## FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "ROSTOV STATE MEDICAL UNIVERSITY" MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

Faculty of Education of foreign students, residents and postgraduates

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# DISCIPLINE WORKING PROGRAM

## PEDIATRICS

Speciality 31.05.01 General medicine

Form of education full-time

Rostov-on-Don 2023

# I. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE

**1.1 The purpose of mastering the discipline:**consists of mastering knowledge of the anatomical and physiological characteristics of the child's body, as well as the principles of diagnosis, treatment and prevention of major diseases of childhood, aimed at preserving and improving the health of the population by ensuring the appropriate quality of medical care (therapeutic and preventive, medical and social) and dispensary observation

# **1.2 Objectives of studying the discipline:**

# medical activities:

- preventing the occurrence of diseases among the population by carrying out preventive and anti-epidemic measures;
- Conducting preventive medical examinations, medical examinations, and follow-up;
- carrying out the collection and medical-statistical analysis of information on health indicators of the population of various age and sex groups, characterizing their health status;
- diagnosis of diseases and pathological conditions of patients;
- diagnosis of emergency conditions;
- provision of primary medical care in outpatient and day hospital settings;
- provision of primary medical care for sudden acute diseases, conditions, exacerbation of chronic diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care;
- participation in the provision of emergency medical care for conditions requiring urgent medical intervention;
- formation of motivation among the population, patients and members of their families aimed at preserving and strengthening their health and the health of others;
- training patients and their parents in basic hygienic health measures that help prevent the occurrence of diseases and promote health;

# organizational and managerial activities:

- application of the basic principles of organizing the provision of medical care in medical organizations and their structural divisions;
- creation in medical organizations of favorable conditions for the stay of patients and the work of medical personnel;
- maintaining medical records in medical organizations;
- organization of medical examination;
- participation in organizing assessment of the quality of medical care provided to patients;
- compliance with basic information security requirements; *research activities:*
- analysis of scientific literature and official statistical reviews, participation in statistical analysis and public presentation of the results obtained;
- participation in the solution of individual research and scientific-applied

tasks in the field of health care for diagnosis, treatment, medicalrehabilitation and prevention.

### **II. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE**

The process of studying the discipline is aimed at developing the following competencies in accordance with the Federal State Educational Standard of Higher Education and the EP of Higher Education in this specialty:

### professional (PC)

**PK-6**The ability to determine the patient's main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems, X revision;

PK-8 Sability to determine tactics for managing patients with various nosological forms;

### III. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF EP VO

2.1. Academic discipline is basic

2.2. The formation of the above competencies is facilitated by the study of the following previous disciplines:

#### Foreign language and Latin language

**Know**: basic medical and pharmaceutical terminology in Latin and foreign languages. **Be able to**: use medical and pharmaceutical terminology

**Own**: reading skills in Latin, Latin and pharmaceutical terms and the ability to write prescriptions in Latin

### <u>Anatomy</u>

**Know**: anatomical terms (Russian and Latin); anatomy and topography of organs, systems and apparatus of internal organs, their structure and main functions; projection of internal organs on the surface of the body; main structural variants and possible malformations of organs; patterns of the structure of the human body as a whole, anatomical and functional relationships of individual parts of the body with each other; anatomical-physiological, age-sex and individual characteristics of the structure and development of the human body

**Be able to:**find and show the main bony landmarks, parts and areas of the body on the human body; find and show organs and the main details of their structure on x-rays; accurately and accurately find and determine the location and projection of organs and their parts on the surface of the body,

#### <u>Histology, embryology, cytology</u>

Know:structure and function of tissues, organs and systems of the body, basic

patterns of normal development of tissues, organs and systems of the human body, critical periods of their formation, possible developmental disorders

Be able to:interpret the morphological picture of sections of various organs and tissues.

#### **Biochemistry**

**Know:**mechanism of action of the body's buffer systems, their relationship, electrolyte balance of the human body, features, basics of hemoglobin chemistry, its participation in gas exchange and maintaining the acid-base state

Be able to:be able to interpret laboratory test results

# Pathological anatomy, clinical pathological anatomy

**Know:** features of pathomorphologyprincipal human diseases, agerelated characteristics in children

Be able to: interpret the results of pathological studies

# <u>Pathophysiology</u>

**Know:**basic patterns of human pathology, pathogenesis of the main groups of diseases **Be able to:**analyze the patterns of functioning of various organs and systems in various diseases and pathological processes

#### <u>Microbiology, virology</u>

**Know**: morphology and physiology of obligate human microflora, its impact on human health, morphology and physiology of the main pathogens of infectious diseases

Be able to:interpret the results of bacteriological, virological and serological studies of human biological environments

## <u>Immunology</u>

**Know:**know the basic patterns of the immune response in normal and pathological conditions **Be able to:**interpret the results of studies of human immune status

## <u>Pharmacology</u>

Know:medicines of the main pharmacological groups, indications and contraindications for the use of medicines

**Be able to:**prescribe medications for major human diseases, calculate doses of essential medications for pathologies in children of different ages

#### <u>Medical informatics</u>

Be able to: use educational, scientific literature,

electroniceducational and information resources for professional activities **Own:**basic technologies for searching professional information

### <u>Hygiene</u>

**Know:**social, environmental, hygienic factors influencing the state of physical and mental health of the child's body and the development of a number of diseases, sanitary and hygienic measures in preschool and school institutions

**Be able to:**analyze cause-and-effect relationships between environmental quality, as well as other risk factors and health status, assess the health status of children depending on environmental factors, justify measures to improve the sanitary and epidemiological well-being of the child population

#### **Propaedeutics of internal diseases**

**Know:**methods of examining a patient to determine the state of his health, semiotics of damage to major organs and systems

**Be able to:**determine the patient's status: collect anamnesis, interview the patient or his relatives, measure blood pressure, determine the pulse and evaluate it, etc.; assess the patient's condition to make a decision about the need to provide him with medical care; identify the leading pathological syndromes

Own: methods of general clinical examination, diagnostic algorithm.

2.3. The discipline "Pediatrics" creates the prerequisites formationspecified competencies by disciplines:

### **Clinical pharmacology**

**Know:**pharmacodynamics and pharmacokinetics under conditions of major pathological conditions, indications and contraindications for the use of drugs, adverse drug reactions

**Be able to:**justify pharmacotherapy in a particular child for the main pathological syndromes and emergency conditions, determine the route of administration, prescribe medications and calculate the doses of basic medications for pathology in children of different ages, taking into account background and comorbid conditions, evaluate the effectiveness and safety of the treatment.

## Infectious diseases

**Know**: epidemiology, etiology, pathogenesis, clinical picture, methods of diagnosis and treatment of major infectious and parasitic diseases

Be able to: interpret data from objective and laboratory-instrumental examination of patients with major infectious diseases

### obstetrics and gynecology

**Know**: diagnosis and management of physiological and pathological pregnancy, diagnosis and treatment of its complications, indications for surgical delivery,

and their impact on the health of the fetus and newborn; etiology, pathogenesis, clinical picture, features of the course and possible complications of the most common gynecological pathology in women and girls

Be able to: assess the condition of the fetus and newborn, interpret prenatal diagnostic data; interpret data from objective and laboratory-instrumental examinations for major gynecological diseases in girls

### <u>Pediatric surgery</u>

**Know**: etiology, pathogenesis, clinical picture, features of the course and possible complications of the most common surgical pathology in children,

modern methods of their diagnosis and treatment, indications for surgical treatment

Be able to: interpret data from objective and laboratory-instrumental examination in surgical pathology in children

# **Epidemiology**

**Know:**factors shaping human health (ecological, climatic, social); basics of preventive medicine (organization of preventive measures in childhood)

Be able to:carry out preventive, hygienic and anti-epidemic measures

As a result of mastering the discipline, the student must:

Know: anatomical and physiological characteristics of children of different ages and

features of clinical manifestations and course of the most common childhood diseases

<u>Be able to:</u> apply the principles and methods of examination and treatment of the most common diseases of childhood. Be able to carry out differential diagnosis with other diseases.

Own: acquired knowledge and skills in this discipline.

# IV. CONTENT AND STRUCTURE OF DISCIPLINE The complexity of the discipline is 9 z - 324 hours

		Number of hours					
Secti on number	Section name	ContactTotalwork					SRS
			L	WITH	ET C	LR	
		S	emester '	7			
1	Organization medical care for children	12	4		4		4
2	Propaedeutics of childhood diseases	24	-		20		4
3	Breastfeeding	18	4		8		6
4	Neonatology	20	6		6		8
5.	Pathology of young children	34	8		18		8
	Interim certification form				Те	est	
	Semester 8						

# 4.1. Sections of the discipline studied in semesters 7, 8, 9

5	Pathology of young children	32	4		18		10
6	Pathology of older children age	76	16		44		16
	Interim certification form	Test					
	Semester 9						
7	Diseases respiratory organs in children	36	8		20		8
8	Urgen tpediatric assistance	36	6		18		12
	Interim certification form	Exam – 36 hours					
	Total:	288	56		156		76

SRS- independent work of students L- lectures

WITH- seminars (in accordance with the RUP)

LR –laboratory work (in accordance with the RUP)

ETC- practical exercises (in accordance with the RUP, they include clinical practical exercises)

4.2. Contact work

# Lecture

S	

Secti on number	No. lectures	Lecture topics	Number r of hours
		Semester 7	
1	1	History of domestic pediatrics. Organization of maternal and child health care in Russia. Infant mortality, its causes, structure, possible ways to reduce it. Health and development. Periods of childhood. Patterns of physical and neuropsychic development of children. Development of immunity in childhood. Order of the Ministry of Health of the Russian Federation dated March 7, 2018 No. 92n "On approval of the Regulations on the organization of primary health care for children"	2

	2	Features of dispensary observation of children of the first three years of life in a children's clinic. Preventive focus of domestic pediatrics. Features of adolescent medicine. The concept of acceleration of physical development.	2
3	3.	Peculiarities of metabolism in children: energy metabolism, protein metabolism, carbohydrate and fat metabolism. The concept of adequacy and balance of nutrition. Nutrition of children of the first year of life. Definition of concepts: natural, mixed and artificial feeding. Lactation, biological features of human milk. Benefits of breastfeeding. National program for optimizing feeding of children in the first year of life in the Russian Federation (2019).	3
	4.	Nutrition for children over one year old. National program for optimizing the nutrition of children aged 1 to 3 years in the Russian Federation (2019). The importance of nutrition in the prevention of deficiency conditions in children, the role of the doctor general practice in ensuring adequate nutrition for infants and young children.	1
4	5.	Problems of modern neonatology. Methods for assessing gestational age. Intrauterine growth retardation: risk factors, clinical picture, diagnosis, treatment and follow-up. Organization of medical care for newborns in a maternity hospital. Order of the Ministry of Health of the Russian Federation dated November 15, 2012 N 921n "On approval of the Procedure for providing medical care in the specialty "neonatology". Screening of newborns. Sepsis of newborns - definition, classification, clinical and laboratory diagnostic criteria. Modern approaches to treatment.	2

	6.	Asphyxia of newborns: risk factors for the development of asphyxia, pathogenesis, clinical picture. Rendering resuscitation care for a newborn in the delivery room. Perinatal damage to the central nervous system of newborns: classification, diagnosis, treatment in acute and recovery periods. Premature baby: features of management and treatment in a maternity hospital or perinatal center.	2
	7	Jaundice of newborns. Pathological jaundice with indirect hyperbilirubinemia. Hemolytic disease of newborns. Treatment of newborns with indirect hyperbilirubinemia. Clinical guidelines Rh isoimmunization Hemolytic disease of the fetus. 2020. Infections relevant for the perinatal period: persistent herpes viral infection: (HSV, CMV), toxoplasmosis, chlamydia	2
	8.	Metabolism of vitamin D. The role of vitamin D in maintaining human health. National program "Vitamin D deficiency in children and adolescents of the Russian Federation: modern approaches to correction" (2018).	2
5	9	Rickets and rickets-like conditions in children. Etiology, pathogenesis, clinical picture, differential diagnosis, principles of treatment and prevention, prognosis approaches. ricketogenic tetany. Hypervitaminosis D	2
	10.	Nutrition and health. The connection between health and nutrition. The impact of malnutrition in the first year of life on the health of children in the future. Chronic eating disorders in children: definition, classification. Etiology, pathogenesis, classification, clinical picture and diagnosis of malnutrition in children. Treatment. Types of prevention of dystrophies in young children.	2

	eleven	Anemia: definition, classification. Deficiency anemia: etiology, pathogenesis. Iron metabolism in the body. Clinic, diagnosis, treatment and prevention of iron deficiency anemia in children. KR: Iron deficiency anemia, 2021	
		Semester 8	•
	12.	Functional gastrointestinal disorders in young children: clinical manifestations, pathogenetic therapy, prevention options	2
5	13.	Features of the management of premature infants in acute care settings. Criteria for discharge from hospital. Bronchopulmonary dysplasia: clinical picture, diagnosis, follow-up.	2
	14.	Chronic diseases of the gastrointestinal tract in older children: gastroduodenitis, peptic ulcer of the stomach and duodenum, Peptic ulcer of the stomach and/or duodenum KR Children. Approval year: 2021	2
	15	Functional disorders of the gallbladder, irritable bowel syndrome. Etiology, pathogenesis, features of the clinical picture, methods of laboratory and instrumental diagnostics, treatment, prevention, prognosis. KR Gallstone disease, ID: 580 Approval year: 2021	2
6	16.	Features of the course of some kidney diseases: Glomerulonephritis in children. Federal clinical recommendations "Nephrotic syndrome in children.ICD 10: N04, 2016 Clinical guidelines "Diagnostics and treatment of acute post-streptococcal glomerulonephritis", 2014.	2
	17	Urinary tract infections. Etiology, pathogenesis, classification, diagnosis, treatment. Federal clinical guidelines "Urinary tract infection in children, 2018." Clinical guidelines – Chronic kidney disease (in children) – 2022-2023-2024 (01/18/2022) – Approved by the Ministry of Health of the Russian Federation	2

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	18.	Features of the course of some diseases of the cardiovascular system in children: congenital heart defects, acute rheumatic fever, non-rheumatic carditis, neurocirculatory dystonia. Federal clinical guidelines "Myocarditis in children. ICD 10: I01.2 /I09.0 /I40/ I41/ I51.4/ I98.1", 2016	2
	19	Rheumatoid arthritis in children - clinical features, diagnosis, treatment. Federal clinical guidelines Juvenile arthritis with systemic onset ID: 26 Coding according to the International Statistical Classification of Diseases and Related Health Problems: M08.2 Age category: Children Year of approval: 2021.	2
	17.	Early diagnosis of diseases accompanied by increased bleeding. Acute hemoblastoses: timely diagnosis, principles of treatment.	2
	18	Bronchial asthma. Features of early diagnosis, clinical presentation, treatment of bronchial asthma in children under 5 years old. KR: Bronchial asthma. ID: 359 International Statistical Classification of Diseases and Related Health Problems coding: J45, J46 Age category: Adults, Children Year of approval: 2021	2
	1	Semester 9	1
7	19.	Acute respiratory viral diseases in young children. Federal clinical guidelines "Acute respiratory viral infection (ARVI) in children. ICD 10: J00 / J02.9/ J04.0/ J04.1/J04.2/J06.0/J06.9." 2018 Acute tonsillitis and pharyngitis (Acute tonsillopharyngitis) ID: 306 International Statistical Classification of Diseases and Related Health Problems coding: J02, J02.0, J02.8, J02.9, J03, J03.0, J03.8, J03.9 Age category: Adults, Children Year of approval: 2021	2
	20.	Acute obstructive laryngotracheitis: clinical features, differential diagnosis, emergency measures. Clinical guidelines Acute obstructive laryngitis [croup] and epiglottitis ID: 352 Coding according to the International Statistical Classification of Diseases and Related Health Problems: J05.0, J05.1 Age category: Adults, Children. Approval year: 2021	2

	21.	Bronchitis in children: classification, clinical picture, treatment and prevention. Clinical guidelines Bronchitis ID: 381 International Statistical Classification of Diseases and Related Health Problems coding: J20, J40, J41, J42 Age category: Children Year of approval: 2021	2
	22.	Pneumonia in young children: congenital, community- acquired, hospital-acquired. Clinical and morphological features of pneumonia in older children. Nosocomial pneumonia. Pleurisy.	2
	23.	Criteria for assessing the severity of a child's condition. Basic principles of providing emergency care to children.	2
8	24	Acute allergic reactions: urticaria, angioedema, anaphylactic shock. Federal clinical guidelines "Urticaria in children." ID: 357 International Statistical Classification of Diseases and Related Health Problems coding: L50 Age category: Children Year of approval: 2018 CR: Anaphylactic shockID: 263 Coding according to the International Statistical classifications of diseases and health problems: T78.0, T78.2, T80.5, T88.6. Age category: Adults, Children. Year of approval: 2020	2
	25.	Coma in children: hypo-, hyperglycemic, uremic. Emergency assistance in extreme conditions.	2

# Seminars, practical work

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
		Semester 7		

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
1	1	Introduction to the organization of work in a children's hospital. Organization of the work of a children's clinic. The main sections of the work of a local pediatrician. Continuity in the work of the antenatal clinic, maternity hospital and children's clinic. Monitoring healthy children in a children's clinic. Scope and content of preventive examinations of children of various ages. Principles of medical examination. Routine active immunization. Indications and contraindications for vaccination, vaccination for epidemic indications. Order of the Ministry of Health of the Russian Federation dated August 10, 2017 N 514n "On the procedure for conducting preventive medical examinations of minors." Work in a children's clinic. Participation in the reception of healthy infants. Filling out the child's development history. Patronage of children in the first year of life,	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
	2	Physical development of children, its methodsassessments.Change major anthropometric indicators in the process of growth and development of children. The concept of indexesphysical development. Anatomyphysiological characteristics and semiotics of diseases of the skin, subcutaneous tissue, and lymphatic system.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
2	3	Anatomical and physiological features and semiotics of nervous system damage in children. Methodology for assessing neuropsychic development and studying the state of the nervous system in children.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	4	Anatomical and physiological features and semiotics of respiratory organ damage in children.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
	5	Anatomical and physiological features and semiotics of damage to the cardiovascular system and gastrointestinal tract in children.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
	6	Anatomical and physiological features and semiotics of damage to the urinary organs and musculoskeletal system in children.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
3	7	Natural feeding, hisadvantages, difficulties and contraindications from the mother andchild. Methodology of natural feeding children of the first year of life. Preparation of diets for children of different ages who are breastfed. Basic principles of nutrition for a nursing mother. Hypogalactia: definition, classification, causes of hypogalactia, methods of treatment and prevention. Mixed and artificial feeding. Classification of formulas used for feeding. Methods of mixed and artificial feeding. Nutrition for healthy children over one year old. Nutrition of children with underlying conditions. PROGRAM FOR OPTIMIZATION OF FEEDING OF CHILDREN IN THE FIRST YEAR OF LIFE IN THE RUSSIAN FEDERATION. 2019	8	Testing, oral questioning, interview, solving situational problems, passing practical skills.
4	8	Caring for a newborn baby. Primary toilet of a newborn. Features of clinical examination of a newborn. Borderline conditions, their features in premature infants. Power calculationfull term prematurenewborns. Hemolytic disease of newborns: etiology, pathogenesis, clinical picture, diagnosis, treatment and prevention. Work in the neonatal department of a maternity hospital. Federal guidelines "Skin care for a newborn baby," 2016	6	Testing, oral questioning, interview, solving situational problems, passing practical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
5	9	Rickets and rickets-like diseases in children. Risk factors for the development of deficiency of phosphates and calcium salts in children. Clinical manifestations of rickets of varying severity andnature of the flow. Diagnostics,differential diagnosis. Treatment and prevention. Spasmophilia: clinical picture, diagnosis, emergency measures. Hypervitaminosis D: clinical picture, diagnosis, treatment, features of diet therapy for hypervitaminosis D. NATIONALPROGRAM "FAILUREVITAMIN D IN CHILDREN AND ADOLESCENTS OF THE RUSSIAN FEDERATION: MODERN APPROACHES 2018	8	Testiroti on, oralsurvey, interview, solving situational problemstasks, changepractical skills.
	10	Chronic eating disorders. Exogenous and endogenous risk factors for prenatal and extrauterine dystrophy. Hypotrophy: clinical picture, diagnosis, differential diagnosis. Treatment of patients with malnutrition: staged diet therapy, drug treatment and prevention. Lactase deficiency: primary, secondary, clinical picture, differential diagnosis, treatment. Federal clinical guidelines "Celiac disease in children ICD 10: K90.0", 2016 Supervision of sick young children. Writing a medical history.	4	Testiroti on, oralsurvey, interview, solving situational problemstasks, changepractical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	ele ven	Features of the composition of peripheral blood in children, dynamics of the main cell populations of the blood at different age periods, characteristics of the myelogram. Mastering the skills of interpreting general blood tests and some biochemical parameters in healthy children	6	Testiroti on, oralsurvey, interview, solving situational problemstasks, changepractical skills.
	I	Semester 8		
5	12	Mastering the skills of interpreting general blood tests and some biochemical indicators for the most common pathologies in children.	6	Testing, oral questioning, interview, solving situational problemstasks, delivery practical skills.
	12	Anemia: definition, prevalence. Pathogenesis of iron deficiency states. Clinical features and laboratory diagnostics of predominantly iron deficiency anemia in children. Differential diagnosis of deficiency anemias. Stages of treatment of iron deficiency anemia, calculation of the dose of the drug for enteral and parenteral application.Types preventioniron deficiency anemia. Dispensary	8	Testing, oral questioning, interview, solving situational problemstasks, delivery practical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	13	Functional disorders of the gastrointestinal tract in young children: regurgitation, vomiting, disturbances in stool character (dysbiosisbowel syndrome, irritable bowel syndrome intestines, constipation). Infant colic, clinic, features of infant care, prevention.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
	14	Chronic diseases of the stomach and duodenum: clinical picture of chronic gastroduodenitis, gastric ulcer and duodenal ulcer, possibilities for diagnosing the disease, methods for detecting Helikobacter pylori. Features of the endoscopic picture at different stages of diseases. Diet therapy, medicationtherapy, rehabilitation. Standardspecialized medical care for children with gastritis and duodenitis 1598n dated 2012-12-28.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
6	15	Biliary dyskinesia, their connection with gastroduodenal pathology. Features of the clinic and treatment of various variants of dyskinesia. Federal clinical guidelines "Cholelithiasis in children. ICD 10: K80." 2016 Irritable bowel syndrome - definition, etiology and pathogenesis, clinical picture. Diagnosis and differential diagnosis, treatment and prevention.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	16	Urinary tract infections in children. Etiology, predisposing factors. Clinical picture of acute pyelonephritis, its features in young children. Laboratory diagnostics. Clinical and laboratory criteria for process activity. Features of diet therapy for various types of dysmetabolic nephropathy in children. Principles of antibacterial therapy for urinary infections ways.	4	Testing, oral questioning, interview, solving situational problems, passing practical skills.
	17	Acute poststreptococcal glomerulonephritis. Features of the clinical picture of various variants of the course of the disease. Diagnostic criteria for OSGN, differential diagnosis, differentiated approach to pathogenetic therapy.	4	Testing, oral questioning, interview, solving situational problemstasks, changepractical
	18	Acute rheumatic fever: features of clinical manifestations and course in childhood. Rheumatoid arthritis: clinical features, diagnosis, treatment in children.Standard of specialized medical care for children with juvenile arthritis with systemic onset 668n dated 2012-11-07	4	skills. Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	19	Non-rheumatic carditis: diagnosis and differential diagnosis with heart damage in rheumatic fever, arrhythmias, myocardial dystrophy	2	Testing, oral questioning, interview, solving situational problemstasks, changepractical

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	20	Congenital heart defects with enrichment of the pulmonary circulation (ASD, VSD, patent ductus arteriosus): clinical picture, differential diagnosis. Congenital heart defects with depletion of the pulmonary circulation (isolated pulmonary artery stenosis, tetralogy of Fallot). Standard of specialized medical care for congenital pulmonary artery stenosis and other congenital anomalies of the pulmonary artery (1618n from 2012-12-28), for congenital aortic valve stenosis (1655n from 2012-12-29), for congenital anomalies (malformations) of the cardiac septum ( 1656n from 2012- 12-29).	3	Testing, oral questioning, interview, solving situational problems, passing practical skills.
	21	Diseases accompanied by increased bleeding syndrome. Thrombocytopenic purpura: clinical picture of various variants and stages of thrombocytopenic purpura. Laboratory tests, endothelial tests. Differential diagnosis and differentiated therapy of various variants of thrombocytopenia. Hemophilia: classification, clinical picture, criteria for assessing the severity of hemophilia, diagnosis and clarification of the type of hemophilia. Standard of specialized medical care for children with hemophilia A, hemophilia B, prevention of bleeding and hemorrhage in the presence of inhibitors to blood coagulation factors VIII and IX (outpatient) 1235n dated 2012-12-20	4	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	22	Henoch-Schönlein disease: clinical features, diagnosis, treatment. Principles for selecting the dose of heparin, indications for prescribing corticosteroids. Differential diagnosis of hemorrhagic syndrome in children. Acute leukemia in children. Morphological options. Clinical picture of the onset of the disease. Laboratory and instrumental data confirming the diagnosis. Interpretation of hemograms and bone marrow puncture results. Principles of chemotherapy for acute leukemia, differentiated approach to the treatment of various options. Standard of specialized medical care for children with acute lymphoblastic leukemia of standard risk, consolidation (day hospital) 1699n from 2012-12-29. Complications of the disease itself and complications of therapy, the possibility of their early diagnosis and treatment.	8	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	23	Autonomic dystonia syndrome. Treatment and prevention. Supervision of older children. Writing a medical history.	3	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	1	Semester 9		1

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
7	24	Acute respiratory diseases. Etiology. Clinical features of various etiological variants of acute respiratory diseases. Diagnostics, differential diagnosis. Basic principles of treatment of uncomplicated acute respiratory infections: etiotropic, pathogenetic, symptomatic therapy. Standard of primary health care for children with influenza of mild severity (757n from 2012-11-09), for acute nasopharyngitis, laryngitis, tracheitis and acute infections of the upper respiratory tract of mild severity (1654n, 2012-12-28). Standard of specialized medical care children with acute respiratory diseases of moderate severity (798n, dated 2012-11-09).	2	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	25	Acute obstructive laryngotracheitis. Criteria for assessing the severity of the condition and the dominant component of obstructive laryngotracheitis. Diagnostics, differential diagnosis of laryngeal stenosis in young children. Etiotropic, pathogenetic therapy. Basic principles of adequately administered inhalation therapy, recommended solutions for inhalation, rationale for their choice in various types of obstructive laryngotracheitis. Standard for specialized medical care for children with laryngeal stenosis (1281n dated 2012-12-20)	2	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	26	Bronchitis in children: acute simple bronchitis, criteria for diagnosis. Features of the clinical picture of bronchitis caused by intracellular pathogens. Treatment. Principles for choosing drugs for cough treatment. Obstructive bronchitis. Diagnosis criteria, Tal scale for assessing the severity of obstruction, laboratory and instrumental studies. Differential diagnosis of diseases accompanied by obstruction of the lower respiratory tract. Emergency treatment of bronchial obstruction syndrome. Acute bronchiolitis in young children. Etiology, diagnostic criteria, treatment. Respiratory failure: differential diagnosis of types and degrees of respiratory failure, emergency care for acute respiratory failure.	4	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	27	Pneumonia in young children. Diagnostic criteria. Features of clinical and morphological forms of community-acquired pneumonia in young children. Treatment of uncomplicated pneumonia: regimen, diet, rational choice of etiotropic treatment. Treatment of complications of pneumonia: principles of infusion therapy. Rehabilitation activities. Forecast. Standard of specialized medical care for patients with moderate pneumonia (1658n dated 2012-12-29)	4	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	28	Pneumonia in older children. Etiology, clinical and morphological variants depending on the etiological factor. Pleurisy in children: synpneumonic, metapneumonic. Features of the management of patients with complicated pneumonia. Standard specialized medical care for severe pneumonia with complications (741n dated 2013-01-17). The concept of nosocomial pneumonia, its features clinics, diagnostics and treatment	2	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	29	Complicated forms of ARVI in children. Modern approaches to antibacterial therapy of respiratory diseases in children.	2	Testing, oral questioning, interview, solving situational problemstasks, changepractical
	thirty	Bronchial asthma. Criteria for assessing the severity of the disease and the severity of the attack in children in different age groups. Asthma control. Principles of constructing individual plans for long-term therapy of bronchial asthma (stepped therapy). Inhaled corticosteroids, their classification, dosing, prevention of side effects. The concept of combination therapy for bronchial asthma. Treatment of exacerbation of bronchial asthma. Standard for specialized medical care for children with asthma (1119n dated 2012-12-20)	4	skills. Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.

Secti on number	No PR	Topics of seminars, practical work	Qua ntit y hours	Forms of current control
	31	Criteria for assessing the severity of the condition in children. Basic principles of providing emergency care to children. Definition of "fever". Degrees of temperature increase. Types of temperature curves. Features of thermoregulation in young children. Methods of measuring temperature. Infectious and non-infectious fevers. Causes of fever and low- grade fever in children under 3 years of age, over 3-5 years of age, and in adolescents. Variants of hyperthermia in children against the background of acute respiratory infections. Principles of prescribing antipyretic drugs. Emergency care for various types of hyperthermia. Standard of emergency medical care for children with fever (1441n, 2012-12-24), with convulsions (1091n, 2012-12-20).	6	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
8	32	Acute allergic reactions in children. Urticaria, angioedema. Allergic reactions to insects. Anaphylactic shock. Signs of life-threatening conditions, diagnosis, emergency measures, prevention options.	6	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.
	33	Scope of differential diagnostic measures for impaired consciousness in children. The degree of impairment of consciousness, the reasons leading to this condition. Diabetic, hypoglycemic coma. Diagnostics, emergency measures. Acute renal failure: causes, clinical picture, diagnosis, treatment of various stages. Chronic renal failure: clinical features, diet therapy, indications for hemodialysis.	6	Testing, oral questioning, interview, solving situational problemstasks, changepractical skills.

# 4.3. Independent work of students

Secti on No.	Type of independent work of students	Qua ntity hours	Forms of current control
S	Semester 7		
1.	Writing essays	2	Abstract, interview
	Work in a children's clinic	2	Diary
	Preparation for classes	0.5	Survey
	preparation for testing	0.5	Tests
2.	preparation for current control	0.5	Survey
	Working at the bedside	2.5	Diary
	Preparation for classes	2	Survey
3	preparation for testing	2	Tests
3	Working at the bedside	2	Skill control
	Preparation for classes	2	Survey
4	preparation for testing	1	Tests
•	Writing essays	5	Abstract, interview
	Preparation for classes	2	Survey
5	Preparing for testing	2	Tests
U	Working at the bedside	4	Skill control
S	lemester 8		
	Writing a medical history	4	Stor yillnesse s
5	Preparation for classes, preparation for testing, preparation for current control	3	Poll, Tests
	Duty in a department that receives children 24/7	3	Diary
	Preparing a presentation	3	Presentation
6	Writing essays	3	Abstract, interview

Secti on No.	Type of independent work of students	Qua ntity hours	Forms of current control
	Preparation for classes, preparation for testing, preparation for current control	7	Survey
	Duty at a children's clinic	3	Diary
	Semester 9		
	Writing a medical history	4	Stor yillnesse s
7	Preparation for classes, preparation for testing, preparation for current control	1	Survey
	Duty in a department that receives children 24/7	3	Diary
	Preparing a presentation	4	Presentation
8	Writing essays	4	Abstract, interview
	Duty in the intensive care unit, providing round-the- clock admission to children	4	Diary

# V. ASSESSMENT MATERIALS FOR CURRENT CONTROL AND INTERMEDIATE CERTIFICATION

(are an appendix to the work program).

# VI. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF DISCIPLINE

1.	Shabalov N.P. Childhood diseases. T. 1.: 2 volumes textbook for university students / N.P. Shabalov 7th ed., revised. and additional - SPb: PETER, 2012 922 p.	75
2.	Shabalov N.P. Childhood diseases. T. 2.: 2 volumes textbook for university students / N.P. Shabalov 7th ed., revised. and additional - SPb: PETER, 2012 872 p.	75
3.	From symptom to diagnosis. Clinical reviews in pediatrics : practical guide [for doctors and medical students. universities] / [O.R. Varnikova, I.G. Vasilyeva, V.E. Karavaev and others]	10

	; edited by V.V. Suitcase 2nd ed., revised. and additional -	
	Moscow: Litterra, 2020 620 p.	
4.	Childhood diseases: a textbook for university students/	75
	under.edited by A.A. Baranova M.: GEOTAR-Media, 20121006 p.	
5.	Propaedeutics of childhood diseases: textbook. benefit forstudents of therapeutic and preventive, medical preventive, dental faculties and educational centers / ed. V.V.KarpovRostov n/d: Publishing house RostGMU, 2014 289 p.	20
6.	Feeding young children: textbook. benefit forstudents of therapeutic and preventive, medical Faculty of Prevention, Dentistry and UVC / edited by V.V. Karpova - Rostov n\D: Publishing house Rostov State Medical University, 201861 p.	20
7.	Selected issues of pathology of young children. Textbook / ed. V.V. Karpova Rostov n/d, Publishing house: RostGMU2018 146 p.	20
8.	Diagnosis and emergency treatment of threatening conditions in children with organ diseasesbreathing.Training manual / edited by V.V. Karpova Rostov n/a. Publishing house: RostGMU2016183 p.	20
9.	Pneumonia in children: textbook. manual / edited by V.V. Karpova Rostov n/d: Publishing house of Rostov State Medical University, 2011110 p.	20
10.	Acute obstruction of the upper respiratory tract in children: diagnosis andemergency care. Methodological recommendations / ed. V.V. Karpova Rostov n/d, Publishing house: RostGMU201941 p.	20

ele ve	Karpov V.V. Historical stages of the Department of Childhood Diseases	20
n.	No. 3 RostSMU - Rostov n/a: Publishing house RostGMU, 2018 88 p.	
12.	<ul> <li>Bronchitis in children: textbook / V.V. Karpov, M.G. Lukashevich,</li> <li>N.G. Abaeva [and others]; edited by V.V. Karpova; Federal State</li> <li>Budgetary Educational Institution of Higher Education Rost State</li> <li>Medical University of the Ministry of Health of Russia;</li> <li>department childhood diseases No. 3.</li> <li>Rostov n/a: Publishing house of Rostov State Medical</li> <li>University. 2016. – 76 p.</li> </ul>	20
13.	Selected sections of pediatric gastroenterology: method. rec./ V.V. Karpov, L.G. Disenbaeva, N.G. Abaeva, [etc.], ed. V.V. Karpova; Federal State Budgetary Educational Institution of Higher Education Rost State Medical University of the Ministry of Health of Russia, department. childhood diseases No. 3. – Rostov n/a: Publishing house of the Federal State Budgetary Educational Institution of Higher Education Rostov State Medical University of the Ministry of Health of Russia, 2017. – 64 p.	20
14.	Pediatrics: a textbook for university students / ed. ON THE. Geppe. – M.: GEOTAR-Media, 2009 429 p.	20
15.	Childhood diseases. T. 1: textbook for universities in 2 volumes / ed. I.Yu. Melnikova. – M.: GEOTAR-Media, 2009. – 672 p.	51
16.	Childhood diseases. T. 2: textbook for universities in 2 volumes / ed. I.Yu. Melnikova. – M.: GEOTAR-Media, 2009. – 608 p.	51
17.	Zaprudnov A.M. Childhood diseases. vol. 1: in 2 vols.: textbook for university students / A.M. Zaprudnov, K.I. Grigoriev, L.A. Kharitonov 2nd ed., revised. and additional – M.: GEOTAR- Media, 2013 765 p.	
		1

18.	Fundamentals of clinical diagnostics in pediatrics: textbook. manual for university students / Artamonov R.G M.: GEOTAR- Media, 2010125 p.	1
19.	Emergency pediatrics: National manual for doctors, interns, residents and students / Ed. B.M. Blokhina. - M.: GEOTAR-Media, 2017 831 p.	10

20.	General child care: textbook. manual: for university students V.A. Shovkun, A.A. Savisko, O.V. Lutovina Rostov n/a: CMC "COPITSENTR", 2013.	10
21.	Guide to perinatology / D.O. Ivanov, I.O. Bushtyreva, S.A. Bobrov [and others]; edited by BEFORE. Ivanova; North-West federal honey. center named after V.A. Almazova. – St. Petersburg: Inform-Navigator, 2015. – 1214 p.	2
22.	Khazanov A.I. Clinical neonatology/ A.I. Khazanov St. Petersburg: Hippocrates, 2009 424c.	1

# **6.2. LIST OF INTERNET RESOURCES**

ELECTRONIC	Access
EDUCATIONAL RESOURCES	to the
	resource
Electronic libraryRost State Medical University	Unlimited
URL: <u>http://109.195.230.156:9080/opacg/</u>	access
Student Advisor[Kits: "Medicine. Healthcare. IN"; "Medicine.	
Healthcare. SPO"; "Psychological Sciences"]: Electronic library system. –	Unlimited
Moscow: LLC	access
"Polytekhresurs" - URL: <u>https://www.studentlibrary.ru</u> +	
opportunities for inclusive education	
<b>Doctor's consultant. Electronic medical library</b> : Electronic library	
system Moscow: LLC "Higher School of Organization and	Unlimited
Management of Healthcare. Comprehensive medical consulting." -	access
URL: <u>http://www.rosmedlib.ru</u> +	
opportunities for inclusive education	
Scientific electronic library eLIBRARY	Ope
URL: <u>http://elibrary.ru</u>	naccess
	Access from
National Electronic Library URL: <u>http://neb.rf/</u>	library
	computers
Springer Nature database URL: <u>https://link.springer.com/</u>	Unlimited
via IP addresses of RostSMU and remotely after registration, remotely via	access
RFBR CIAS <u>https://kias.rfbr.ru/reg/index.php</u> (National project)	
Sage Publication: [full-text collection of electronic books eBook	Indefinit
Collections]. – URL: https://sk.sagepub.com/books/discipline By	esubscripti
IP addresses of RostSMU (National Project)	on
Federal Center for Electronic Educational Resources	Open

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Open Internet resources $\rightarrow$ further by keyword
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# VII. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

No.	Namediscipline (module), practice in accordance with the curriculum	Name of special premises and premises for independent work	Equipping special rooms and rooms for independent work
1	Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, Municipal Budgetary Institution "GB No. 1 named after. N. A. Semashko ,Department of Childhood Diseases No. 3 (Liter 13, 3rd floor). Study room No. 1 A room for practical classes, ongoing monitoring of intermediate certification, a room for independent work, for individual and group consultations on the discipline "Pediatrics"	Study room No. 1 The premises are equipped with specialized educational furniture tables (4), office chairs (17PC.) In setsdemonstration equipment and trainingvisual aids, providing thematic illustrations:Visual materials by topic(6 pcs.) Demonstration material by topic (10 ), Stand scientific mug (1 pc.), glass educational board (1pcs.),DVDplayer(1pc.),TV "Rolsen" (1 piece), cabinet - 1 piece.
	Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, MBUZ "GB No. 1 named after. N. A. Semashko (Liter 13, 0th floor) Study room No. 2 A room for conducting practical classes, ongoing monitoring of intermediate certification, group and individual consultations in the discipline "Pediatrics"	training room No. 2premises are equippedwithspecializededucationalfurnitureComplete studentfurniture of the 6th Rostovgroup (table, 2 chairs) -7 pcs., office chairs10 pcs., educationalboardglass - 1 pc.,Overhead stationary"Ecovision-900",DVDplayer, 1 piece TV"Rolsen" - 1 piece,cabinet-1PC.In setsdemonstration

		equipment and trainingvisual aids, providing thematic illustrations: Visual materials on topics (5 pcs.) Demonstration material on topics (5 PC.).
Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, MBUZ "GB No. 1 named after. N. A. Semashko (Liter 13, 0th floor) Study room No. 3 Room for conducting practical classes, ongoing monitoring of intermediate certification in the discipline "Pediatrics".	training room No. 3The room is equipped with specialized educational furniture: tables (4 pcs.), office chairs (10 pcs.), glass educational board - 1 pc., stand -1 PC. In setsdemonstration equipment and trainingvisual aids, providing thematic illustrations:Visual materials by topic (5pcs.) Demonstration material by topic (5 PC.)

Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, MBUZ "GB No. 1 named after. N. A. Semashko (Liter 13, 0th floor) Study room No. 4 Room for conducting practical classes, ongoing monitoring of intermediate certification, group and individual consultations on the discipline "Pediatrics"	training room No. 4Thepremises are equippedwithspecializededucationalfurnitureComplete studentfurniture of the 6th Rostovgroup (table, 2 chairs)- 8 pcs., officechairs(11pcs.)tablewrittenwithhanging cabinet2drawer+niche-1pcs,Boardeducational glass-1pcs, stand - 1 pc,X-rayviewerNSh-80-11 piece,angularshelf - 1ninceSete of
		viewer NSh-80- 1 piece, bookshelf - 1 piece

Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, MBUZ "GB No. 1 named after. N. A. Semashko (Liter 13, 3rd floor) Study room No. 5 Room for conducting practical classes, ongoing monitoring of intermediate certification, in the discipline "Pediatrics"	thematic illustrations:Visual materials by topic (5pcs.) Demonstration material by topic (5 PC.); <b>training room No. 5</b> The premises are equipped with specializededucational furniture: Office tables - 6 pcs., Soft chair - 6 pcs., Core E workstation7400 Table for multimediaprojector - 1 piece, stand - 1 piece, bookcase with blank fronts - 2 pieces. , stand - 3 pcs. Sets of demonstration equipment and educationalvisual aids, providing thematic illustrations:Visual materials by topic (5pcs.) Demonstration material by topic (5 PC.)
Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, MBUZ "GB No. 1 named after. N. A. Semashko (Liter 13, 3rd floor) Study room No. 6 Room for conducting practical classes, ongoing monitoring of intermediate certification in the discipline "Pediatrics"	study room no.6 The room is equipped with specialized educational furniture: computer table - 2pcs, computer Vset - 1 piece, cabinet - 1 piece, bookshelf - 2 pieces, office chairs - 7pcs., cabinet bookish -3 pcs. split systemToshiba-1 piece Visual materials by topic (2 pieces) Demonstration material by topic (2 piece)
Pediatrics	344010, Rostov region, Rostov-on-Don, Voroshilovsky Ave. 105, MBUZ	training room No. 7 Room

Pediatrics	"GB No. 1 named after. N. A. Semashko" (Liter 13, 2nd floor) Study room No. 7 Room for conducting practical classes, ongoing monitoring of intermediate certification in the discipline "Pediatrics"	equipped with specialized educational furniture: table (2 pcs.), soft chairs 12 pcs., desk chair - 1 pc.,Sofa L-1700-1 piece, Electrocardiograph EK- 1T-04- 2 pcs. Overhead projector - 1 pc.; multimedia presentationcomplex(Lapt op Toshiba- 1pcs, Wallfurniture - 1 piece, safe with cabinet - 1 piece, safe with cabinet - 1 piece, safe with cabinet - 1 piece, Toshiba split system -1pc.Visual materials by topic (2 pcs.) Demonstration material by topic (2 pcs.)
	Voroshilovsky 105, Liter 13 - 3rd floor – MBUZ GB No. 1 named after. ON THE. Semashko Laboratory room - storage room andpreventive serviceeducational equipment	wardrobe - 2 pieces,bookcase blind facades - 2 pcs. safe with cabinet - 1 piece, fireproof cash register - 1 piece, refrigerator - 1 piece,microwave- 1 PC.
Pediatrics	344000, Rostov region, Rostov-on-Don, Larina, 6. Room 101. Room for practical classes, ongoing monitoring of intermediate certification in the discipline "Pediatrics"	The premises are equippedfurniture:table computer-1pc, computer Vset - 1 piece, stand - 1 piece, office chairs - 20pcs., cabinet bookish -1 PC. split systemToshiba-1 piece Visual materials by topic (2 pieces) Demonstration material by topic (2 piece)
Pediatrics	344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 41, Liter A-Ya, 2	Computer equipment with network connection

floor, 4th floor, Liter B-A, 6th floor) 344022, Rostov region, Rostov-on-Don, st. Adygei/Pushkinskaya 12/191. Special rooms for independent work - reading rooms of the library, auditorium of the Department of Physics, Department of Automation and monitoring the quality of training	Internet providing access to the EIOS RostSMU
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