	Work of the medical and social department. Observation of disabled children.	2-5	2-5	2-5
9	Medical care for children and adolescents in preschool educational institutions.	2-5	2-5	2-5
10	Control lesson by sections	2-5	2-5	2-5

Assessment scales for current/midterm/intermediate knowledge control

The success of students in mastering the discipline (topics/sections), practical skills and abilities is characterized by a qualitative assessment and is assessed on a 5-point system: “5” - excellent, “4” - good, “3” - satisfactory, “2” - unsatisfactory.

Test control evaluation criteria
"5" excellent - 90-100% correct answers
"4" is good - 80-89% correct answers
"3" satisfactory - 70-79% correct answers
“2” is unsatisfactory – less than 70% of correct answers.

Note : when passing the final and midterm test control for a discipline on the unified educational portal in the Moodle system , a student must score at least 80% correct answers to receive a positive grade.

Assessment criteria (grades) of the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones , express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers.

"4" - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing, allows up to 20% of erroneous answers.

"3" - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; when tested, allows up to 30% of erroneous answers.
"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers when tested.

Assessment criteria for the practical part

"5" - the student supervises a subject patient on a daily basis, has fully mastered the practical skills and abilities provided for by the course work program (correctly interprets the patient's complaints, anamnesis, objective examination data, formulates a clinical diagnosis, prescribes examination and treatment, interprets clinical, laboratory and instrumental indicators taking into account the norm).
"4" – the student supervises the subject patient on a daily basis, has fully mastered the practical skills and abilities provided for by the course work program, but allows for some inaccuracies.
"3" - the student does not regularly supervise the patient; the student has only some practical skills and abilities.
"2" - the student has visited the supervised patient less than 4 times, performs practical skills and abilities with gross errors.

Criteria for evaluation of educational medical history

"5" – preparation of the educational medical history in accordance with the requirements.
"4" - in the student's medical history, the student makes some inaccuracies in the formulation of a detailed clinical diagnosis, examination and treatment.
"3" - the medical history is filled with errors, written in illegible handwriting, there are inaccuracies in the formulation of the detailed clinical diagnosis, treatment, the pathogenesis of the disease is not fully covered.
"2 " - the medical history is written in illegible handwriting, with gross errors (a detailed clinical diagnosis is not made and not substantiated, treatment is not prescribed correctly, the pathogenesis of the disease is not covered.

Working off disciplinary debts

If a student misses a class for a valid reason, he/she has the right to make it up and receive the maximum grade provided for by the course work program for that class. A valid reason must be documented.

If a student misses a class for an unjustified reason or receives a "2" mark for all activities in the class, he/she is required to make it up. In this case, the mark received for all activities is multiplied by 0.8.

If a student is excused from a class at the request of the dean's office (participation in sports, cultural and other events), then he is given a grade of "5" for this class, provided that he submits a report on the completion of mandatory extracurricular independent work on the topic of the missed class.

Assessment criteria for midterm assessment

Interim certification is carried out in 2 stages:
1. Test control in the " Moodl e " system.
2. Answers to examination tickets.

Criteria for final assessment (midterm assessment)

Excellent - for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones , to express and justify their judgments, to correctly and logically present the answer; when testing, allows up to 10% of erroneous answers.

"Good" - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing, allows up to 20% of erroneous answers.
"Satisfactory" - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; during testing, allows up to 30% of erroneous answers.
"Unsatisfactory" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers during testing.

A student can claim to receive an "excellent" grade automatically if he/she has won a prize in disciplinary or interdisciplinary Olympiads (university, regional) and has an average grade for the current academic performance of at least 4.8 points **.** A student can refuse the "automatic" grade and take an exam or test together with a group on a general basis.

2.6 Independent work of students: in-class and out-of-class

The main didactic tasks of independent work of students under the guidance of a teacher: consolidation of knowledge and skills acquired in the process of studying the academic discipline in lectures and practical classes; prevention of their forgetting; expansion and deepening of educational material; formation of the ability and skills of independent work; development of independence of thinking and creative abilities of students.

Independent classroom work of 4th-5th year students of the Faculty of Medicine

Independent classroom work of students makes up 25% of the time allocated for the lesson. Classroom work includes **:** the main didactic tasks of independent work of students under the guidance of the teacher: consolidation of knowledge and skills acquired during the study of the academic discipline in lectures and practical classes; prevention of their forgetting; expansion and deepening of the educational material; formation of the ability and skills of independent work; development of independent thinking and creative abilities of students.

The students' classroom work includes: checking their current knowledge on the topic of the practical lesson in the form of an oral or written survey, test control, solving situational problems, interpreting laboratory and instrumental indicators, drawing up an examination and treatment plan. Familiarization with the department's available methodological manuals, tables, diagrams, stands, tablets. Supervision of patients and preparation of the educational medical history, practicing practical skills and abilities in the SAC. Individual work with the development and implementation of practical skills.

1. Supervision of thematic patients.
2. Drawing up an examination plan and treatment regimens for patients with various pathologies.
3. Development of algorithms for differential diagnostics of various diseases.
4. Determination of risk groups and health groups of children.
5. Comprehensive assessment of children's health status.
6. Working with centile tables, conducting an assessment of genealogical, social, and biological history.
7. Writing educational case histories.
8. Drawing up a plan for dispensary observation and rehabilitation in a polyclinic setting.
9. Conducting functional stress tests.
10. Drawing up and solving situational problems.
11. Calculation of dosages of essential drugs used in pediatrics.
12. Registration of stage epicrisis and diaries of supervision in medical records.
13. Calculation of nutrition for healthy children.
14. Calculation of nutrition for children with health problems.
15. Drawing up a nutritional plan for a child with a background condition.

16. Watching educational videos, educational computer programs.
17. Working with documentation in the section "Outpatient pediatrics", studying methodological recommendations, information letters of the Ministry of Health of the Russian Federation.
18. Working in a healthy child's office.
19. Drawing up a plan for anti-epidemic measures in the center of infection.
20. Drawing up a vaccination plan for different periods of childhood.
21. Conducting health education talks with children and parents.
22. Writing and evaluating laboratory parameters for various diseases.
23. Drawing up a plan for monitoring children and adolescents in the medical and social department.
24. Drawing up a plan of activities for monitoring and career guidance of a disabled child.

From 1/4 to 1/2 of the practical lesson time is allocated for independent work of students: conducting research, recording results, discussing them, formulating conclusions, completing individual assignments. The preparatory stage, or the formation of an approximate basis for actions, begins for students outside of class time when preparing for the practical lesson, and ends in class.

All subsequent stages are carried out in class. The stage of materialized actions (solving problems using an algorithm or without an algorithm, with an unknown answer in advance) is carried out independently. The teacher, if necessary, provides consultation, provides assistance and simultaneously monitors the quality of students' knowledge and their ability to apply existing knowledge to solve assigned problems.

The following can be used as the main forms of extracurricular independent work: studying the main and additional educational and scientific literature; solving situational problems, test assignments, working in an Internet class; preparing oral reports; writing an educational case history . This type of educational activity should be based on the students' activity, initiative, consciousness, self-organization and creativity.

Extracurricular independent work of students

№ p /p	Topic of clinical practical lesson	Time for student preparation for the lesson	Forms of extracurricular independent work of students	
			Mandatory and the same for all students	At the student's choice
1	2	3	4	5
1	Organization and principles of work of children's hospital. Collection of anamnesis. Methods of examination of a child.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Computer presentation, report on the topic Methodology of examination of lymph nodes
2	Physical and neuropsychic development of children.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Computer presentation, report on the topic: Delay in physical and neuropsychic development in children
3	Feeding a healthy baby in the first year of life. Principles of mixed and artificial feeding. Nutrition of children over one year old.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Computer presentation, report on the topic: Nutrition of pregnant women and nursing mothers

4	Newborn baby. Prematurity. Diseases of newborns.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Abstract review or computer presentation on the topic: Peculiarities of nursing children with extremely low body weight
5	Constitutional anomalies. Atopic dermatitis. Immunodeficiency states.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Abstract review or computer presentation on the topic: Features of skin care in children with atopic dermatitis
6	Chronic nutritional disorders. Hypovitaminosis in children.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Abstract review or computer presentation on the topic: Hypovitaminosis in children
7	Rickets. Spasmophilia. Hypervitaminosis D.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Abstract review or computer presentation on the topic: Rickets-like diseases in children
8	Iron deficiency anemia.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Abstract review or computer presentation on the topic: Hemolytic anemia in children
9	Acute pneumonia and bronchitis in young children.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes, diagrams, algorithms, etc.), solving a test task (in writing), completing a workbook, preparing to write an essay, working in an online class .	Abstract review or computer presentation on the topic: Respiratory failure in children
10	Control lesson on the section	5	Preparation for the test, workbook preparation, preparation for the defense of a clinical case study	
11	Chronic bronchopulmonary diseases in children.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, drawing up notes, diagrams, algorithms, etc.), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Congenital malformations of the respiratory system in children
12	Bronchial asthma.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, drawing up notes, diagrams, algorithms, etc.), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Hypersensitivity pneumonitis
13	Vegetative dysfunction syndrome. Arterial hypertension. Rhythm and conduction disorders.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Preparation of a presentation on the topic Symptomatic arterial hypertension

14	Non-rheumatic carditis, infective endocarditis. Congenital heart defects.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Congenital carditis
15	Rheumatic fever in children. Juvenile rheumatoid arthritis. Systemic connective tissue diseases, systemic vasculitis .	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Reactive arthritis in children
16	Kidney diseases in children: pyelonephritis, glomerulonephritis . Acute and chronic renal failure.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Alport syndrome
17	Chronic gastrointestinal diseases in children: gastroduodenitis, peptic ulcer. Dysfunctions of the hepatobiliary system. Irritable bowel syndrome. Chronic nonspecific colitis.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Dyspancreatism in children
18	Hemorrhagic diathesis . Leukemia. Leukemoid reactions. Lymphogranulomatosis.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: thrombocytopathy in children
19	Acute respiratory infections. Chickenpox. Infectious mononucleosis.	4	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Specific prevention of ARI
20	Control lesson on the section	5	Preparation for the test, preparation of the medical history, workbook, preparation for the defense of the medical history	
21	Scarlet fever. Diphtheria. Whooping cough.	2	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Complications of angina infections Abstract review or computer presentation on the topic:
22	Measles. Rubella. Mumps.	2	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: The course of rash infections at the present stage
23	Enterovirus infections. Poliomyelitis. Meningococcal infection.	2	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Prevention of neuroinfections
24	Acute and chronic viral hepatitis.	2	Preparation on theoretical issues (lecture reading, primary and secondary literature,	Abstract review or computer presentation on the topic:

	Autoimmune hepatitis. Intestinal infections. Helminthiasis.		methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Prevention of intestinal infections and helminthiasis in children
25	Organization of work of children's polyclinic. Comprehensive assessment of children's health.	2	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: The state of health of children at the present stage
26	Outpatient observation and rehabilitation of children with chronic diseases.	2	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Sanatorium and resort treatment of children with chronic pathology
27	Frequently ill children. Prevention of morbidity in children and adolescents (primary, secondary, tertiary). Vaccine prevention.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Modern domestic and foreign vaccination prevention
28	Work of the medical and social department. Observation of disabled children.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Rehabilitation of disabled children
29	Medical care for children and adolescents in preschool educational institutions.	3	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, writing notes), solving a test task (in writing), working in an online classroom .	Abstract review or computer presentation on the topic: Health-saving technologies in preschool educational institutions
30	Control lesson by sections	3	Preparation for the test, preparation of the medical history, workbook, preparation for the defense of the medical history	
Total labor intensity (in hours)		96	72	24

2.7. Research (project) work

Organization of students' research (project) work (SRW) is carried out in accordance with the "Regulations on the research work of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy". Research (project) work is a mandatory section of the discipline and is aimed at the comprehensive formation of general cultural and professional competencies of students and provides for the study of specialized literature and other scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge, participation in scientific research, etc. The topics of SRW can be chosen by students independently in consultation with the teacher or from the list below (taking into account the scientific direction of the department).

Sample research topics:

1. The health status of schoolchildren at the present stage.
2. Minor anomalies in the development of the heart in children.
3. Congenital anomalies of the urinary system in children.
4. Atopic dermatitis.
5. Feeding children up to one year.
6. Iron deficiency conditions in children.

7. Iodine deficiency conditions in children.
8. Vegetative-vascular dysfunction in children and adolescents.
9. Psychological adaptation of children and adolescents in preschool educational institutions
10. Irritable bowel syndrome.
11. Helminthiasis in children
12. Physical development indicators in children in the Amur region

The student can present the results of these studies at meetings and the final conference of the Student Scientific Society, at conferences; and publish them in a scientific and practical publication.

3. EDUCATIONAL, METHODOLOGICAL, MATERIAL, TECHNICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE

3.1 Main literature:
1. Children's diseases: edited by Baranov A.A. Textbook. - M.: "GEOTAR-Media", 2012.-1008s.
2. Kildiyarova , R. R. Children's diseases : textbook / edited by Kildiyarova R. R. - Moscow: GEOTAR-Media, 2021. - 800 p. - ISBN 978-5-9704-5964-5. - Text: electronic (date accessed: 05/04/2021). - Access mode : by subscription. http://www.studmedlib.ru/book/ISBN9785970459645.html
3. Geppe , N. A. Children's diseases : textbook / Geppe N. A. - Moscow: GEOTAR-Media, 2018. - 760 p. - ISBN 978-5-9704-4470-2. - Text : electronic (date accessed: 04.05.2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970444702.html
3.2 Further reading:
1. Kildiyarova , R. R. Physical examination of a child / R. R. Kildiyarova , Yu. F. Lobanov, T. I. Legonkova - Moscow : GEOTAR-Media, 2018. - 264 p. - ISBN 978-5-9704-4303-3. - Text: electronic (date accessed: 05/04/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970443033.html
2. Kildiyarova, R. R. Outpatient and emergency pediatrics : textbook / Kildiyarova R. R., Makarova V. I. - Moscow: GEOTAR-Media, 2021. - 496 p. - ISBN 978-5-9704-6082-5. - Text: electronic (date accessed: 12.05.2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970460825.html
3. Infectious diseases in children: a textbook/edited by E.N.Simovani. - 2nd edition , revised and enlarged. - Rostov n / Don: "Phoenix", 2011. - 767 p. - 2 copies.
4. Outpatient and emergency pediatrics: textbook/edited by A.S. Kalmykova . - M.: GEOTAR-Media, 2013.-896 p.
5. Pediatric cardiology and rheumatology: practical manual /edited by L.M. Belyaeva. - M.: OOO "MIA", 2011.-584 p .
6. Pediatric gastroenterology: manual /edited by T.G. Avdeeva et al. - M.: GEOTAR-Media, 2011.-192 p.
7. Pediatric nephrology: a manual for doctors/edited by M.S. Ignatova. - 3rd ed., revised and enlarged. - M.: OOO "MIA", 2011. - 696 p.: ill.

3.3. Educational and methodological support of the discipline, prepared by the staff of the department

Textbooks with the stamp (Coordinating Council for the field of education "Healthcare and Medical Sciences"):

Health resort care for children	Shamraeva V.V., Kholodok L.G., Romantsova E.B., Kholodok O.A. - 105 p.	2009
Connective tissue dysplasia in children and adolescents	Babtseva A.F., Shanova O.V., Boychenko T.E., Arutyunyan K.A., Romantsova E.B. - 110 p.	2010

Medical genetics	Babtseva A.F., Yutkina O.S., Romantsova E.B. - 166 p.	2012

Electronic and digital technologies:

1. Online course on the subject "Pediatrics" in the EIS FGBOU VO Amur State Medical Academy
Access mode for the section Pathology of young children (8th semester): https://educ-amursma.ru/course/view.php?id=543
Access mode for the section Pathology of older children (9th semester): https://educ-amursma.ru/course/view.php?id=544
Access mode for the section Infectious diseases in children (10th semester): https://educ-amursma.ru/course/view.php?id=547
Access mode for the Children's Clinic section (10th semester): https://educ-amursma.ru/course/view.php?id=545

2. Electronic teaching aid "Development of early childhood" Authors: K.A. Harutyunyan, E.L. Chupak, O.V. Shanova . 2021
https://educ-amursma.ru/course/view.php?id=543#section-4

3. Multimedia presentations (Microsoft PowerPoint 2016), for lecture-type classes, according to the thematic lecture plan:
Access mode for the section Pathology of young children (8th semester): https://educ-amursma.ru/course/view.php?id=543
Access mode for the section Pathology of older children (9th semester): https://educ-amursma.ru/course/view.php?id=544
Access mode for the section Infectious diseases in children (10th semester): https://educ-amursma.ru/course/view.php?id=547
Access mode for the Children's Clinic section (10th semester): https://educ-amursma.ru/course/view.php?id=545

4. Videos used in teaching students

1. "Methodology for studying a healthy and sick child"
2. "Examination of the respiratory organs in young children"
3. "Examination of the digestive system in children"
4. "Urinary system"
5. "Physical and neuropsychic development of children"
6. "Feeding a healthy child in the first year of life"
7. "All about newborn care"
8. "Examination of the newborn"
9. "Neurological problems in young children"
10. "Neurological examination of the newborn"
11. "The child was born. Examination of the child"
12. “Cystic fibrosis”
13. "Bronchial asthma in children"
14. "Immune thrombocytopenic purpura"
15. "First aid for bleeding"
16. Dermatomyositis in children"
17. Systemic lupus erythematosus»
18. "Scleroderma"
19. "Modern methods of prevention of meningococcal infection" (video lecture)
20. "Chickenpox"
21. "Infectious mononucleosis"
22. "Whooping cough in children"
23. "Measles"
24. "Meningitis"
25. "Meningococcal infection"
26. "Polio"

27. "Scarlet fever"
28. "Epidemic Mumps"
29. "Croup in Children"
30. "Parasites"

Educational and visual aids for lecture-type classes and practical classes

Name, title	View	Number of copies
Presentations on the topics of classes, lectures	CD Flash Card	27
Educational histories of sick children. Extracts from medical histories	Pech .	27
A set of chest X-rays, excretory urograms	X-ray images	14
A set of laboratory diagnostic results: clinical, biochemical, immunological blood and urine tests, bacteriological examination.	Pech .	More than 50
ECG kit	Pech .	16
Collections of articles from journals and medical newspapers on the topics studied	Pech .	More than 50
Selection of handouts in the form of an information block on all topics studied	Pech .	27

3.4. Equipment used for the educational process

№ p /p	Name	Quantity
1	Head of Department's Office	1
	Table	2
	Chairs	16
	Bookshelf	5
2	Assistant	1
	Table	3
	Chairs	4
	Bookshelf	2
	Wardrobe	1
3	Study room #1-6	6
	Table	27
	Chairs	111
	Stands	9
	Board	3
	Bookshelf	8
	Wardrobe	1
	Couch	1
	Visual aids	49
	Screen	1
4	Personal computer	1
5	Laptop	1
6	Multimedia video projector	2
7	Screen	1
8	printer/copier	1
9	Equipment of the laboratory of the State Autonomous Healthcare Institution of the Arkhangelsk Region City Clinical Hospital	

	(clinical, immunological) Equipment of the functional diagnostics department of the State Autonomous Healthcare Institution of the Arkhangelsk Region City Clinical Hospital Equipment of the X-ray room of the State Autonomous Healthcare Institution of the Arkhangelsk Region, the Children's City Clinical Hospital Departments of the State Autonomous Healthcare Institution of the Arkhangelsk Region Children's City Clinical Hospital: pediatrics, day hospital, neurology, orthopedics, restorative and rehabilitation treatment	
10	Classrooms #21, #23 for conducting simulation classes Equipment: conference table – 1 pc., chairs – 18 pcs., video monitoring and recording system for the simulation training process – 1 pc., cabinet – 1 pc. Equipment: RDM-01 stadiometer - 1 pc., electronic medical scales "Malysh" - 1 pc., patient simulator with a heart rhythm simulator (simulates a child up to one year old) - 1 pc., medical bed - 2 pcs., changing table - 4 pcs., medical table 1 pc., chair - 2 pcs., doll for training in caring for a female infant with an umbilical cord - 1 pc., doll for training in caring for a male infant with an umbilical cord - 1 pc., patient care mannequin (child 6-7 years old with the ability to connect stimulators) - 1 pc., mannequin with the ability to simulate auscultatory picture of heart and lung diseases in children - 1 pc., patient care mannequin (infant with the ability to connect stimulators) - 1 pc., multifunctional robot simulator of a child patient with a system for monitoring the main vital signs (child 5 years) - 1 pc., video monitoring and recording system for the simulation training process – 1 pc.	**2**

Dummies: Susie , Hal , Kelly on the basis of the SAC GBOU VPO ASMA
Handouts: ECG , ultrasound examination of abdominal organs, spirograms, clinical and biochemical blood tests, urine tests, coprograms , radiographs, situational tasks, test assignments, archival and educational medical histories, albums on the topics studied, standards for the provision of specialized care and protocols on the topics discussed.

3.5. Professional databases, information and reference systems, electronic educational resources

№ p/p	Resource name	Resource Description	Access	Resource address
Electronic library systems				
1.	"Student Consultant" Electronic library of the medical university.	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	library, individual access	http: // www .studmedlib.ru/
2.	"Doctor's Consultant" Electronic Medical Library.	The materials posted in the library have been developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine).	library , individual access	http://www.rosmedlib.ru/cgi-bin/mb4x

		The information has been prepared taking into account the position of the scientific and practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.		
3.	PubMed	Free search engine in the largest medical bibliographic database MedLine . Documents medical and biological articles from the specialized literature, and also provides links to full-text articles.	library, free access	http : //www. ncbi.nlm.nih . gov / pubmed /
4.	OxfordMedicineOnline .	A collection of Oxford medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine, both electronic versions which are constantly updated.	library, free access	http://www.oxfordmedicine.com
5.	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	library, free access	http://humbio.ru/
6.	Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems				
7	Russian Medical Association	Professional Internet resource. Objective: to	b library, free	http://www.rmass.ru/

		facilitate the implementation of effective professional activities of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian Medical Union.	access	
8	Web medicine.	The site provides a directory of professional medical resources, including links to the most authoritative thematic sites, magazines, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	b library, free access	http: //webmed.irkutsk.ru/
Databases				
9	World Health Organization.	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	library, free access	http://www.who.int/ru/
10	Ministry of Science and Higher Education of the Russian Federation.	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
11	Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	https://edu.gov.ru/
12	Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all branches of	library, free access	http: //www .edu.ru/ http://window.edu.ru/catalog/?prubr =2.2.81.1

		medicine and health care.		
Bibliographic databases				
13	Database "Russian Medicine"	It is created in the Central Scientific and Medical Library, and covers the entire collection, starting in 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas. biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
14	eLIBRARY.RU	Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.	library, free access	http://elibrary.ru/defaultx.asp
15	Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
16	Medline .r u	Medical and biological portal for specialists. Biomedical journal. Last	library, free access	http://www.medline.ru

		updated February 7, 2021.		

3 .6. Licensed and freely distributed software used in the educational process

I. Commercial software products		
1.	Operating system MS Windows 7 Pro	License number 48381779
2.	Operating system MS Windows 10 Pro , MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	KasperskyEndpointSecurity for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1C : University PROF	LICENSE AGREEMENT No. 2191 dated 15.10.2020
6.	PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution conditions: https://play.google.com/about/play-terms/index.html
2.	Browser « Yandex »	Freely distributed License agreement for the use of the Yandex Browser software https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunications network "Internet"

Standards of Primary Health Care
https://minzdrav.gov.ru/ministry/61/22/stranitsa-979/stranitsa-983/1-standarty-pervichnoy-mediko-sanitarnoy-pomoschi
Standards for the provision of specialized medical care
https://minzdrav.gov.ru/ministry/61/22/stranitsa-979/stranitsa-983/2-standarty-spetsializirovannoy-meditsinskoy-pomosch i
Procedures for providing medical care to the population of the Russian Federation
https://minzdrav.gov.ru/ministry/61/4/stranitsa-857/poryadki-okazaniya-meditsinskoy-pomoschi-naseleniyu-rossiyskoy-federatsii
Ministry of Health of the Amur Region (documents)
https://amurzdrav.ru/%D0%B4%D0%BE%D0%BA%D1%83%D0%BC%D0%B5%D0%BD%D1%82%D1%8B/
Federal Electronic Medical Library

https://femb.ru/?ysclid=lbdiwpk03h64025738
Union of Pediatricians of Russia
http :// www . pediatr - russia . ru
Union of Pediatricians of Russia (Clinical Guidelines)
https://www.pediatr-russia.ru/information/klin-rek/
Pediatrics Magazine
http :// pediatriajournal . ru
Journal "Russian Bulletin of Perinatology and Pediatrics"
http :// www . ped - perinatology . ru
Magazine "Attending physician"
http://www.lvrach.ru
"Russian Medical Journal"
http://www.rmj.ru
"Program for optimizing nutrition for children aged 1 to 3 years in the Russian Federation"
http://www.pediatr-russia.ru/information/dokumenty/other-docs/optimizatsii-pitaniya-detej-v-vozraste-1-god-3-let-v-rf.pdf
"Program for optimizing feeding of children in the first year of life in the Russian Federation"
http://www.pediatr-russia.ru/information/dokumenty/other-docs/nacprog1year_2019.pdf
http://www.fesmu.ru/dmj/20182/2018220.aspx Far Eastern Medical Journal (Article "Lean technologies as a tool for improving the efficiency of healthcare" (review of the problem)). Gandurova E.G., Gorbachev A.V., Dorofeev A.L., Erastov E.V., Zhmerenetsky K.V., Ivasishina I.A., Korablyov V.N., Popova K.E. // Far Eastern Medical Journal, 2018.-№2.-P.90-92.
Department page on the Academy website
https://www.amursma.ru/zakrytaya-chast-sayta/4-kurs/ - 4th year
https://www.amursma.ru/zakrytaya-chast-sayta/5-kurs/ - 5th year

4. ASSESSMENT TOOLS FUND

4.1 Current test control (input, initial), midterm, final

4.1.1 Examples of test tasks for entrance knowledge control (with sample answers)

Test assignments are located in the Moodle system .
Access mode for the section Pathology of young children (8th semester): https://educ-amursma.ru/course/view.php?id=543
Access mode for the section Pathology of older children (9th semester): https://educ-amursma.ru/course/view.php?id=544
Access mode for the section Infectious diseases in children (10th semester): https://educ-amursma.ru/course/view.php?id=547
Access mode for the Children's Clinic section (10th semester): https://educ-amursma.ru/course/view.php?id=545

The total number of test tasks is 50.
The list of options and answers is generated automatically

1. ACUTE INFLAMMATION IS CHARACTERIZED BY THE FOLLOWING SEQUENCE OF PATHOPHYSIOLOGICAL PROCESSES

1) alteration, microcirculation disorder, proliferation
2) alteration, emigration, microcirculation disorder, proliferation
3) alteration, proliferation, microcirculation disorder, emigration
4) alteration, activation of lysosomal enzymes, release of mediators and microcirculatory bed reaction, change in permeability, exudation and emigration, phagocytosis, proliferation and repair of the defect

2. ETIOLOGY OF MULTIFACTORIAL PATHOLOGY

1) action of two alleles of a gene at one locus
2) chromosomal aberrations
3) single gene effect
4) additive effect of many genes with different contributions from each

3. TRANSLATION OF A PHARMACEUTICAL TERM FROM LATIN FEBRIFUGE

1) claratodinum
2) vancomycinum
3) antipyrine
4) relanium

Standard answers

1	2	3
4	4	3

4.1.2 Examples of test tasks for initial knowledge control (with sample answers)

Pathology of young children
Access mode for the section Pathology of young children (8th semester): https://educ-amursma.ru/course/view.php?id=543

1. INTRODUCING VEGETABLE PUREE TO BREAST-FEEDING CHILDREN BEGINS AT THE AGE OF:

1) 4-x
2) 5-ti
3) 6-ti
4) 8-mi

2. AN APPROXIMATE CALCULATION OF BODY WEIGHT IN THE FIRST YEAR OF LIFE CAN BE MADE USING THE FOLLOWING FORMULA:

1) body weight at 1 year + 600x6 + 200x(n - 6), where n is the number of months
2) body weight at 1 year + 700x6 + 300x(n - 6), where n is the number of months
3) body weight at 1 year + 800x6 + 400x(n - 6), where n is the number of months
4) body weight at 1 year + 900x6 + 500x(n - 6), where n is the number of months

3. WHAT NUMBERS ARE CORRECT FOR CALCULATING THE AMOUNT OF FOOD BY THE VOLUME METHOD FOR A CHILD 2-4 MONTHS OLD?

1) 1/6
2) 1/5
3) 1/4
4) 1/3

4. IN THE FIRST TWO MONTHS OF A CHILD'S LIFE, ITS HEIGHT INCREASES MONTHLY BY :

1) 5 cm

2) 4 month
3) 4.5 months
4) 3 cm

5. INDICATOR OF NERVOUS AND MENTAL DEVELOPMENT OF A CHILD AT THE AGE OF ONE MONTH:

1) holds his head well
2) smiles
3) cooing
4) a revival complex appears in response to a conversation

6. WHEN ASSESSING PHYSICAL DEVELOPMENT INDICATORS USING CENTILE TABLES, THE AVERAGE LEVEL OF PHYSICAL DEVELOPMENT CORRESPOND TO **:**

1) 1st and 8th corridors
2) 2nd and 7th corridors
3) 3 and 6 corridors
4) 4th and 5th corridors

7. THE PERIOD OF THE FIRST GROWTH ACCELERATION (FIRST EXTENSION) IS OBSERVED:

1) at 4-6 years for boys and at 6-7 years for girls
2) at 4-6 years for boys and 9-10 years for girls
3) at 6-9 years for boys and 6-8 years for girls
4) at 6-9 years for boys and 9-10 years for girls

8. THE PERIOD OF THE SECOND GROWTH ACCELERATION (SECOND EXTENSION) IS OBSERVED:

1) at 8-10 years for boys and 10-12 years for girls
2) at 11-12 years for boys and 8-10 years for girls
3) at 13-16 years for boys and 8-10 years for girls
4) at 13-16 years for boys and 10-12 years for girls

9. THE TERM "PHYSICAL DEVELOPMENT" IS A DYNAMIC PROCESS:

1) growth of a child at a particular period of childhood
2) growth of the child and biological maturation of individual systems
3) growth and biological maturation of a child in a particular period of childhood
4) biological maturation of individual organs and systems of the child

10. WHEN AUSCULTING YOUNG CHILDREN, THE FOLLOWING TYPE OF BREATHING IS LISTENED:

1) vesicular
2) puerile
3) tough
4) bronchial

Answer samples:

1	2	3	4	5	6	7	8	9	10
2	3	1	4	2	4	1	4	3	2

Pathology of older children

Access mode for the section Pathology of older children (9th semester): https://educ-amursma.ru/course/view.php?id=544

1. CHANGES IN URINE COLOR IN VIRAL HEPATITIS ARE CAUSED BY THE

APPEARANCE IN THE URINE OF:
1) urobilin
2) conjugated bilirubin
3) biliverdin
4) hemoglobin

2. THE SEROLOGICAL MARKER CONFIRMING THE ETIOLOGY OF HEPATITIS A IN THE ACUTE PERIOD OF THE DISEASE IS:
1) anti - HAVIgG
2) anti- HBc IgM
3) anti- NVe
4) anti - HAVIgM

3. VIRAL HEPATITIS A IS NOT CHARACTERISTIC OF:
1) acute onset of the disease
2) cyclical flow
3) fever in the pre-icteric period
4) improving well-being when jaundice appears

4. VIRAL HEPATITIS B IS NOT CHARACTERISTIC OF:
1) the most severe course in children of the first year of life
2) the possibility of lifelong carriage of the virus
3) seasonal fluctuations in morbidity
4) affecting all age groups

5. THE MORPHOLOGICAL BASIS OF THE FULMINANT FORM OF HEPATITIS B AND D IS:
1) balloon dystrophy
2) massive necrosis
3) cirrhosis
4) dysfunction of the hepatobiliary system

6. THE FOLLOWING IS CURRENTLY USED TO TREAT CHRONIC HEPATITIS:
1) recombinant interferon
2) normal human immunoglobulin
3) Hepatitis B vaccine
4) cephalosporin antibiotics

7. IN A GENERAL URINE ANALYSIS FOR TYPICAL VIRAL HEPATITIS:
1) no changes are noted
2) glucose levels increase
3) direct bilirubin appears
4) acetone appears

8. FULMINANT FORM OF HEPATITIS C IS:
1) mild form
2) moderate
3) heavy
4) malignant

9. CHOLESTASIS SYNDROME IS CHARACTERIZED BY AN INCREASE IN THE BLOOD:
1) alkaline phosphatase
2) ALT , AsAT
3) serum iron
4) unconjugated bilirubin

10. MESENCHYMAL INFLAMMATION SYNDROME IS CHARACTERIZED BY AN INCREASE IN THE BLOOD:
1) gamma globulins
2) cholesterol
3) alkaline phosphatase
4) bilirubin

Answer samples:

1	2	3	4	5	6	7	8	9	10
2	4	4	3	2	1	3	2	1	1

Infectious diseases in children

Access mode for the section Infectious diseases in children (10th semester): https://educ-amursma.ru/course/view.php?id=547

1. THE MATERIAL FOR ISOLATION OF THE DIPHTHERIA AGENT IS:
1) blood
2) urine
3) feces
4) all of the above

2. NAME THE CULTURAL-BIOLOGICAL VARIANTS OF THE DIPHTHERIA AGENT:
1) gravis
2) intermedius
3) interrogans
4) mitis
5) pamona

3. INDICATE THE SIGNS OF THE MEMBRANOUS FORM OF DIPHTHERIA OF THE ORPHARYNX:
1) the film is difficult to remove
2) the film is rough and cannot be rubbed between spatulas
3) after removing the film the surface bleeds
4) the film floats on the surface of the water
5) in water the film sinks to the bottom

4. SPECIFY THE DEGREE OF TOXIC DIPHTHERIA:
1) 0 degree
2) 1st degree
3) 2nd degree
4) 3rd degree
5) 4th degree

5. THE MOST COMMON COMPLICATIONS OF DIPHTHERIA:
1) hepatitis
2) myocarditis
3) polyneuropathy
4) keratitis
5) nephrosis

6. NAME THE DISEASES WITH WHICH DIPHTHERIA OF THE OPHARYNX IS DIFFERENTIATED:
1) lacunar tonsillitis

2) follicular tonsillitis
3) peritonsillar abscess
4) fungal sore throat
5) all of the above

7. WHAT CAN BE THE NATURE OF INFLAMMATORY CHANGES IN THE RESPIRATORY TRACT IN CROUP:

1) catarrhal
2) fibrinous
3) necrotic
4) all of the above

8. SPECIFY THE DRUGS PRESCRIBED AND THE MEASURES CARRIED OUT IN THE CASE OF STENOSIS OF THE FIRST DEGREE NOT COMPLICATED BY RESPIRATORY AND CARDIAC FAILURE:

1) prednisolone
2) chymotrypsin
3) warm bath
4) warm drink
5) ozokerite boots

9. FOR SPECIFIC TREATMENT OF PATIENTS WITH DIPHTHERIA THE FOLLOWING IS USED:

1) antitoxic antidiphtheria serum
2) antidiphtheria gamma globulin
3) all of the above

10. WHICH OF THE FOLLOWING ARE EMERGENCY PREVENTIVE MEASURES FOR SCARLET FEVER:

1) contact separation
2) quarantine for the team
3) vaccination

Answer samples:

1	2	3	4	5	6	7	8	9	10
4	1,2,4	1,2,3,5	2,3,4	2,3,5	5	4	3,4,5	3	1,2

Children's clinic

Access mode for the Children's Clinic section (10th semester): https://educ-amursma.ru/course/view.php?id=545

1. STIMULATION OF THE DEVELOPMENT OF FUNCTIONS IN YOUNG CHILDREN IS CALLED:

1) rehabilitation
2) habilitation
3) disability
4) adaptation

2. CORRECTION OF MOTOR AND MENTAL DISORDERS IN AN ABNORMAL CHILD WITH THE HELP OF PEDAGOGICAL AND PHYSICAL INFLUENCE IS CALLED:

1) Petyo's conductive pedagogy
2) Maria Montessori's method
3) dolphin therapy
4) physiotherapeutic effect

3. THE METHOD OF SPEECH FORMATION BY INFLUENCING FINE MOTOR SKILLS IS CALLED:

1) music therapy
2) occupational therapy
3) physiotherapy
4) physiotherapy

4. FUNCTIONAL THERAPY METHOD, INCLUDING PHYSICAL EXERCISES:
1) balneotherapy
2) kinesitherapy
3) balneotherapy
4) biofeedback

5. THE FOLLOWING CONTINGENT OF THE CHILD POPULATION HAS THE RIGHT TO RECEIVE FREE TREATMENT WITH THE PURCHASE OF MEDICINES ON PREFERENTIAL PRESCRIPTIONS: 1) DISABLED CHILDREN; 2) CHILDREN WITH CEREBRAL PALSY; 3) ADOLESCENTS WITH MANIFESTATIONS OF A CHRONIC DISEASE; 4) CHILDREN UNDER 3 YEARS OF AGE.
1) 1.4
2) 1,2,3,4
3) 1,2,4
4) 1.3

6. WHAT IS THE NAME OF THE PROCESS OF ACTIVE ADAPTATION OF AN INDIVIDUAL OR GROUP TO A CHANGING SOCIAL ENVIRONMENT?
1) acclimatization
2) synchronization
3) adaptation
4) taxonomy

7. THE PROGNOSIS IS FAVORABLE WHEN DETERMINING THE LIMITATION OF LIFE ACTIVITIES IF:
1) there is a possibility of partial restoration of impaired categories of life activity
2) there is no possibility of even partial restoration of impaired categories of life activity and reduction of the degree of their limitations
3) there is a possibility of complete restoration of the impaired categories of life activity

8. THE MAIN CATEGORIES FOR ASSESSING THE NATURE OF THE LIMITATION OF LIFE ACTIVITIES: 1) limitation of self-care, independent movement; 2) formation of social insufficiency; 3) limitation of the ability to control one's behavior
1) 1,2
2) 2.3
3) 1.3

9. A FAMILY IN A SOCIALLY DANGEROUS SITUATION IS:
1) a family that includes alcoholics, drug addicts or persons who commit crimes, in which there is no control over the upbringing and education of children;
2) a family where parents do not fulfill their responsibilities to provide for the life of their children;
3) a family whose life activity is disrupted by objective circumstances and which is unable to solve life activity problems independently.

10. A “RISK GROUP” FAMILY IS:
1) a family that includes alcoholics, drug addicts or persons who commit crimes, in which there is no control over the upbringing and education of children;
2) a family where parents do not fulfill their responsibilities to provide for the life of their children;
3) a family whose life activity is disrupted by objective circumstances and which is unable to solve life activity problems independently.

Standard answers

1	2	3	4	5	6	7	8	9	10
2	1	2	2	3	3	3	3	2	1

4.1.3 Examples of test tasks for the interim knowledge assessment (with sample answers)
Section Pathology of young children VIII semester

Testing is carried out on a single information and educational portal in the Moodle system
https://educ-amursma.ru/mod/quiz/view.php?id=21135
The total number of test tasks is 100.

Please indicate one correct answer.

1. THE LONGEST AND MOST STABLE EFFECT IN TREATING FOOD ALLERGIES WAS ACHIEVED BY USING:
1) membrane stabilizing drugs
2) elimination diet
3) specific hyposensitization
4) enterosorbents
5) 2nd generation antihistamines .

2. ARTIFICIAL FEEDING OF A CHILD IN THE FIRST YEAR OF LIFE WITH A SEVERE FORM OF ATOPIC DERMATITIS IS ADVISABLE TO CARRY OUT:
1) adapted formulas based on cow's milk
2) soy mixtures
3) mixtures based on partially hydrolyzed whey protein
4) highly hydrolyzed mixtures
5) fermented milk mixtures.

3. THE MOST INFORMATIVE METHOD FOR DIAGNOSING FOOD ALLERGIES IS:
1) determination of the level of specific antibodies in Ig E
2) skin tests with a suspected allergen
3) food diary assessments
4) evaluation of the results of the provocative test
blast transformation reactions .

4. A FOOD ALLERGY DOES NOT RESULT IN ILLNESS:
1) seborrheic dermatitis
2) urticaria
3) atopic dermatitis
4) Quincke's edema
5) rhinitis.

5. ANTIBODIES INCLUDE:
1) acute phase proteins

2) glycosaminoglycans
3) immunoglobulin A
4) C-reactive protein
5) complement system.

6. THE MOST COMMON CLINICAL FORM OF FOOD ALLERGY IN YOUNG CHILDREN IS:
1) atopic dermatitis
2) broncho-obstructive syndrome
3) nephrotic syndrome
4) gastrointestinal syndrome
5) urticaria and Quincke's edema .

7. THE MOST COMMON FOOD ALLERGY CAUSING BERRIES:
1) blueberries
2) strawberries
3) currant
4) gooseberry
5) blackberry.

8. THE VEGETABLES THAT MOST OFTEN CAUSE FOOD ALLERGIES ARE:
1) zucchini
2) cucumbers
3) cauliflower
4) carrots, tomatoes.

9. FRUITS THAT MOST OFTEN CAUSE FOOD ALLERGIES:
1) oranges
2) green pears
3) prunes
4) peaches
5) green apples.

10. IT IS RECOMMENDED TO INTRODUCE COMPLEMENTARY FOODS TO A CHILD WITH FOOD ALLERGIES AT THE AGE OF:
1) 10 months
2) 6 months
3) 2 months
4) 4 months.

Standard answers

1	2	3	4	5	6	7	8	9	10
3	4	2	1	3	1	2	4	1	2

Section Pathology of older children IX semester

Testing is carried out on a single information and educational portal in the Moodle system
https://educ-amursma.ru/mod/quiz/view.php?id=21161
The total number of test tasks is 100.

Please indicate one correct answer.

1. NAME THE DISEASE IN WHICH SIGNS OF EXOCRINE INSUFFICIENCY MOST FREQUENTLY DEVELOP:
1) Down syndrome
Marfan syndrome
3) primary amyloidosis
4) cystic fibrosis

5) none of the listed diseases

2. NAME THE PART OF THE GASTROINTESTINAL TRACT WHERE BILE IS REABSORBED:
1) Duodenum
2) proximal jejunum
3) terminal section of the jejunum
4) distal ileum
5) large intestine

3. THE LEADING FACTORS IN THE ETIOLOGY OF DYSKINESIA OF THE COLON ARE:
1) psycho-emotional
2) neurogenic
3) changes in the activity of endocrine glands
4) all of the above

4. CREATOREE IS CHARACTERISTIC OF:
1) chronic pancreatitis
2) Crohn's disease
3) irritable bowel syndrome
4) biliary dyskinesia

5. JAUNDICE IN GILBERT'S SYNDROME IS AUGMENTED BY THE USE OF:
1) phenobarbital
2) antisecretory drugs
3) prokinetics
4) sulfonamides

6. A 14-YEAR-OLD BOY WAS ADMITTED TO THE CLINIC WITH COMPLAINTS OF WEAKNESS, PERIODICAL VOMITING OF BLOOD, BLOODY STOOL, AND ENLARGED ABDOMEN. EXAMINATION REVEALED A "MEDUSA HEAD", SIGNS OF ASCITES, DENSE LIVER, AND ENLARGED SPLEEN. YOUR PRESUMPTIVE DIAGNOSIS:
1) autoimmune hepatitis
2) liver cirrhosis
3) nonspecific ulcerative colitis
4) Crohn's disease
5) duodenal ulcer

7.PRINCIPLES OF THERAPY FOR LACTASE DEFICIENCY:
1) elimination of fat
2) exclusion of rice
3) exclusion of milk

8. NAME THE SUBSTANCE THAT STIMULATES THE ACTIVITY OF PANCREATIC ENZYMES:
1) somatostatin
2) glucagon
3) histamine
4) vasoactive intestinal peptide

9. NAME THE MOST RELIABLE TEST FOR DIAGNOSIS OF MALABSORPTION SYNDROME:
1) D -xylose test
2) lactose tolerance test

3) clinical blood test
4) study of gastric secretion

10. NAME THE MOST VALUABLE MORPHOLOGICAL DIAGNOSTIC SIGN OF THE ACTIVITY OF NON-SPECIFIC ULCERICAL COLITIS:
1) the presence of an ulcerative defect
2) the presence of neutrophilic leukocytes in the lamina propria of the intestinal wall mucosa
3) the presence of proliferative activity of fibroblasts

Standard answers

1	2	3	4	5	6	7	8	9	10
4	4	4	1	4	2	3	3	1	2

X semester
Section Infectious diseases in children
Testing is carried out on a single information and educational portal in the Moodle system
https://educ-amursma.ru/mod/quiz/view.php?id=21143

The total number of test tasks is 50.
Please indicate one correct answer.

1. COMPLICATIONS OF CHICKENPOX CAN INCLUDE ALL OF THE FOLLOWING EXCEPT :
1) glomerulonephritis
2) pneumonia
3) meningoencephalitis
4) phlegmon

2. CHICKENPOX IS TRANSMITTED:
1) feco-oral route
2) by airborne droplets
3) parenteral route
4) by contact and household means

3. THE MOST COMMON FORM OF HERPES IN OLDER CHILDREN IS:
1) ophthalmoherpes
2) damage to the skin and mucous membranes
3) encephalitis
4) generalized form

4. DATA THAT ALLOW ONE TO SUSPECT CONGENITAL CYTOMEGALOVIRUS INFECTION DO NOT INCLUDE:
1) premature birth
2) microcephaly, developmental delay
3) hepatosplenomegaly
4) adrenal insufficiency

5. IN INFECTIOUS MONONUCLEOSIS, THE FOLLOWING ARE DETECTED IN THE PERIPHERAL BLOOD:
1) neutrophilia + lymphopenia

2) lymphopenia + atypical mononuclear cells
3) atypical mononuclear cells + lymphocytosis
4) lymphocytosis + eosinophilia

Standard answers

1	2	3	4	5
1	2	2	4	3

X semester

Section Children's Clinic

Testing is carried out on a single information and educational portal in the Moodle system
https://educ-amursma.ru/mod/quiz/view.php?id=21140
The total number of test tasks is 50.

1 STIMULATING THE DEVELOPMENT OF FUNCTIONS IN YOUNG CHILDREN IS CALLED:
1) rehabilitation
2) habilitation
3) disability
4) adaptation

2. Correction of motor and mental disorders in an ABNORMAL CHILD WITH THE HELP OF PEDAGOGICAL AND PHYSICAL INFLUENCE IS CALLED:
1) Conductive pedagogy of Petyo
2) Maria Montessori's Method
3) Dolphin therapy
4) Physiotherapeutic effects

3. THE METHOD OF SPEECH FORMATION BY INFLUENCING FINE MOTOR SKILLS IS CALLED:
1) Music therapy
2) Occupational therapy
3) Physiotherapy
4) Physiotherapy

4. A SECTION OF BALNEOLOGY THAT STUDIES THE HEALING PROPERTIES OF MINERAL WATERS:
1) climatotherapy
2) speleotherapy
3) balneotherapy
4) physiotherapy

5. FUNCTIONAL THERAPY METHOD, INCLUDING PHYSICAL EXERCISES:
1) balneotherapy
2) kinesitherapy
3) balneotherapy
4) biofeedback

Standard answers

1	2	3	4	5

2	1	2	3	2

4.1.4 Examples of test tasks for the final knowledge assessment (with sample answers) X semester

Testing is carried out on a single information and educational portal in the Moodle system
https://educ-amursma.ru/mod/quiz/view.php?id=21141
The total number of test tasks is 220.

Examples of test tasks for final knowledge assessment (with sample answers)

1. SUPPLEMENTARY FEEDING WITH VEGETABLE PUREE FOR BREAST-FEEDING CHILDREN BEGINS AT THE AGE OF:
1) 6 months
2) 7 months
3) 5 months
4) 8 months

2. AN APPROXIMATE CALCULATION OF BODY WEIGHT IN THE FIRST YEAR OF LIFE CAN BE MADE USING THE FOLLOWING FORMULA:
1) body weight at 1 year + 800x6 + 400x(n-6), where n is the number of months
2) body weight at 1 year + 600x6 + 200x(n-6), where n is the number of months
3) body weight at 1 year + 700x6 + 300x(n-6), where n is the number of months
4) body weight at 1 year + 900x6 + 500x(n-6), where n is the number of months

3. WHAT NUMBERS ARE CORRECT FOR CALCULATING THE AMOUNT OF FOOD BY VOLUME FOR A CHILD 2-4 MONTHS OLD?
1) 1/5
2) 1/4
3) 1/3
4) 1/6

4. PATHOGENESIS OF BLEEDING IN IDIOPATHIC THROMBOCYTOPENIC PURPURA IS CAUSED BY:
1) pathology of the vascular wall
2) disturbances in the vascular- platelet link of hemostasis
3) deficiency of plasma coagulation factors
4) disturbance of erythrocyte morphology

5. SKIN CHANGES IN THE FORM OF INDURATION AND ATROPHY ARE MOST PRONESSED IN :
1) periarteritis nodosa
2) systemic lupus erythematosus
3) scleroderma
4) juvenile rheumatoid arthritis

6. CHILDREN WITH LACTASE INTOLERANCE CAN'T TOLERATE:
1) milk
2) bread
3) vegetables
4) cottage cheese

7. USING THE ACUTE DISEASE INDEX, DETERMINE REDUCED RESISTANCE:
1) 0-0.32
2) 0.5-0.6
3) 0.67 and >
4) 0.33-0.49

8. AT WHAT STAGE OF A CHILD'S DEVELOPMENT IS IT DIFFICULT TO DETERMINE THE SOMATOTYPE?
1) disharmonious
2) harmonious
3) high
4) moderately disharmonious

9. IN ACUTE INTESTINAL INFECTIONS OF BACTERIAL ETIOLOGY, INFECTION OF BREAST-FEEDING CHILDREN MOST COMMONLY OCCURRES:
1) by food
2) by water
3) contact-household
4) airborne

10. SUPERINFECTION WITH DELTA VIRUS IS A DANGER FOR PATIENTS:
1) hepatitis B
2) hepatitis A
3) hepatitis C

1	2	3	4	5	6	7	8	9	10
3	1	4	2	3	1	4	1	3	1

4.2 SITUATIONAL PROBLEMS (WITH STANDARD ANSWERS)

4.2.1 Examples of situational tasks of current (output) control (with standard answers)

Task No. 1

The parents of a 4-year-old boy went to the doctor with complaints of a prolonged cough after suffering from an acute respiratory viral infection.

A boy from the first pregnancy, which proceeded with toxicosis in the first half, term delivery, with a weight of 3300 г, length 51 см. Preventive vaccinations were carried out according to an individual calendar due to atopic dermatitis. Since 3.5 years old, he has been attending kindergarten. Since that time, he often suffers from acute respiratory viral infections, with a cough lasting more than 3 weeks. Earlier, an ENT doctor diagnosed adenoid vegetations of the 2nd degree. Family history: the child's mother has food and drug allergies, the father is practically healthy, smokes a lot. The disease began with an increase in body temperature, headache, nasal discharge, dry cough, which became wet. The cough intensified in the morning. Sometimes coughing fits ended in vomiting. Symptomatic treatment (cough mixture) did not bring relief. A local doctor was invited.

On examination: moderate condition, pale, rhinorrhea . Wet cough. Body temperature 37.2°C. Percussion: pulmonary sound with a slight boxy shade over the lungs. Auscultation : prolonged expiration, scattered dry wheezing, medium-bubble moist rales on inspiration. Respiratory rate 28 per 1 minute. Borders of relative cardiac dullness: right - parasternal line, upper - 2 intercostal space , left - 1 cm outward from the left mammary line, no murmurs. Heart rate 110 beats per minute. The abdomen is soft, painless. The liver protrudes from under the edge of the costal arch by 1,5 см.

Blood test: hemoglobin - 120 g/l, erythrocytes - $5.1x10^{12}$/l, leukocytes - $4.9x10^{9}$/l, band cells - 2%, segmented cells - 48%, eosinophils - 3%, lymphocytes - 38%, monocytes - 9%, ESR - 6 mm/hour.

Chest X-ray: increased pulmonary markings, especially in the area of the roots of the lungs, due to the vascular component and peribronchial changes.

Questions

1. Make a preliminary diagnosis.
2. Conduct differential diagnostics.
3. What are the most common causes of this disease?
4. Assign an examination plan to this child.
5. Prescribe treatment.
6. What is the primary prevention of this disease?
7. Make a plan for medical observation.
8. What is the significance of parental smoking for prognosis?

Problem #2

A 4-year-old girl was admitted to the hospital with complaints of difficulty breathing, a painful cough for several months, shortness of breath, exhaustion with a satisfactory appetite, rumbling and bloating of the abdomen. The mother noticed that when kissing the child there was a salty taste, the stool was abundant, with a greasy sheen and an unpleasant odor, it was difficult to wash off. In addition, it is known from the anamnesis that the girl was born from the 2nd pregnancy with a weight of 3100 г, by the end of the first year she weighed 8000 г. Mental development corresponded to her age. She often suffered from colds since birth. At 4 months she suffered from right-sided pneumonia, at 6 months - acute bronchitis, at 9 months left-sided pneumonia with a protracted course, after 1 year - repeated protracted bronchitis, obstructive bronchitis, frequent acute respiratory viral infections, iron deficiency anemia, pancreatopathy . My mother has chronic bronchitis, my father is healthy, my grandmother (on my mother's side) died 10 years ago from cirrhosis of the liver.

On examination, the patient's condition is severe. Body length 95 см, weight 13 кг. Pale skin, clubbed fingers, barrel-shaped chest. Nasal breathing is difficult due to mucosal edema. Percussion reveals a box-like sound over the lungs, moist, scattered rales of various sizes are heard. RR is 30 per minute. Heart sounds are muffled. HR is 122 per minute. The abdomen is enlarged, rumbling, distended intestinal loops are palpated. The liver protrudes from under the costal arch by 2 см.

Blood test: Hb - 85 g/l, er - 3.1x10 $^{12/}$l , c.p. - 0.71, reticulocytes - 1.9%, Lake . - 12.2x10 ^{9} /l, p/i - 7%, s/i - 60%, e - 3%, l - 22%, m - 8%, ESR - 16 mm/hour. Anisocytosis of erythrocytes and poikilocytosis are pronounced .

Coprogram: unformed feces, mucus+, leuk . – no, eryth . – no, fatty acids +++, fatty acid soaps ++, neutral fat ++, muscle fibers semi-digested ++, undigested +, extracellular starch +++.

A sweat test was performed: sodium – 130 mmol /l, chlorides – 115 mmol /l.

Questions

1. Make a preliminary clinical diagnosis.
2. Evaluate additional research data.
3. Schedule an examination for your child.
4. What diagnostic method will allow us to make a final diagnosis?
5. Describe the pathogenesis of the main clinical syndromes.
6. Prescribe treatment for the child.
7. Is it indicated that this child should be registered as disabled?
8. Basic principles of dispensary observation of a child.

Problem #3

A boy, 1 year 2 months old, was admitted to the hospital with complaints (according to his mother) of decreased appetite, weakness, and taste perversion (eating chalk).

It is known from the anamnesis that the child is from the first pregnancy, which proceeded with anemia in the second half (the mother was not treated). The delivery was due at term. Birth

weight 3150 г, body length - , 51 смApgar score 8/9 points. Breastfeeding for up to 2 months. Then feeding with non-adapted milk formula, from 5 months complementary foods were introduced - oatmeal and semolina porridge, cottage cheese, from 9 months - vegetable puree, from 11 months - meat puree (he ate poorly). At the age of 1 year, the boy was sent to the village, where he ate mainly cow's milk, porridge, vegetables and berries; he refused meat products.

On admission to the hospital, the condition is moderate. The skin is pale, clear, the hair is dull and brittle. The boy is capricious. In the lungs, breathing is puerile, no wheezing, respiratory rate is 22 per minute. Heart sounds are loud, rhythmic, a short systolic murmur is heard at the apex, heart rate is 95 per minute. The abdomen is soft, painless in all sections. The liver protrudes from under the costal margin by 2,5 см. The spleen is not palpable. Urine and stool are of normal color.

Blood test: Hb - 85 g/l, er - 3.1x10 ^{12}/l , c.p. - 0.82, reticulocytes - 1.9%, L - 7.2x10 ^{9}/l, p/i - 2%, s/i - 30%, e - 4%, l - 54%, m - 10%, ESR - 6 mm/hour. Anisocytosis of erythrocytes and poikilocytosis are pronounced .

General urine analysis: color - light yellow, specific gravity - 1010, protein - no, glucose - no, squamous epithelium - a little, leukocytes - 0-1 in the field of view, erythrocytes - no, cylinders - no, mucus - a little.

Fecal occult blood test (three times): negative.

Questions

1. Formulate a preliminary diagnosis.
2. Conduct a differential diagnosis.
3. What additional examination methods need to be carried out to clarify the diagnosis?
4. Name the reasons for the development of the disease in this child.
5. What treatment should be prescribed for the child?
6. Make a plan for medical observation.
7. In which organs and tissues is iron predominantly deposited?
8. List the main problems that arise when using parenteral ferropreparations based on iron salts.

Standards for problem solving.

Task No. 1

1. DS : Acute obstructive bronchitis.
2. Differential diagnosis is carried out with pneumonia, bronchial asthma, bronchiolitis , bronchial obstruction (foreign body, aspiration syndrome), and also with superinfection.
3. Causes: viral infections (rhinoviruses , RSV, parainfluenza virus type 3), in preschool and school-age children – M. p neumoniae , Clamydia p neumoniae . Bronchitis of bacterial etiology is rare in the presence of bronchial cleansing disorders.
4. Collection and analysis of the medical history, assessment of the content of the respiratory syndrome, assessment of the severity of the bronchopulmonary syndrome, clinical blood test, X-ray examination of the chest organs.
5. Treatment: Hospitalization in case of severe obstruction with respiratory failure .
   Step 1: β- adrenergic agonist (salbutamol , fenoterol – " Berotec "), assessment after 20-40 minutes: there is an effect – maintenance therapy, no – Step 2.
   Step 2: repeat dose of β- adrenergic agonist + (GC) glucocorticoids (budesonide); assessment after 20-40 min: there is an effect – maintenance therapy, no – Step 3.
   Step 3: GC intramuscularly (dexamethasone or prednisolone).
   Maintenance therapy: β- adrenergic agonist (aerosol, orally), including ipratropium bromide (Berodual) and/or aminophylline (Euphyllin) orally. Vibration massage and postural drainage from the 2nd day, if viscous, difficult to separate sputum appears – mucolytic agents (ambroxol) orally or by inhalation (carbocysteine).
6. Primary prevention includes early detection and dispensary observation of children at risk. Compliance with the daily routine, hypoallergenic diet, a set of health measures, detection and sanitation of foci of infection.
7. Outpatient observation. Frequency of examinations during outpatient observation: by a pediatrician

- 2 times a year, by an ENT doctor and a dentist - 2 times a year, by a pulmonologist - 1 time per year, by an allergist and immunologist - as indicated. Examination methods: general blood and urine tests during exacerbations and after intercurrent diseases. Chest radiography, sputum cultures, Mantoux test, spirography. Cough stimulation, chest drainage massage, first- generation antihistamines can reduce mucus secretion. Vaccination is carried out according to the existing vaccination calendar upon recovery, usually after 2-3 weeks, including during therapy. Duration of observation is 2 years.

8. Passive smoking has an unfavorable effect on the prognosis of the disease. Children are especially sensitive to the toxic and allergenic effects of tobacco smoke components, are more susceptible to respiratory diseases, and acute infectious diseases in them become protracted.

Problem #2

1. Cystic fibrosis, mixed form.
2. Class blood test: hypochromic regenerative anemia stage 2, moderate neutrophilic leukocytosis with a shift in the leukocyte formula to the left. Coprogram: unformed stool, presence of mucus, severe steatorrhea , amylorrhea , moderate creatorrhea . Sweat test - an increase in chlorides and sodium in sweat by approximately two times (the norm is no more than 60 mmol / l).
3. Complete biochemical blood test, ultrasound of the internal abdominal organs, chest X-ray, blood and urine amylase, Lasus test , coprogram, DNA test.
4. A definitive diagnosis can be made by DNA testing for cystic fibrosis (blood) – searching for the most common gene mutations.
5. The activity of chloride channels of the apical membranes of epithelial and exocrine cells is disrupted, which leads to an increased concentration of electrolytes in the exocrine secretion , to dehydration and a decrease in the volume of pericellular fluid; there is a significant increase in the viscosity of secretions.
6. Diet, regimen. Alternating courses of antibiotic therapy taking into account the sensitivity of the microflora (including inhalation - Colimycin), Pulmoziminhalation constantly, mucolytics , enzymes in large adequate doses, drainage positions, massage, breathing exercises; symptomatic therapy.
7. Yes.
8. It is desirable to register with the Russian Cystic Fibrosis Center (inclusion in the registry of CF patients for adequate monitoring and receiving medications at discounted rates). Constant adherence to a diet, taking all medications used in treatment in courses, non-drug treatment.

Problem #3

1. Iron deficiency anemia, moderate severity, hypochromic, normoregenerative .
2. Differential diagnosis is carried out with other microcytic hypochromic anemias, anemia due to lead poisoning, etc.
3. Necessary examination: biochemical blood test: serum Fe , TIBC, LIBC, KNT; specialist consultations: hematologist.
4. Adverse factors of antenatal development, irrational feeding.
5. Treatment: elimination of causes and provoking factors, rational nutrition, iron supplements, vitamin complexes with microelements.
6. Outpatient observation. Examinations of a patient receiving iron preparations should be carried out every 10-14 days. After normalization of Hb, outpatient examination is carried out once a month, then quarterly. Observation is stopped if anemia has not been observed in the child for 2 years without prophylactic administration of iron preparations.
7. In the antenatal period, iron accumulation occurs in the liver; in a full-term newborn, the total amount of iron in the body is 75 mg per kg of body weight, of which 25 mg is stored in the liver, the rest in the muscles , bone marrow macrophages and parenchymal organs.
8. With parenteral administration of iron, allergic reactions (itching, dermatitis, anaphylactic shock), abscesses at the injection site, hemosiderosis , diarrhea, nausea, vomiting, fever, arrhythmia, hematuria, and pain in the lumbar region may occur.

4.2.2 Examples of situational tasks of the boundary control (with standard answers)

VIII semester

Task number 1.

When assessing the physical development of an 8-month-old child, his body weight was 7800 г., length 68 см. The child was born with a body weight of 3200 г, length 50 cm, was breastfed until 4 months, then transferred to an adapted formula. From 4.5 months, complementary foods were introduced in the form of porridge (semolina, oatmeal), from 5 months - vegetable puree, from 6 months - meat. Up to 5 months, development corresponded to age, then low weight gains were noted, 80 100 гper month, and after 7 months - weight loss. Stool is unstable, 2-3 times a day.

1. Assess your child's physical development
2. Conduct a diet analysis
3. What mistakes were made in organizing the child's nutrition?
4. Provide recommendations on how to feed a child correctly.
5. Create a diet (menu) for one day.

Sample answer to problem #1

1. Required weight: 3200g + (800 x 6) + (400 x 2)= 8800 г.

2-3. Early transfer to artificial feeding, early introduction of complementary foods, unjustified introduction of semolina porridge as the first complementary food, the introduction of which can lead to the development of gluten enteropathy , early introduction of complementary foods could lead to metabolic disorders, protein intoxication with the development of chronic nutritional disorder such as hypotrophy.

4. At the age of 8 months, the child should receive two milk feedings and three complementary foods. Since the child is on artificial feeding, it is necessary to give him adapted milk formula No. 2 for two feedings, and one time adapted fermented milk formula - 2.

5. Menu for one day: amount of food per day 1 литр(more is not desirable), 5 feedings per day, for one feeding 200 г.

7 hours adapted milk formula 2– 200 ml
11 o'clock buckwheat porridge 130g butter drain. 5.0
yolk 10.0
fruit puree 50.0
15 hour vegetable puree120 г
minced meat30 г
fruit/berry puree or juice 50.0
19 hours adapted fermented milk product200 г
23 hours adapted milk formula 2 -200 г

Daily use of yolk and cottage cheese is not advisable (as they can lead to protein overfeeding); it is necessary to alternate these products, giving each of them 2-3 times a week.

Task #2

The child is 6 months old. He is breastfed. He gets breast milk 4 times a day, porridge 1 time, fruit puree, 50 граммcottage cheese.

On examination - active, psychomotor development - according to age, weight 7500 г, length 66 см(at birth weight 3200 г, length 52 см), skin is clean, organs - without pathology, stool 2-3 times a day.

1. Assess your child's **nutrition**
2. Give recommendations on the child's nutrition
3. According to modern concepts, what is meant by complementary feeding?
4. Signs of neuropsychic development that determine readiness to accept complementary foods
5. What is the average number of feedings for a child in the second half of life?

Sample answer to problem #2:

1. The child is breastfed, receives 4 milk feedings and complementary feeding, it may be inappropriate to give the child such a quantity of cottage cheese daily. The child is gaining weight well, psychomotor development also corresponds to age. Excessive introduction of cottage cheese can lead to metabolic disorders with subsequent development of protein intoxication.

2. Continue breastfeeding and by the end of 6 months begin introducing the second complementary food of vegetable puree.

3. According to modern concepts, complementary feeding is understood as food of a thicker consistency, with a gradually more complex composition, which complements breast milk or formula and makes a significant contribution to the daily consumption of energy and nutrients.

4. Criteria for the child's readiness for complementary feeding - *the formation of psychomotor skills* - during the first year of life, the child's reflexes change. For example, a newborn has pronounced search and sucking reflexes that help find and grasp the nipple, which ensures the breastfeeding process. On the contrary, the "pushing reflex" makes it difficult to introduce solid food until a certain time. Until 4 months of age, a child cannot swallow a bolus of food in a coordinated manner. He is not yet able to sit, which makes feeding semi-liquid food difficult. By 5 months, children acquire the ability to take various objects in their mouths, and they are able to eat thick food even before teeth appear. By 8 months , most children are able to sit without support, by this time their first teeth appear, and coordinated tongue movements allow them to swallow food of a denser consistency. Then stable hand skills are acquired and children can drink from a cup, holding it with both hands, and send small pieces of food into their mouths. Strengthening these skills requires encouragement from parents, giving the child more independence and encouraging his initiative.

5. The average number of feedings for a child in the second half of life is 5 times.

Task #3

The baby was born weighing 3000 г., length 50 см. He is currently 1 month old.

The mother is concerned that she has little milk and asks to prescribe additional nutrition. Upon examination, the child is active, the skin is pink, clean, weight is 3500 г, urinates 10-12 times a day, stools 1-2 times a day.

1.What weight should a child have?

2. Make a menu for one day.

3. Give recommendations to the woman on her own regimen and diet.

4. If breastfeeding technique is incorrect, there may be?

5. Name the difference between female and cow's milk in terms of protein

Sample answer to problem #3

1.3000 г+ 600 г= 3600 г.

2. Continue exclusive breastfeeding at the child’s request, including feeding at night.

3. Tell the mother about the amount of milk produced - demand creates supply. Recommend to the mother: sufficient rest, good nutrition: daily intake of 100- 120 граммprotein in the form of meat or fish, cottage cheese, cheese, vegetables and fruits, additional amount of liquid 1 литр, mandatory intake of milk and fermented milk products. Repeated examination of the child in 1 week.

4. If breastfeeding technique is incorrect, the following may occur: cracked nipples, lactostasis , decreased sucking efficiency, decreased weight gain (due to malnutrition).

5. The difference between human and cow's milk in protein - human milk contains less protein and has a different qualitative composition. Caseins predominate in cow's milk, 80% of the total protein. In human milk, casein content is approximately 40%, the rest is whey proteins, the biological value of which is significantly higher than casein, since they include a large number of essential amino acids that are vital for the child and enter the body only with food (cystine , tryptophan, leucine, lysine, etc.) . Human milk has a high content of taurine, which is necessary for combining bile salts (and, therefore, for the absorption of fats), and also serves as a neurotransmitter and neuromodulator in the development of the central nervous system. Differences in the structure of proteins also affect their absorption. The caseins (alpha forms) that predominate in cow's milk, under the influence of enzymes, form a rather coarse, loose clot in the stomach, the breakdown of which requires a lot of energy from the child's body. Whey proteins (beta forms) are finely dispersed, and in the child's stomach they curdle into delicate, small flakes that are easily affected by gastric juice.

Task #4

A girl, 1 year 2 months old, was admitted to the children's department with complaints of lethargy, severe pallor, and lack of appetite.

A girl from the first pregnancy, which proceeded with toxicosis of the second half, from a term birth complicated by bleeding. The mother did not use prenatal leave, worked as a hairdresser. Body weight at birth 3100 g, body length 50 cm. From birth, she was breastfed until 2 months, then

bottle-fed, received only cow's milk (1.5 l per day). At the age of 9 months, she fell ill with ARI , complicated by pneumonia.

The family consists of three people, the total family income is below the subsistence level, they live in a private house with stove heating. Walks in the fresh air in autumn and winter are not every day, for an hour.

On admission: the patient's condition is severe, he is lethargic, adynamia, and inhibited. The skin is pale, with a waxy tint, and its elasticity is reduced. The mucous membranes are pale and dry, with cracks in the corners of the mouth . The nails are thin and flaky, the hair is dull. The tongue is varnished and lacks papillae throughout. Muscle hypotonia. Tissue turgor is 11.5 kg, body length is 76 cm. Puerile breathing in the lungs, the respiratory rate is 28 per 1 minute. Tachycardia up to 140 per 1 minute, an intense systolic murmur is heard at the apex of the heart and at the V point . The abdomen is soft and painless on palpation, the liver protrudes 4 cm from under the edge of the costal arch, the edge of the spleen is determined . Stool tends to be constipated.

Blood test: hemoglobin 62 g/l, erythrocytes $2.9x10^{12}$/l, color index 0.64, reticulocytes 0.4%, platelets $185x10^{9}$ /l, leukocytes $6.0x\ 10^{9}$ /l, band 3%, segmented 28%, lymphocytes 64%. monocytes 5%, ESR 10 mm/h, microcytosis , anisocytosis .

Questions

1. Make and justify a diagnosis.
2. Name the possible causes of the disease.
3. Schedule additional testing.
4. Make a treatment plan.
5. Write a follow-up plan.

Sample answer to problem #4

1. Iron deficiency anemia , severe, hypochromic, hyporegenerative , microcytic . Reason: complaints, anamnesis, examination (sideropenic , anemic syndromes), examination.
2. Aggravated antenatal period (toxicosis, harmful working conditions, unused maternity leave), aggravated intranatal period (large blood loss during childbirth), aggravated postnatal period (early artificial feeding, feeding with cow's milk, lack of complementary foods), unfavorable social factors, previous acute respiratory infections complicated by pneumonia, insufficient time spent in the fresh air.
3. Additional examination: biochemical blood test: ALT, AST, bilirubin, urea, glucose, cholesterol, total protein, protein fractions, serum iron, TIBC, LIBC, KNT; general urine analysis; coprogram, stool for occult blood, stool for eggs of foetuses; ultrasound of abdominal organs. Consultations of specialists: ENT, gynecologist, dentist.
4. Treatment: regimen, diet therapy; iron preparations (at a dose of 5 mg/kg/ day , 6-month course, then a maintenance course of 12 weeks at ½ of the age-related daily therapeutic dose); microelements; vitamin therapy; oxygen-vitamin cocktails; enzymes; eubiotics ; non-specific adaptogens.
5. Medical examination: pediatrician once a month for 1 year, if necessary, hematologist (once every 3 months). Hemogram with reticulocyte count once every 3 months. Biochemical blood test: serum iron, TIBC, LIBC, KNT once a quarter. Preventive vaccinations are contraindicated until hemoglobin is normalized. After normalization of blood counts, vaccinations are administered according to the calendar. The child is removed from the register 1 year after normalization of blood counts.

IX semester

Task number 1.

An 11-year-old girl, 2 weeks after suffering from tonsillitis, began to complain of swelling of the right, and a day later of the left knee, ankle and elbow joints. At the same time, her body temperature rose to 38º, and there were unpleasant sensations in the heart area.

From the anamnesis of life it is known that the girl has catarrhal tonsillitis 1-2 times a year. The grandmother on the mother's side has rheumatoid arthritis.

Questions:

1. List the diseases between which differential diagnostics should be carried out.
2. What should be given more detailed attention during a clinical examination?
3. Design and justify the examination plan.
4. Principles of treatment.
5. What is the primary prevention of acute rheumatic fever?

Sample answer to problem #1

1. Considering the leading syndrome of arthritis that occurs after a sore throat, one should first of all think about acute rheumatic fever, differentiate it from juvenile rheumatoid arthritis, reactive arthritis, systemic lupus erythematosus and other systemic diseases of connective tissue.

2. Diagnosis of arthritis (size, shape of joints, skin temperature over the area of affected joints, joint functions. Size of relative cardiac dullness, heart rate, sonority of heart sounds, pathological murmurs over the heart, blood pressure, respiratory rate, liver size, peripheral edema, bulging jugular veins).

3. Clinical blood test – determination of humoral activity;

biochemical blood test (CRP – determination of humoral activity of the process, CPK, LDH – myocardial enzymes, other general clinical indicators);

serological analysis (ASL-O, antistreptokinase);

immunological blood test (antibodies to DNA, rheumatoid factor, immunoglobulins);

ECG – registration of rhythm disturbances (myocarditis);

EchoCG – diagnosis of carditis (endo-, myo-, pericarditis);

chest x-ray if necessary (cardiomegaly);

Ultrasound of joints (diagnosis of arthritis);

X-ray of affected joints;

consultations with an ENT doctor and ophthalmologist.

4. Symptomatic treatment - NSAIDs - diclofenac sodium 2-3 mg/kg in 2-3 doses, compresses with dimexide , physiotherapy , sanitation of infection foci.

5. Antibiotic treatment of acute bacterial tonsillitis and exacerbation of chronic tonsillitis.

Task number 2.

An 8-year-old boy came to the clinic complaining of abdominal pain, malaise, decreased appetite, infrequent urination, slight facial swelling, and a change in the color of urine (cloudy). According to his mother, the boy has turned pale over the past month and developed nocturnal enuresis. In the last week, an increase in body temperature to 38 degrees has been noted. An objective examination reveals a puffy face, pale skin, poor nutrition, muffled heart sounds, decreased blood pressure (75/40 mm Hg) , and soreness of the upper and lower ureteral points. Positive Pasternatsky's symptom , more on the left. During the examination: blood test Hb 100 g / l, leukocytes 11 thousand / μl , a shift in the formula to the left. ESR 19 mm / hour. There is no protein in the urine tests, leukocytes are in large quantities, renal epithelial cells are single in the preparation. Bacterial urine culture: microbial count of 3 million microbial bodies in 1 ml of urine, culture yielded growth of E. coli.

An ultrasound examination of the urinary system revealed dilation of the renal pelvis on the left: renal pelvis up to 30 м, all groups of calyces up to 10 мм.

1. What is your diagnosis?
2. Are additional examination methods necessary?
3. Prescribe treatment.
4. Further therapeutic tactics.
5. List the causes of congenital hydronephrosis known to you.

Sample answer to problem #2

1. Diagnosis: Chronic secondary pyelonephritis, active stage.

Congenital hydronephrosis on the left?

2. Intravenous urography.

Voiding cystogram .

Ultrasound of the kidneys with Dopplerography of the renal vessels.

Dynamic nephroscintigraphy .

Zimnitsky test , urea, blood creatinine , SCF.

3. Treatment: semi-bed rest, diet No. 5, plenty of fluids, antibacterial therapy (drugs of choice: amoxicillin/ clavulanate or third- generation CS) for 10-14 days.

4. Consultation with a urologist and decision on the timing of surgical treatment of hydronephrosis.
5. Accessory renal artery, embryonic adhesion, ureteral stone.

Task #3

Nikita L., 14 years old, consulted a pediatrician complaining of pain in the epigastric region that occurs shortly after eating (especially fatty and spicy foods), heartburn in the center of the sternum, dryness and periodically a sour taste in the mouth. About 6 months ago, abdominal pain and heartburn appeared. At first, these symptoms occurred periodically, mainly after overeating, but in the last month, heartburn began to be felt as a pronounced heat behind the sternum, it was intrusive and caused significant discomfort. The boy began to tire quickly, his academic performance worsened, and he began to have hypochondria attacks. He eats with long breaks, and abuses dry food. He smokes 3-4 cigarettes a day. Alcohol - beer 1-2 times a month. He does not use narcotics. In preschool age, his mother noted a decreased appetite, and non-localized abdominal pain occurred periodically. This year, he grew sharply by 5 см, discomfort in the abdomen appeared, then pain and heartburn. The teenager was examined and hospitalized in a specialized gastroenterology hospital.

On admission, the patient's condition is moderate, height 180 см, weight . The skin is pale and dry. There is local 65 кгhyperhidrosis in the armpits and groin area . Red diffuse dermographism. The oral cavity is clean. The tongue is moist, thickly coated with a white-yellow coating, there is an unpleasant odor from the mouth. The teeth are sanitized. Tonsils up to 2nd degree, hypertrophied, lacunae are free. Deep palpation of the abdomen reveals pain in the center of the epigastrium , the projection area of the duodenum, in the epigastric region. The liver is not enlarged. Stool is formed once a day. Urinates freely, painlessly.

Survey results:

Complete blood count: Hb - 128 g/l, Cp - 0.91, Er - 4.2xl0 ^{12} /l; Leukocytes - 7.2x10 ^{9}; p/y - 3%, s/y - 51%, e - 3%, l - 36%, m - 7%, ESR - 6 mm/hour. Blood biochemistry: total protein - 72 g/l, ALT - 19 U /l, AST - 24 U /l, alkaline phosphatase - 138 U /l, amylase - 100 U /l, thymol test - 4 units , bilirubin - 15 μmol /l. Intracavitary pH-metry with a 3-electrode probe - on an empty stomach - pH in the lower third of the esophagus 6.3; periodically short-term decrease for 15-20 sec to 3.3-3.0; in the body of the stomach 1.7, in the antrum 3.8; after stimulation with 0.1% histamine solution at a dose of 0.008 mg / kg - pH in the esophagus 6-6.5 with a decrease in the pH level, more often for 30-40 sec to 2.8-3.3; in the body 1.3; in the antrum 3.6. EGD - the mucous membrane of the esophagus in the lower third is hyperemic, edematous, hyperemia of the "tongues of flame" type, there is a large erosion on the posterior wall up to 0,3 см, the cardia does not close sufficiently, is located below the esophageal opening of the diaphragm. There is bile in the stomach, the mucous membrane of the antrum is hyperemic, moderately edematous. The mucous membrane of the duodenal bulb and postbulbar sections is unchanged.

Questions:

1. Formulate a diagnosis and justify it.
2. Name the etiopathogenetic causes of this disease in older children.
3. Evaluate the pH measurement results.
4. Prescribe complex therapy for this patient, with lifestyle recommendations.
5. Make a plan for follow-up care of the patient after discharge from the hospital.

Sample answer to problem #3

1. Based on complaints (pain in the retrosternal region, retrosternal heartburn, sour taste in the mouth - indicates acidic reflux of gastric contents into the esophagus), anamnesis (frequent regurgitation at an early age, short-term abdominal pain, decreased appetite, the appearance of symptoms in the last 6 months against the background of a significant increase in body growth), the presence of risk factors: smoking, long breaks between meals, dry food, examination data: an increase in body growth relative to weight, symptoms of chronic endogenous intoxication, a white-yellow coating on the tongue, bad breath, abdominal pain with deep palpation in the epigastrium , epigastric region and projection of the duodenum, the child has a Diagnosis: GERD (reflux esophagitis grade II) (according to I. Tytgat). Chronic total gastritis with increased acid-forming function of the stomach, exacerbation. Duodenogastric reflux.

2. Etiopathogenetic causes of GERD in older children:

- An increase in the volume of gastric contents (heavy meals, excessive secretion of hydrochloric acid, pylorospasm and gastrostasis), horizontal or inclined body position, increased intragastric pressure (when wearing a tight belt, strength exercises, drinking gas-forming drinks).
- An imbalance between aggressive factors (GERD with reflux of acid, pepsin, bile,

pancreatic enzymes; increased intra-abdominal , intragastric pressure; smoking, alcohol, medications, fatty foods, overeating, products with caffeine and mint) and protective factors (effective esophageal cleansing, resistance of the esophageal mucosa, anti-reflux barrier function of the LES, etc.).

- The degree of damage to the esophageal mucosa depends on the degree of disruption of protective factors.

3. On an empty stomach, the pH in the lower third of the esophagus is 6.3 (normal 5.5 - 7.0) - within the normal range, but periodic short-term (15-20 seconds) acid reflux from the stomach with a decrease in pH to 3.3-3.0 is noted (a decrease in pH in the esophagus below 4.0 is considered significant); after stimulation with a 0.1% histamine solution at a dose of 0.008 mg / kg - pH in the esophagus did not change significantly (6-6.5), but more frequent episodes of esophageal acidification with a decrease in pH levels, usually for 30-40 seconds to 2.8-3.3 are noted. The acid-forming function of the stomach is also increased after stimulation with histamine - in the body 1.3; in the antrum 3.6.

4. The basic principles of conservative treatment of GERD include:

An approximate treatment plan for this patient:

- Lifestyle modification - *frequent* and fractional meals (5-6 times a day); intake of mechanically and chemically gentle food; the last meal should be no later than 3-4 hours before bedtime; avoid eating foods that increase GERD (coffee, fats, chocolate, etc.); in case of severe reflux, eat standing; walk for half an hour after eating; sleep on a bed with the head end raised by 20 см; do not eat less than 2 hours before bedtime; it is undesirable to take drugs that reduce the tone of the lower esophageal sphincter (theophylline, progesterone, antidepressants, nitrates, calcium antagonists, NSAIDs, doxycycline); avoid straining the abdominal muscles, bending over, wearing tight belts, belts).
- Domperidone (Motilium) 10 mg x 3 times a day 30 minutes before meals. Course 10 days.
- Gaviscon 1 tbsp . 1 hour after meals 3 times a day and the 4th time before bed. Course 7-10 days.
- Esomeprazole (Nexium) 40 mg x 1 time per day. Course 4 weeks.
- Ursodeoxycholic acid (Ursofalk) 250 mg x 1 time per day (at 8 p.m.). Course 1 month.
- Physiotherapy (SMT electrophoresis with cerucal on the epigastric region , UHF on the collar zone) No. 5.

5. Tactics of dispensary observation of a patient after discharge from hospital

- Observation by a local pediatrician (frequency of examinations: in the first year after the acute period - once every 3 months, in the second year - once every 6 months, subsequently - once every 12 months) until transfer to the adult network. Removal from the dispensary register after 3 years in the absence of exacerbations.
- EGDS – once a year (only for patients who have not achieved remission), pH-metry of the stomach once every 2-3 years.
- Sanatorium and resort treatment during the period of remission – once a year
- Physical education: exemption from classes for 5 weeks due to exacerbation, then a special or preparatory group for 2 years.
- On-demand therapy: for heartburn, a feeling of heaviness in the epigastric region – antacids; Nexium 20 mg (once at 3 p.m.). The course is 2 weeks.

Task #4

An 11-year-old boy was admitted to the department with complaints of irritability, periodic twitching of the facial muscles, severe weakness, decreased attention and memory.

It is known from the anamnesis that 2.5 months ago he had scarlet fever. He received antibacterial therapy with penicillin antibiotics. A month later, when the child began attending school, there were changes in handwriting, tearfulness, the boy became restless, and his academic performance at school declined. Soon the mother noticed twitching of the boy's facial muscles, imprecision of movements when dressing and eating. Periodically, the body temperature rose to subfebrile numbers, there were no catarrhal phenomena. Neurological disorders increased dynamically: grimacing increased, the boy could not dress himself, sometimes he needed help with eating, tearfulness and irritability persisted.

On admission, the boy's condition is severe. The boy is tearful, irritable, tires quickly, has a scanned speech, inaccurate performance of coordination tests, positive Cherny and Filatov symptoms, muscle hypotonia, grimacing. In the lungs, breathing is vesicular, there are no wheezing,

respiratory rate is 16 per minute. Borders of relative cardiac dullness: right - along the right edge of the sternum, upper - 3rd rib, left - 1 cm inward from the midclavicular line. Heart sounds are moderately muffled, heart rate is 96 beats per minute, a soft systolic murmur is heard at the apex, it is not conducted, its intensity decreases in orthostasis . Blood pressure is 110/70 mm Hg. The abdomen is soft, accessible for deep palpation, the liver and spleen are not enlarged.

Blood test: hemoglobin 120 g/l, erythrocytes 4.5x10 ^{12}/l, leukocytes - 9.0x10 ^{9} / l, band 2%, segmented 56%, eosinophils 2%, lymphocytes 38%, monocytes 2%, ESR 10 mm/hour.

General urine analysis: specific gravity 1018, protein negative, leukocytes 2-3 per field of vision, erythrocytes absent.

Questions

1. Make a preliminary diagnosis.
2. Schedule an examination to clarify the diagnosis.
3. What specialists does this patient need to consult?
4. Prescribe treatment.
5. Make a plan for medical observation.

Sample answer to problem #4

1. DS: Acute rheumatic fever without marked cardiac changes. Minor chorea.
2. Necessary examination: biochemical blood test: " acute phase " indicators (CRP, fibrinogen); determination of the titer of antistreptococcal antibodies in the blood serum; ECG, ECHO-CG.
3. Consultations with specialists: rheumatologist, cardiologist, neurologist, ophthalmologist, orthopedist.
4. Treatment: regimen, diet, antibacterial therapy, nonsteroidal anti-inflammatory drugs, potassium preparations, cardiometabolic drugs, antioxidants.
5. Outpatient observation. Observe continuously until the child reaches adolescence and is transferred to an adult clinic. Conduct primary and secondary prevention (the most optimal is year-round prevention, carried out monthly for 5 years). Examination methods: blood and urine tests twice a year and after intercurrent diseases, biochemical indicators of inflammation activity twice a year, ECG - twice a year, other studies - as indicated.

X semester

Task #1

A 5-year-old child attends kindergarten. The disease began acutely with a rise in body temperature to 38.2 ^{0}C, repeated vomiting, and anxiety. A few hours later, the mother noticed redness of the face and a rash on the skin. The child was sent to the hospital.

On examination: the patient is in a moderate condition, body temperature is 38.8 ^{0} C, complains of headache and sore throat. There is a bright blush on the cheeks, a pale nasolabial triangle. The skin is dry, pink, on the trunk and limbs (mainly on the flexor surfaces) there is an abundant fine-point rash. Breathing through the nose is free, there is no cough. Vesicular breathing in the lungs, no wheezing. Heart sounds are sonorous, rhythmic, tachycardia up to 140 beats / min. The abdomen is painless. The liver and spleen are not enlarged. The stool is formed. In the pharynx there is bright delimited hyperemia, enanthems, tonsils with insular superpositions along the lacunae.

Clinical blood test: Hb- 135 g\l, Er - 3.4 x 10 ^{12}\l, Leukocytes - 15.5 x 10 ^{9}\l; p\ya-10%, s\ya- 62%, e-3%, l-20%, m-5%, ESR-30 mm\hour.

General urine analysis : specific gravity - 1021, reaction - acidic, protein - no, glucose - no, epithelium - units, leukocytes - 1-2 in the field of vision, mucus - a lot.

In the culture of mucus from the pharynx: growth of hemolytic streptococcus.

1. Make a clinical diagnosis.
2. Provide a rationale for the diagnosis.
3. Principles of treatment.
4. What activities need to be carried out at home and in the children's group?
5. Differential diagnosis.

Sample answer to problem #1

1.Diagnosis: Scarlet fever, typical, moderate form A.

Etiology: Group A β-hemolytic streptococcus

2. Based on the acute onset of the disease with an increase in body temperature to 38.2 ^{0}C, repeated vomiting, anxiety, headache, sore throat, facial flushing, skin rash, objective examination data: bright blush on the cheeks, pale nasolabial triangle, dry skin, the presence of abundant small-spotted rash on the trunk, limbs (mainly on the flexor surfaces), tachycardia up to 140 beats / min, laboratory test data: inflammatory changes in the blood (leukocytosis with a shift to the left, increased ESR), throat culture - growth of hemolytic streptococcus.

3.Treatment.

- ✓ Bed rest during fever.
- ✓ Mechanically and chemically gentle food for the angina period.
- ✓ Antibacterial therapy for 10 days (penicillin 100 thousand/kg/ day)
- ✓ Antihistamines (5 days).
- ✓ Vitamin C.
- ✓ Gargling with furacilin solution .

4. Activities in the outbreak area. Quarantine for 7 days in kindergarten - do not accept people who have not had scarlet fever into the group. Monitor contacts for fever, rash, and sore throat. Examine staff for tonsillitis and other streptococcal diseases. At home, if there are children attending preschool institutions and the first 2 grades of school, quarantine them for 7 days. Adults in the outbreak area who work with children, in maternity and surgical departments are not suspended from work, but are observed for 7 days for early detection of streptococcal infection. An emergency notification is sent to the State Sanitary and Epidemiological Supervision Service for the patient.

5. With yersiniosis , staphylococcal, enterovirus infections, allergic reactions, acute hemorrhagic fevers.

Task #2

Seryozha, 14 years old, fell ill 5 days ago with a fever of 38°, cough, runny nose. After 3 days, the condition worsened: the temperature rose to 39°, catarrhal symptoms intensified, and a maculopapular rash appeared on the face. The next day, the rash spread to the body. The local doctor was called. The child was hospitalized.

On examination, the child is lethargic, the face is puffy, the eyelids are swollen, red, the conjunctiva is hyperemic, photophobia and lacrimation are noted; there is abundant mucous discharge from the nose, frequent wet cough, dyspnea. On the skin of the face and trunk there is abundant bright, large maculopapular rash, which merges in places. The oral mucosa is loosened with areas of hyperemia, on the mucous membrane of the cheeks there are point and group foci of whitish rashes. There is harsh breathing above the lungs, on the right under the scapula, moist fine bubbling rales are heard and a shortened percussion sound is noted. The heart sounds are muffled, increased to 114 per minute. The liver is + 1 см, the spleen is not enlarged. Formed stool once a day. There are no meningeal signs.

Questions:

1. Make a clinical diagnosis.
2. What examination does the patient need?
3.What diseases will you conduct differential diagnosis with?
4. Describe the proposed treatment.
5. Draw up a plan for anti-epidemic measures in the outbreak area.

Sample answer to problem #2

1. Diagnosis: Measles, typical, moderate form, uneven course. Complication: right-sided pneumonia.

2. Necessary examinations.

Clinical blood test. Urinalysis. Chest X-ray. ELISA: IgM , IgG to measles virus. Stool for helminth eggs. Scraping for pinworms.

3. Differential diagnosis: with rubella, allergy .

4.Treatment.

Bed rest, shared meals.

Intramuscularly: antibacterial drugs from the cephalosporin group (cefazolin , cefotaxime).

Internally: antihistamines, vitamins A and C, expectorants, in the eyes - instillation of 20% albucid, in the nose - 0.1% sanorin solution.

5. Anti-epidemic measures in the outbreak area.

Isolate the patient for 10 days from the moment the rash appears. Urgent notification to the State Sanitary and Epidemiological Service. In the outbreak, persons under 35 years of age who have not been ill , not vaccinated, and vaccinated once against measles should be vaccinated against measles within 72 hours and medically monitored for 21 days. If the intensity of measles immunity in contacts is determined in the outbreak, then with a titer lower than 1:10 in the RPGA, these contacts should also be vaccinated. All those with fever and suspected of having measles should be examined (ELISA).

Task #3

A child aged 3 years. From the anamnesis it is known that the child has frequent acute respiratory viral infections, atopic dermatitis. The indicators of physical and neuropsychic development correspond to average values (4 zone according to centile tables).

On examination: pale skin, facial pastosity, hyperemia on the cheeks and extensor surfaces of the hands, scabs, scratches. Tonsils enlarged to size II , body temperature 36.8 C. Body weight 12,7 кг, length 98 см.

Questions:

1. To what health group can this child be assigned?
2. Give a description of this health group.
3. Is child D subject to observation?
4. What sanatoriums can be recommended for a child?
5. Name the main functional responsibilities of a district pediatrician.

Sample answer to problem #3

1. II health group.

2. Health group II – children without chronic diseases, with functional and morphological disorders; convalescents from severe and moderate infections; with delayed physical development without endocrine pathology; children with underweight or overweight ; children with mild physical disabilities, consequences of injuries or surgery while maintaining the corresponding functions.

3. Outpatient observation by a local doctor, with mandatory consultation with a dermatologist, and, if necessary, consultation with other specialists. Children with severe forms of atopic dermatitis are under the observation of a dermatologist.

4. In this case, the child is 3 years old, it is better to use local resorts in the summer. For children of our region, we can recommend the sanatoriums "Lake Shira ", "Lake Uchum ", " Tagarskoe ".

5. The main functional responsibilities of the district pediatrician: conducting clinical and laboratory examinations; providing specialist consultations; comprehensive assessment of health status; preventive measures; implementation of health-improving, restorative and corrective measures; rehabilitation of children in the dispensary group; compliance with deontological principles.

4.3. List of practical skills that a student should have after mastering the discipline

In the section pathology of young children

1. Interpret anthropometric data and patterns of growth and development of a child.
2. Collect and evaluate the child's medical history and illness.
3. Collect a genealogical history and determine hereditary predisposition.
4. Conduct a physical examination of the child and evaluate the obtained data in accordance with the age norm.
5. To evaluate the data of clinical blood and urine tests, the main biochemical and immunological parameters of blood in the age aspect.
6. Evaluate the X-ray data of the child's chest and skeletal system.
7. Prescribe rational feeding for a child of the first year of life and nutrition for a child over one year of age with a written nutrition menu.
8. Diagnose, conduct differential diagnosis, draw up and implement a plan for treatment, rehabilitation, dispensary observation and prevention of the following diseases in young children.
9. Provide emergency care for spasmophilia and hyperthermic syndrome.
10. Conduct health education work with the aim of developing a healthy lifestyle and creating

conditions for the harmonious physical and mental development of children.
11. Promote natural breastfeeding.
12. Determination of newborn reflexes

In the section on pathology of older children

1. Interpret objective examination data (percussion, auscultation, palpation, blood pressure, heart rate, respiratory rate) in patients with diseases of various organs and systems.
2. To highlight the main symptoms and syndromes for each nosological form and explain their pathogenesis.
3. To draw up a plan for examining a patient with diseases of various organs and systems, taking into account the standard of specialized medical care
4. Interpret taking into account the norm: clinical and biochemical blood tests ; ECG data , Holter rhythm monitoring, ultrasound of internal organs, heart, kidneys, fundus examination.
5. Based on the information received, formulate and justify a clinical diagnosis .
6. Prescribe treatment for the patient taking into account the standard of specialized medical care and individual characteristics.
7. Write prescriptions for prescribed medications and characterize the main groups of drugs.
8. To characterize the methods of disease prevention (within the nosological forms studied) and give the patient recommendations on diet and lifestyle.
9. Recognize complications and provide emergency care during an attack of bronchial asthma, hypertensive crisis, obstructive laryngotracheitis.
10. Complete a medical history.

In the section infectious diseases in children

1. percussion, auscultation, palpation, blood pressure, heart rate, respiratory rate) in a patient with infectious diseases .
2. To highlight the main symptoms and syndromes of infectious diseases and explain their pathogenesis.
3. Make a plan for examining a patient with infectious diseases, taking into account the standard of specialized medical care
4. Interpret taking into account the norm: clinical and biochemical blood tests, immunological and serological studies, coprological studies, ECG data, ultrasound of internal organs.
5. Based on the information received, formulate and substantiate a clinical diagnosis .
6. Prescribe treatment for the patient taking into account the standard of specialized medical care and individual characteristics.
7. To characterize the methods of preventing infectious diseases (within the nosological forms studied) and give the patient recommendations on diet and lifestyle.
8. Recognize complications and provide emergency care in case of infectious toxic shock.

By section children's clinic

1. Conduct a comprehensive assessment of the child's health.
2. Make a plan for the child’s medical observation during the first year of life.
3. To draw up a plan for the dispensary observation of children with chronic pathology.
4. Provide patronage to socially disadvantaged families and families of disabled children.
5. Make a plan for preventive vaccinations.
6. Write prescriptions for prescribed medications and characterize the main groups of drugs.
7. Provide emergency care in the following conditions: loss of consciousness, bleeding, acute allergic reactions, convulsive syndrome.
8. To draw up a plan for preventive and health-improving measures for children and adolescents with chronic pathology.

4.4. List of questions for the exam

1. History of pediatrics. The role of domestic scientists in the development of pediatrics.
2. Childhood morbidity and infant mortality at the present stage. Ways of reduction.
3. Periods of childhood.
4. Peculiarities of age-related pathology.

5. Physical development of children.
6. Anatomical and physiological features of the nervous system.
7. Neuropsychic development of children.
8. The development of immunity and its characteristics in children at different age periods.
9. Anatomical and physiological features of the skin, subcutaneous fat, and mucous membranes.
10. Anatomical and physiological features of the respiratory organs.
11. Anatomical and physiological features of the digestive organs.
12. Anatomical and physiological features of the cardiovascular system.
13. Natural feeding.
14. Artificial feeding.
15. Nutrition for children over one year old.
16. Alimentary-dependent conditions in young children.
17. Newborn baby (anatomical and physiological characteristics, structure of morbidity and mortality). Borderline conditions of newborns.
18. Premature baby (anatomical and physiological characteristics, structure of morbidity and mortality). Newborns with extreme and very low body weight.
19. Perinatal encephalopathy. Etiology, classification, clinical features, diagnostics, treatment, prevention, outcomes.
20. Congenital malformations. Causes, classification, diagnostics, treatment, prevention. Embryo- and fetopathy .
21. Hemolytic disease of the newborn. Etiology, classification, clinical features, diagnostics, treatment, prevention, differential diagnostics.
22. Intrauterine infections. Classification, clinical features, diagnostics, treatment, prevention.
23. Localized inflammatory diseases of the skin and subcutaneous tissue.
24. Pneumonia in newborns and premature infants.
25. Sepsis in newborns.
26. Constitutional anomalies (diathesis). Allergic, lymphatic, neuro-arthritic diathesis. Role in children's morbidity.
27. Atopic dermatitis. Etiology, pathogenesis, clinical features, treatment, prevention, rehabilitation.
28. Syndrome of "frequently ill child". Causes, clinical features, treatment, prevention.
29. Hypotrophy. Causes, classification, clinical picture, diagnostics.
30. Hypotrophy. Treatment, prevention, dispensary observation.
31. Hypovitaminosis in children. Classification, clinical picture, prevention, treatment.
32. Hereditary metabolic disorders. Classification, clinical presentation, diagnostics, prevention, treatment.
33. Intestinal malabsorption syndrome . Causes, clinical features, treatment, prevention.
34. Rickets. Etiology, classification, diagnostics, treatment, prevention, dispensary observation.
35. Rickets-like diseases. Causes, classification, clinical picture, diagnostics, differential diagnostics, treatment, prevention.
36. Hypervitaminosis D. Causes, classification, clinical picture, diagnostics , differential diagnostics, treatment, prevention.
37. Spasmophilia. Causes, classification, clinical picture, diagnostics, differential diagnostics, treatment, prevention.
38. Pneumonia. Etiology, pathogenesis, clinical picture, classification, complications.
39. Pneumonia. Treatment, prevention, dispensary observation.
40. Iron deficiency anemia. Etiology, classification, clinical features, complications.
41. Iron deficiency anemia. Treatment, prevention, dispensary observation.
42. Chronic bronchitis, chronic bronchiolitis . Causes, classification, clinical picture, diagnostics, differential diagnostics, treatment, prevention.
43. Bronchopulmonary dysplasia in young children. Causes, clinical features, diagnostics, differential diagnostics, treatment, prevention, outcomes.
44. Cystic fibrosis. Causes, classification, diagnosis, treatment, prevention.
45. Features of the course of tuberculosis in children.
46. Bronchial asthma. Etiology, pathogenesis, clinical features, classification, complications.

47. Bronchial asthma. Treatment, prevention, dispensary observation.
48. Exogenous allergic pulmonitis . Etiology, pathogenesis, clinical features, treatment, prevention, dispensary observation.
49. Rheumatic fever. Etiology, pathogenesis, clinical features, classification, diagnostics.
50. Rheumatic fever. Treatment, prevention, dispensary observation.
51. Juvenile rheumatoid arthritis. Etiology, pathogenesis, clinical features, classification, diagnostics.
52. Juvenile rheumatoid arthritis. Treatment, prevention, dispensary observation, rehabilitation.
53. Reactive arthritis. Etiology, classification, clinical features, diagnostics, treatment, prevention.
54. Juvenile arterial hypertension. Etiology, classification, clinical features, diagnostics, treatment, prevention, dispensary observation.
55. Myocardial dystrophies. Etiology, clinical picture, classification, treatment, prevention, dispensary observation.
56. Violation of rhythm and conduction. Etiology, clinical picture, classification, treatment, prevention, dispensary observation.
57. Systemic lupus erythematosus. Etiology, pathogenesis, clinical features, classification, treatment, prevention, dispensary observation.
58. Systemic scleroderma. Etiology, pathogenesis, clinical features, classification, treatment, prevention, dispensary observation.
59. Congenital heart and vascular defects. Causes, classification, clinical presentation, complications, treatment, prevention, follow-up.
60. Mitral valve prolapse. Etiology, classification, clinical features, complications, treatment, prevention.
61. Non-rheumatic carditis. Etiology, classification, clinical features, diagnostics, treatment, prevention, dispensary observation.
62. Juvenile dermatomyositis. Etiology, classification, clinical features, diagnostics, treatment, prevention, dispensary observation.
63. Hemorrhagic vasculitis. Etiology, classification, clinical features, diagnostics, treatment, prevention, dispensary observation.
64. Vegetative dystonia syndrome. Causes, classification, clinical picture, complications.
65. Vegetative dystonia syndrome. Diagnostics, treatment, prevention, dispensary observation, rehabilitation.
66. Acute pyelonephritis. Etiology, classification, clinical features, complications, treatment, prevention.
67. Chronic pyelonephritis. Etiology, clinical picture, classification, complications, treatment, prevention.
68. Acute glomerulonephritis . Etiology, clinical features, classification, complications, treatment, prevention.
69. Chronic glomerulonephritis . Etiology, clinical picture, classification, complications, treatment, prevention.
70. Acute and chronic renal failure. Etiology, clinical features, classification, treatment, prevention.
71. Acute gastritis. Etiology, clinical picture, classification, complications, treatment, prevention.
72. Chronic gastroduodenitis. Etiology, clinical picture, classification, complications, treatment, prevention, rehabilitation.
73. Chronic pancreatitis. Etiology, clinical picture, classification, complications, treatment, prevention.
74. Peptic ulcer. Etiology, pathogenesis, clinical features, classification, complications.
75. Ulcer disease. Treatment, prevention, rehabilitation.
76. Chronic enterocolitis, chronic enteritis.
77. Ulcerative necrotic enterocolitis. Etiology, clinical picture, classification, complications, treatment, prevention.
78. Irritable bowel syndrome. Etiology, clinical features, classification, complications, treatment, prevention, rehabilitation.
79. Functional disorders of the gastrointestinal tract in young children. Etiology, clinical presentation, classification, complications, treatment, prevention.
80. Helminthiasis. Nematodosis , trematodosis, cestodosis.

81. Dyskinesia of the biliary tract. Etiology, clinical picture, classification, complications, treatment, prevention.
82. Chronic cholecystitis. Etiology, clinical picture, classification, complications, treatment, prevention.
83. Chronic hepatitis. Etiology, pathogenesis, clinical picture, classification.
84. Chronic viral hepatitis.
85. Autoimmune hepatitis. Etiology, clinical picture, classification, complications, treatment, prevention.
86. Thrombocytopenic purpura. Etiology, pathogenesis, clinical features, classification, diagnostics.
87. Thrombocytopenic purpura. Treatment, prevention.
88. Hemophilia. Etiology, pathogenesis, clinical picture, classification, diagnosis.
89. Hemophilia. Treatment, prevention, outcomes.
90. Lymphoblastic leukemia. Causes, pathogenesis, clinical features, diagnostics.
91. Lymphoblastic leukemia. Treatment, prevention.
92. Leukemoid reactions.
93. Lymphogranulomatosis.
94. Diabetes mellitus. Etiology, clinical features, classification, complications, treatment, prevention.
95. Congenital hypothyroidism. Etiology, clinical features, classification, complications, treatment, prevention.
96. Diffuse toxic goiter. Etiology, clinical picture, classification, complications, treatment, prevention.
97. Ethics, bioethics and deontology in pediatrics.
98. Scarlet fever. Etiology, pathogenesis, clinical features, classification, diagnostics.
99. Scarlet fever. Differential diagnostics, treatment, prevention, complications.
100. Whooping cough. Etiology, pathogenesis, clinical features, classification, diagnostics.
101. Whooping cough. Differential diagnostics, treatment, prevention, complications.
102. Diphtheria. Etiology, pathogenesis, clinical picture, classification, diagnosis.
103. Diphtheria. Differential diagnostics, treatment, prevention, complications.
104. Measles. Etiology, pathogenesis, clinical features, classification, diagnostics.
105. Measles. Differential diagnostics, treatment, prevention, complications.
106. Rubella. Etiology, pathogenesis, clinical picture, classification, diagnosis.
107. Rubella. Differential diagnostics, treatment, prevention, complications.
108. Epidemic mumps. Etiology, pathogenesis, clinical features, classification, diagnostics.
109. Epidemic mumps. Differential diagnostics, treatment, prevention, complications.
110. Poliomyelitis. Etiology, pathogenesis, clinical features, classification, diagnostics.
111. Poliomyelitis. Differential diagnostics, treatment, prevention, complications.
112. Chickenpox. Etiology, pathogenesis, clinical presentation, classification, diagnostics.
113. Chickenpox. Differential diagnostics, treatment, prevention, complications.
114. Infectious mononucleosis. Etiology, pathogenesis, clinical features, classification, diagnostics.
115. Infectious mononucleosis. Differential diagnostics, treatment, prevention, complications.
116. Meningococcal infection. Etiology, pathogenesis, clinical features, classification, diagnostics.
117. Meningococcal infection. Differential diagnostics, treatment, prevention, complications.
118. ARI. Etiology, clinical picture, classification, complications.
119. ARI. Treatment, prevention.
120. Herpes infection.
121. Cytomegalovirus infection.
122. Acute viral hepatitis. Etiology, pathogenesis, clinical features, classification, diagnostics. Differential diagnostics, treatment, prevention, complications.
123. Acute viral hepatitis. Differential diagnostics, treatment, prevention, complications.
124. Dysentery. Etiology, pathogenesis, clinical features, classification, diagnostics. Differential diagnostics, treatment, prevention, complications.
125. Salmonellosis. Etiology, pathogenesis, clinical features, classification, diagnostics. Differential diagnostics, treatment, prevention, complications.
126. Intestinal toxicosis (etiology, pathogenesis, clinical features, classification, treatment,

prevention).

127. Acute allergic reactions. Etiology, pathogenesis, clinical picture, treatment, prevention, localized and generalized forms.
128. Acute bronchial obstruction. Etiology, pathogenesis, clinical features, treatment.
129. Convulsions. Etiology, pathogenesis, clinical features, treatment, prevention.
130. Hyperthermia. Etiology, pathogenesis, clinical features, treatment, prevention
131. Emergency care for an asthma attack.
132. Emergency care for hyper- and hypoglycemic coma.
133. Intestinal toxicosis. Treatment, prevention.
134. First aid for allergic reactions.
135. Children's polyclinic, tasks, structure. Providing medical care to children.
136. Comprehensive assessment of the health status of children of different age periods.
137. Organization of preventive examinations. Medical examination of a healthy child.
138. Vaccination. National vaccination calendar.
139. Medical examination and rehabilitation of children with chronic pathologies (respiratory system, cardiovascular system).
140. Medical and social department. Monitoring children from families at social risk.
141. Medical care for children in children's educational institutions. "School diseases".
142. Observation of disabled children. Rehabilitation of children with musculoskeletal diseases, pathology of the nervous system. Career guidance for adolescents with chronic pathology.
143. Prevention of childhood illnesses.
144. Preventive pediatrics. Basic methods of rehabilitation in pediatrics.
145. Prevention of hereditary and congenital diseases. Neonatal screening.
146. Medical examination and rehabilitation of children with chronic diseases of the gastrointestinal tract and kidneys.
147. Preparing children for preschool education. Prevention of adaptation disorders.
148. Childhood multisystem inflammatory syndrome associated with novel coronavirus infection (COVID-19).
149. Features of clinical manifestations of the new coronavirus infection (COVID-19) in children.
150. Features of treatment of children with new coronavirus infection (COVID-19) .

APPROVED
at a meeting of the Department of
Children's Diseases
Protocol No. 15 of June 22, 2022
Head of Department
Romantsova E.B.

**ADDITIONS AND CHANGES TO THE WORK PROGRAM FOR THE DISCIPLINE "PEDIATRICS"
SPECIALTY 31.05.01 GENERAL MEDICINE
FOR THE 2022-2023 ACADEMIC YEAR**

Teaching of the discipline "Pediatrics" will be conducted in accordance with the approved work program.

1) Make a change on page 63, update the table in the section “Licensed and freely distributed software used in the educational process”.

List of software (commercial software products)

No. p/p	List of software (commercial software products)	Details of supporting documents
1.	Operating system MSWindows 7 Pro	License number 48381779
2.	Operating system MSWindows 10 Pro	AGREEMENT No. UT-368 dated 09.21.2021
3 .	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for BusinessAdvanced	Agreement 326po/21-IB dated November 26, 2021
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022
6.	PROF University	LICENSE AGREEMENT No. ЦБ-1151 dated 01.14.2022
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8.	Consultant Plus	Agreement No. 37/C dated 02/25/2022
9.	Aktion 360	Agreement No. 574 dated November 16, 2021
10.	E-learning environment 3KL(Russian Moodle)	Agreement No. 1362.2 dated November 15, 2021
11.	AstraLinuxCommonEdition	Agreement No. 142 A dated September 21, 2021
12.	Information system "Plans"	Agreement No. 8245 dated 06/07/2021
13.	1C:Document Management	Agreement No. 2191 dated 10/15/2020
14.	R7-Office	Agreement No. 2 KS dated 12/18/2020

List of freely distributed software

No. p/p	List of freely distributed software	Links to license agreement

1.	Yandex Browser	Freely distributed License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2.	Yandex.Telemost	Freely distributed License Agreement for the Use of Programs https://yandex.ru/legal/telemost_mobile_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

2) The work program will be supplemented:

1. The textbook " Pathology of young children " (authors: E.B. Romantsova, K.A. Arutyunyan, O.V. Shanova , E.L. Chupak, Blagoveshchensk, 2022) with the stamp of the Coordinating Council for the field of education "Healthcare and Medical Sciences";

2. The textbook "Medical Genetics" (authors: E.B. Romantsova, O.S. Yutkina , Blagoveshchensk, 2022) with the stamp of the Coordinating Council for the field of education "Healthcare and Medical Sciences".

APPROVED
at a meeting of the Department of
Children's Diseases
Protocol No. 12 of 05/17/2023
Head of Department
Romantsova E.B.

**ADDITIONS AND CHANGES TO THE WORK PROGRAM FOR THE DISCIPLINE "PEDIATRICS"
SPECIALTY 31.05.01 GENERAL MEDICINE
FOR THE 2023-2024 ACADEMIC YEAR**

Teaching of the discipline "Pediatrics" will be conducted in accordance with the approved work program.

1. Make a change on page 63, update the table in the section “Licensed and freely distributed software used in the educational process.”

List of software (commercial software products)

No. p/p	List of software (commercial software products)	Details of supporting documents
1	Operating system MSWindows 7 Pro	License number 48381779
2	Operating system MSWindows 10 Pro	AGREEMENT No. UT-368 dated 09.21.2021
3	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4	Kaspersky Endpoint Security for Business – Standard Russian Edition. 50-99 Node 2 year Educational Renewal License	Agreement 165A dated November 25, 2022
5	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022
6	PROF University	LICENSE AGREEMENT No. ЦБ-1151 dated 01.14.2022
7	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8	Consultant Plus	Agreement No. 37/C dated 02/25/2022
9	Contour.Tolk	Agreement No. K007556/22 dated 09/19/2022
10	E-learning environment 3KL(Russian Moodle)	Agreement No. 1362.3 dated November 21, 2022
11	AstraLinuxCommonEdition	Agreement No. 142 A dated September 21, 2021
12	Information system "Plans"	Agreement No. 9463 dated May 25, 2022
13	1C: Document Management	Agreement No. 2191 dated 10/15/2020

14	R7-Office	Agreement No. 2 KS dated 12/18/2020

List of freely distributed software

No. p/p	List of freely distributed software	Links to license agreement
1	Yandex Browser	Freely distributed License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2	Yandex.Telemost	Freely distributed License Agreement for the Use of Programs https://yandex.ru/legal/telemost_mobile_agreement/
3	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/
6	VK Calls	Freely distributed https://vk.com/license

APPROVED
at a meeting of the Department of
Childhood Diseases
Protocol No. 10 of 04/24/2024
Head of Department
Romantsova E.B.

ADDITIONS AND CHANGES TO THE WORK PROGRAM

IN THE DISCIPLINE "PEDIATRICS"

SPECIALTY 31.05.01 GENERAL MEDICINE

FOR THE 2024-2025 ACADEMIC YEAR

1. Make a change and update the table in the section “Professional databases, information and reference systems, electronic educational resources”.

Resource name	Resource Description	Access	Resource address
Electronic library systems			
"Student consultant. Electronic library of the medical university"	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	Remote access after registration under the university profile	http: // www .studmedlib.ru/
"Doctor's Consultant" Electronic Medical Library.	The materials posted in the library have been developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information has been prepared taking into account the position of the scientific and practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.	Remote access after registration under the university profile	http://www.rosmedlib.ru/cgi-bin/mb4x
EBS « Bookup »	Large medical library - information and educational platform for the joint use of electronic educational, educational and methodological publications of medical universities of Russia and the CIS countries	Remote access after registration under the university profile	https://www.books-up.ru/
EBS "Lan"	Network electronic library of medical universities - an electronic database of educational and scientific works on medical topics, created for the purpose of implementing network forms of professional educational programs, open access to educational materials for partner universities	Remote access after registration under the university profile	https://e.lanbook.com/
Scientific electronic library " CyberLeninka "	CyberLeninka is a scientific electronic library built on the paradigm of open science (Open Science), the main objectives of which are the popularization of science and scientific activity, public control over the quality of scientific publications, the development of interdisciplinary research, a modern institute of scientific review, increasing the citation of Russian science and building a knowledge infrastructure. Contains more than 2.3 million scientific articles.	free access	https://cyberleninka.ru/
Oxford Medicine Online	A collection of Oxford medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	free access	http://www.oxfordmedicine.com

Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	free access	http://humbio.ru/
Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	free access	https://www.medlib.ru/library/library/books
Information systems			
Clinical Guidelines Rubricator	A resource of the Russian Ministry of Health that contains clinical recommendations developed and approved by medical professional non-profit organizations of the Russian Federation, as well as methodological guidelines, nomenclatures and other reference materials.	Link to download the application	https://cr.minzdrav.gov.ru/#!/
Federal Electronic Medical Library (FEMB)	The Federal Electronic Medical Library is part of the unified state information system in the field of healthcare as a reference system . The FEMB was created on the basis of the funds of the Central Scientific Medical Library named after I.M. Sechenov.	free access	https://femb.ru/
Russian Medical Association	Professional Internet resource . Objective: to promote effective professional activity of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian Medical Union.	free access	http://www.rmass.ru/
Web -medicine	The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	free access	http: //webmed.irkutsk.ru/
Databases			
World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more	free access	http://www.minobrnauki.gov.ru
Ministry of Education of the Russian Federation	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more	free access	https://edu.gov.ru/
Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and health care.	free access	http: // www .edu.ru/
Polpred.com	Electronic library system Business media. Media review	free access	https://polpred.com/news
Bibliographic databases			
Database "Russian Medicine"	It is created in the Central Scientific and Methodological Library and covers the entire collection, starting from 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc.	free access	https://rucml.ru/
PubMed	A text database of medical and biological publications in English. The PubMed database is an electronic search engine with free access to 30 million publications from 4,800 indexed journals on medical topics. The database contains articles published from 1960 to the present day, including information from MEDLINE, PreMEDLINE , NLM. Each year, the portal is replenished with	free access	http : //www. ncbi.nlm.nih . gov / pubmed /

	more than 500 thousand new works.		
eLIBRARY.RU	Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.	Full functionality of the site is available after registration	http://elibrary.ru/defaultx.asp
Electronic library of dissertations (RSL)	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	free access	http://diss.rsl.ru/?menu=disscatalog/
Medline.ru	Medical and biological portal for specialists. Biomedical journal.	free access	https://journal.scbmt.ru/jour/index
Official Internet portal of legal information	The single official state information and legal resource in Russia	free access	http://pravo.gov.ru/

2. Make a change and update the table in the section “Licensed and freely distributed software used in the educational process.”

List of software (commercial software products)

No. p/p	List of software (commercial software products)	Details of supporting documents
1.	Operating system MS Windows 7 Pro	License number 48381779
2.	Operating system MS Windows 10 Pro	AGREEMENT No. UT-368 dated 09.21.2021
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for business – Standard Russian Edition. 50-99 Node 2 year Educational Renewal License	Agreement 165A dated November 25, 2022
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022 (additional licenses)
6.	1C: PROF University	LICENSE AGREEMENT No. KrTsB-004537 dated 12/19/2023
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8.	Consultant Plus	Agreement No. 37-2C dated March 27, 2023
9.	Contour.Tolk	Agreement No. K1029608/23 dated 09/04/2023
10.	E-learning environment 3KL(Russian Moodle)	Agreement No. 1362.4 dated 12/11/2023
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021
12.	Information system "Plans"	Agreement No. 1338-23 dated May 25, 2023
13.	1C: Document Management	Agreement No. 2191 dated 10/15/2020
14.	R7-Office	Agreement No. 2 KS dated 12/18/2020

List of freely distributed software

No. p/p	List of freely distributed software	Links to license agreement
1.	Yandex Browser	Freely distributed License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2.	Yandex.Telemost	Freely distributed License Agreement for the Use of Programs https://yandex.ru/legal/telemost_mobile_agreement/
3.	Dr.Web CureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/
6.	VK Calls	Freely distributed https://vk.com/license
7.	Kaspersky Free Antivirus	Freely distributed

		https://products.s.kaspersky-labs.com/homeuser/Kaspersky4Win2021/21.16.6.467/english-0.207.0/3830343439337c44454c7c4e554c4c/kis_eula_en-in.txt

3. Supplement the lesson on the topic “Work of the medical and social department. Observation of disabled children” (5th year, 10th semester) with the issue of post-traumatic stress disorder in children.
Link to the course Children's Clinic in EIOS: https://educ-amursma.ru/course/view.php?id=545
Link to the Practical Course on Psychology /Author: Tarabrina N.V. (Chapter 5 Features of post-traumatic stress in children): https://studfile.net/preview/9231981/page:23/

APPROVED
at a meeting of the Department of
Childhood Diseases
Protocol No. 8 of March 26, 2025

Head of Department
Romantsova E.B.

ADDITIONS AND CHANGES TO THE WORK PROGRAM

IN THE DISCIPLINE "PEDIATRICS"

SPECIALTY 31.05.01 GENERAL MEDICINE

FOR THE 2025-2026 ACADEMIC YEAR

1. Make a change and update the table in section 3.5. Professional databases, information and reference systems, electronic educational resources.

Resource name	Resource Description	Access	Resource address
Electronic library systems			
"Student consultant. Electronic library of the medical university"	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	Remote access after registration under the university profile	https://www.studentlibrary.ru/
Reference and information system " MedBaseGeotar ".	The reference and information system " MedBaseGeotar " is intended for practicing medical specialists, researchers, teachers, postgraduate students, residents, senior students, and healthcare managers for the rapid search, selection, and reading of medical literature necessary for work in a single data source.	Remote access after registration under the university profile	https://mbasegeotar.ru/pages/index.html
EBS « Bookup »	Large medical library - information and educational platform for the joint use of electronic educational, educational and methodological publications of medical universities of Russia and the CIS countries	Remote access after registration under the university profile	https://www.books-up.ru/
EBS "Lan"	Network electronic library of medical universities - an electronic database of educational and scientific works on medical topics, created for the purpose of implementing network forms of professional educational programs, open access to educational materials for partner universities	Remote access after registration under the university profile	https://e.lanbook.com/
Scientific electronic library " CyberLeninka "	CyberLeninka is a scientific electronic library built on the paradigm of open science (Open Science), the main objectives of which are the popularization of science and scientific activity, public control over the quality of	with free access	https://cyberleninka.ru/

	scientific publications, the development of interdisciplinary research, a modern institute of scientific review, increasing the citation of Russian science and building a knowledge infrastructure. Contains more than 2.3 million scientific articles.		
Oxford Medicine Online	A collection of Oxford medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	with free access	http://www.oxfordmedicine.com
Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	free access	http://humbio.ru/
Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	free access	https://www.medlib.ru/library/library/books
Information systems			
Clinical Guidelines Rubricator	A resource of the Russian Ministry of Health that contains clinical recommendations developed and approved by medical professional non-profit organizations of the Russian Federation, as well as methodological guidelines, nomenclatures and other reference materials.	link to download the application	https://cr.minzdrav.gov.ru/#!/
Federal Electronic Medical Library (FEMB)	The Federal Electronic Medical Library is part of the unified state information system in the field of healthcare as a reference system . FEMB was created on the basis of the funds of the Central Scientific Medical Library named after I.M. Sechenov.	with free access	https://femb.ru/
Russian Medical Association	Professional Internet resource . Objective: to promote effective professional activity of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian Medical Union.	free access	http://www.rmass.ru/
Web -medicine	The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	with free access	http: //webmed.irkutsk.ru/
Databases			
World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more	free access	http://www.minobrnauki.gov.ru
Ministry of Education of the Russian Federation	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more	free access	https://edu.gov.ru/
Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all branches of medicine and health care.	free access	http: // www .edu.ru/
Polpred.com	Electronic library system Business media. Media Review	free access	https://polpred.com/news
Bibliographic databases			
Database "Russian Medicine"	It is created in the Central Scientific and Methodological Library and covers the entire collection, starting from 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology,	free access	https://rucml.ru/

	biophysics, biochemistry, psychology, etc.		
PubMed	A text database of medical and biological publications in English. The PubMed database is an electronic search engine with free access to 30 million publications from 4,800 indexed journals on medical topics. The database contains articles published from 1960 to the present day, including information from MEDLINE, PreMEDLINE , NLM. Each year, the portal is replenished with more than 500 thousand new works.	free access	https :// pubmed . ncbi . nlm . nih . gov /
eLIBRARY.RU	Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.	Full functionality of the site is available after registration	http://elibrary.ru/defaultx.asp
Electronic library of dissertations (RSL)	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	free access	http://diss.rsl.ru/?menu=disscatalog/
Medline .r u	Medical and biological portal for specialists. Biomedical journal.	with free access	https://journal.scbmt.ru/jour/index
Official Internet portal of legal information	The single official state information and legal resource in Russia	free access	http://pravo.gov.ru/

2. Make a change and update the table in section 3.6. “Licensed and freely distributed software used in the educational process.”

List of software (commercial software products)

No. p /p	List of software (commercial software products)	Details of supporting documents
1.	MS Operating System Windows 7 Pro	License number 48381779
2.	MS Operating System Windows 10 Pro	CONTRACT No. UT-368 from 09.21.2021
3 .	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for business – Standard Russian Edition . 50-99 Node 1 year Educational Renewal License	Agreement No. 7 AA dated 02/07/2025
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022 (additional licenses)
6.	1C: PROF University	LICENSE AGREEMENT No. KrTsB-004537 dated 12/19/2023
7.	PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8.	Consultant Plus	Contract No. 41AA dated 12/27/2024
9.	Contour .Tolk	Agreement No. K213753/24 dated 13.08.2024
10.	E-learning environment 3KL(Russian Moodle)	Agreement No. 1362.5 dated November 20, 2024
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021
12.	Information system "Plans"	Agreement No. 2873-24 dated June 28, 2024
13.	1C: Document Management	Agreement No. 2191 dated 10/15/2020
14.	R7-Office	Agreement No. 2 KS dated 12/18/2020
15.	License "OS ROSA CHROME workstation"	Agreement No. 88A dated 08/22/2024
16.	Alt Virtualization Server 10 (for secondary specialized and higher professional education)	Agreement No. 14AK dated 09/27/2024
17.	Dr.Web Desktop Security Suite Comprehensive protection + Control Center for 12 months.	Agreement No. 8 dated October 21, 2024
18.	Software "Schedule for educational institutions"	Agreement No. 82A dated July 30, 2024

List of freely distributed software

No. p /p	List of freely distributed software	Links to license agreement
1.	Yandex Browser	Freely distributed License agreement for the use of Yandex Browser programs

		https://yandex.ru/legal/browser_agreement/
2.	Yandex.Telemost	Freely distributed License Agreement for the Use of Programs https://yandex.ru/legal/telemost_mobile_agreement/
3.	Dr.Web CureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/
6.	VK Calls	Freely distributed https://vk.com/license
7.	Kaspersky Free Antivirus	Freely distributed https://products.s.kaspersky-labs.com/homeuser/Kaspersky4Win2021/21.16.6.467/english-0.207.0/3830343439337c44454c7c4e554c4c/kis_eula_en-in.txt

3. Update the list of electronic textbooks:

In section 3.1 Basic literature replace the textbooks:

1) Kildiyarova , R. R. Children's diseases : textbook / edited by Kildiyarova R. R. - Moscow: GEOTAR-Media, 2021. - 800 p. - Access mode : by subscription. http://www.studmedlib.ru/book/ISBN9785970459645.html ;

2) Geppe , N. A. Children's diseases : textbook / Geppe N. A. - Moscow: GEOTAR-Media, 2018. - 760 p. Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970444702.html

for textbooks:

1) Grigoriev, K. I. Children's diseases. T. 1 .: textbook: in 2 volumes / K. I. Grigoriev, L. A. Kharitonova. - 3rd ed., revised . and add. - Moscow: GEOTAR-Media, 2023. - 768 p. - ISBN 978-5-9704-7365-8, DOI: 10.33029/9704-7365-8-GDB1-2023-1-768. - The electronic version is available on the website of the electronic library system "Student Consultant" : [site]. URL: https://www.studentlibrary.ru/book/ISBN9785970473658.html (date of access: 10/30/2024). - Access mode: by subscription. - Text: electronic;

2) Grigoriev, K. I. Children's diseases in 2 volumes. Volume 2.: textbook / K. I. Grigoriev, L. A. Kharitonova. - 3rd ed . reworked and additional - Moscow: GEOTAR-Media, 2023. - 696 p. - ISBN 978-5-9704-7366-5. - Text : electronic // EBS “Student Consultant”: [website]. - URL : https://www.studentlibrary.ru/book/ISBN9785970473665.html (date of access: 10/30/2024). - Access mode: by subscription.

In section 3.2 Further reading:

Add a tutorial: Chemodanov, V. V. Diathesis in young children : a tutorial / V. V. Chemodanov, E. E. Krasnova. - Moscow : GEOTAR-Media, 2022. - 128 p. - ISBN 978-5-9704-6463-2. - Text : electronic // Electronic Library System "Student Consultant": [website]. - URL : https://www.studentlibrary.ru/book/ISBN9785970464632.html (date of access: 11.11.2024). - Access mode: by subscription.

4. Amend section 3.7. Resources of the information and telecommunications network "Internet":

1) Replace the addresses of the department pages on the academy website:
https://www.amursma.ru/zakrytaya-chast-sayta/4-kurs/ - 4th year
https://www.amursma.ru/zakrytaya-chast-sayta/5-kurs/ - 5th year
on
https://amurgma.ru/zakrytaya-chast-sayta/4-kurs/- 4th course
https://amurgma.ru/zakrytaya-chast-sayta/5-kurs/ - 5th course

2) Add the e-mail address of the Amur State Medical Academy library
https://amurgma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/

3) Add the email address of the Electronic Library System "Student Consultant" and replace it with https://www.studentlibrary.ru