# MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS

Educational Institution
BELARUSIAN STATE MEDICAL UNIVERSITY

Контрольный экземпляр

#### **APPROVED**

by Rector of the Educational Institution & Belarusian State Medical University.

S.P.Rubnikovich

Reg. # UD-0911501-25/2425du.

#### **PEDIATRICS**

Curriculum of the educational institution in the academic discipline for the specialty

1-79 01 01 «General Medicine»

Curriculum is based on the educational program «Pediatrics», approved 26.06.2024, registration # yД-0911-01-25/2425/y $^{4}$ ; on the educational plan in the specialty 1-79 01 01 «General Medicine», approved 15.05.2024, registration # 7-07-0911-01/2425/mf.

#### **COMPILERS:**

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#### **RECOMMENDED FOR APPROVAL:**

by 1st and 2nd Departments of Children's Diseases of the educational institution «Belarusian State Medical University» (protocol # 18 of 28.05.2024);

by the Scientific and Methodological Council of the educational institution «Belarusian State Medical University» (protocol # 18 or 26.06.2024)

#### **EXPLANATORY NOTE**

«Pediatrics» is an educational discipline of the Pediatric Module, containing systematized scientific knowledge about the anatomical, physiological and functional characteristics of the growing human body, the course of various diseases in children, methods of their diagnosis, treatment and prevention.

The goal of the educational discipline «Pediatrics» is to develop students' specialized competence in providing medical care to children and adolescents.

The objectives of the educational discipline are to develop students' scientific knowledge about the origin, development, pathological and pathophysiological features, clinical picture of the most common diseases in children and adolescents, skills and abilities necessary for:

establishing communication with a child patient and parents;

assessing the severity of the child's health;

drawing up a plan for examining a child and further interpreting the results of physical, laboratory and instrumental research methods;

treating and preventing the most common diseases in children and adolescents; providing medical care in emergency situations in pediatrics.

The knowledge, skills and abilities acquired in the study of the educational discipline «Pediatrics» are necessary for the successful study of the following disciplines: «Pediatric Infectious Diseases», «Pediatric Surgery».

Studying the educational discipline «Pediatrics» should ensure the formation of students' specialized competency: assess clinical symptoms, apply methods of a sick child examination, laboratory and differential diagnosis, make a clinical diagnosis, master the principles of treatment, prevention and medical rehabilitation of children and adolescents.

# As a result of studying the academic discipline «Pediatrics», the student should know:

the goals, objectives, structure and organization of medical care for children and adolescents in outpatient and inpatient settings in the Republic of Belarus;

the structure of morbidity of the child population by age groups in the Republic of Belarus;

the international classification of diseases;

features of the course of the early neonatal period;

classification, etiology, pathogenesis, clinical picture, methods of diagnosis and differential diagnosis, treatment and prevention of the most common diseases in children and adolescents;

methods of maintaining impaired and replacing lost functions of organs and functional systems of the child's body in pathological processes;

established volumes of examination of children and adolescents at the stages of medical care;

methods of medical rehabilitation in outpatient settings, basics of medical examination and medical rehabilitation of children and adolescents;

principles of medical examination;

rules of medical ethics and deontology in communication with a pediatric patient;

#### be able to:

establish communication with the patient based on an assessment of his/her agerelated mental and personality characteristics, individual reaction to the disease; communicate with the parents of a child patient;

perform hygienic care for newborns, young children;

examine a newborn child taking into account the peculiarities of the course of physiologically and pathologically proceeding pregnancy, childbirth and the postpartum period in the mother;

examine children taking into account their age characteristics using additional diagnostic methods (laboratory, radiation, functional, endoscopic, combined);

determine indications for additional diagnostic methods and carry out a clinical interpretation of the data obtained;

carry out differential diagnostics of diseases;

provide medical care in case of fainting, collapse, shock, coma, acute heart failure, acute respiratory failure, allergic reactions, acute surgical abdominal diseases and processes, trauma, poisoning, various burns, frostbite, bleeding in children and adolescents;

provide support for newborns and older children during transportation to specialized healthcare organizations;

perform venipuncture, venesection, catheterization of the bladder;

administer medications taking into account the characteristics of the child's body; use methods of physiotherapy and exercise therapy;

draw up a medical rehabilitation program and predict the outcome;

#### master:

the skills of examination of a newborn child, healthy children of all age groups; organization of feeding of newborns, young children;

the method of clinical examination of a child;

the skills of interpretation of laboratory and instrumental methods of diagnostics; the methods of organization of treatment of diseases and rehabilitation of children in accordance with clinical protocols;

the skills of rendering medical care to children in emergency conditions;

the skills of conducting medical examination;

the skills of organization of sanitary and hygienic education of the population.

**Total number** of hours for the study of the discipline is 246 academic hours, of which 144 classroom hours and 102 hours of student independent work. Classroom hours according to the types of studies: lectures -24 hours (including 6 hours of supervised student independent work (SSIW)), practical classes -120 hours.

Intermediate assessment is carried out according to the syllabus of the specialty in the form of a credit (8 semester) and examination (9 semester).

Form of higher education – full-time.

# ALLOCATION OF ACADEMIC TIME ACCORDING TO SEMESTERS OF STUDY

		N	lumbei	of hou	-			
	• .				including	9	self-	Form of intermediate assessment
Code, name of specialty	semester	total	in-class	lectures	supervised student independent	practical classes	out-of-class studies	
	7	78	51	6	3	42	27	-
1-79 01 01	8	60	42	6	-	36	18	credit
«General Medicine»	9	108	51	6	3	42	57	examination
		246	144	18	6	120	102	

## THEMATIC PLAN

	Number of c	lass hours
Section (topic) name	lectures (incl. SSIW)	practical
1. Rickets. Hypervitaminosis D. Spasmophilia	3	6
2. Protein-energy malnutrition. Obesity	1,5	6
3. Respiratory diseases	1,5	12
3.1. Bronchitis	-	6
3.2. Acute pneumonia	1,5	6
4. Diseases of the circulatory system	3	18
4.1. Congenital heart defects	-	6
4.2. Carditis	1,5	6
4.3. Heart failure	1,5	6
5. Allergic diseases	-	12
5.1. Bronchial asthma	-	6
5.2. Food allergy. Atopic dermatitis	-	6
6. Diseases of the stomach and duodenum	1,5	6
7. Diseases of the kidneys and urinary tract	4,5	18
7.1. Urinary tract infections. Pyelonephritis. Cystitis	1,5	6
7.2. Glomerulonephritis	1,5	6
7.3. Acute and chronic renal failure	1,5	6
8. Diseases of the blood system	6	18
8.1. Anemia in children	1,5	6
8.2. Hemorrhagic diathesis and diseases	1,5	6
8.3. Leukemia	3	6
9. Physiology and pathology of the neonatal period	3	24
9.1. Basic principles of care for newborns. Anatomical and		6
physiological characteristics of full-term children	-	U
9.2. Jaundice in newborns	1,5	6
9.3. Purulent-inflammatory diseases in newborns	1,5	6
9.4. Respiratory disorders in newborns	-	6
Total hours	24	120

#### CONTENT OF THE EDUCATIONAL DISCIPLINE

#### 1. Rickets. Hypervitaminosis D. Spasmophilia

Principles of medical ethics and deontology.

Anatomical and physiological features of the skeletal system in children. Methods of examining the skeletal system.

Definition of the term «rickets». Predisposing and etiological factors for the development of rickets. Metabolism of vitamin D. Features of phosphorus-calcium metabolism. The needs of the child's body for calcium and phosphorus. Classification and pathogenesis of rickets, stages of osteogenesis. Biochemical changes in the blood serum and radiographic changes in the skeleton in rickets. Clinical manifestations, diagnosis, treatment of rickets. Prevention of rickets.

Causes and predisposing factors, pathogenesis, classification of hypervitaminosis D. Clinical manifestations of acute and chronic hypervitaminosis D. Diagnostics, complications, treatment, prevention of hypervitaminosis D. Treatment of patients with rickets, hypervitaminosis D, spasmophilia: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

## 2. Protein-energy malnutrition. Obesity

Definition of the concepts «normotrophy» and «dystrophy». Types of dystrophy. Predisposing factors for the formation of protein-energy malnutrition. Pathogenesis and classification of protein-energy malnutrition, clinical manifestations depending on the severity. Principles of treatment of protein-energy malnutrition: stages of diet therapy, calculation of the need for proteins, fats, carbohydrates, correction of disorders, drug therapy. Prevention of protein-energy malnutrition in children.

Clinical manifestations and diagnostic criteria for obesity. Stages of diet therapy for obesity, prevention of obesity. Rehabilitation of children with obesity.

Care of patients with protein-energy malnutrition, obesity: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of the results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

# 3. Respiratory diseases

#### 3.1. Bronchitis

Anatomical and physiological characteristics of the respiratory system in children and their role in the development of pathology. Semiotics of lesions. Methods for examining the respiratory system in children.

Definition and classification of bronchitis. Epidemiology, pathogenesis, etiology of bronchitis in young children. Ensuring epidemiological safety in the provision of medical care. Clinical and diagnostic criteria for acute bronchitis, obstructive bronchitis, bronchiolitis, obliterating bronchiolitis, differential diagnostics. Treatment principles. Prevention. Rehabilitation of children with bronchitis.

Care of patients with bronchitis: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of the

results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

#### 3.2. Acute pneumonia

Definition, etiology, pathogenesis, classification of acute pneumonia. Ensuring epidemiological safety in the provision of medical care Clinical picture of acute pneumonia (catarrhal and intoxication syndromes, symptoms of lung damage, hematological changes, instrumental research data). Differential diagnostics. Principles of treatment of acute pneumonia in children (regime, nutrition, antibacterial therapy, features of infusion therapy, symptomatic treatment), prevention.

Supervision of patients with acute pneumonia: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

# 4. Diseases of the circulatory system

#### 4.1. Congenital heart defects

Anatomical and physiological features of the heart and blood vessels in children. Semiotics of lesions. Methods for examining the circulatory system.

Congenital heart defects (CHD): prevalence, etiologic factors, classification. Clinical manifestations and hemodynamic features of CHD with enrichment of the pulmonary circulation: atrial septal defect, ventricular septal defect, patent ductus arteriosus. Clinical manifestations and hemodynamic features of CHD with depletion of the pulmonary circulation: tetralogy of Fallot. Clinical manifestations and hemodynamic features of CHD with depletion of the systemic circulation: coarctation of the aorta. Instrumental methods for diagnosing CHD, differential diagnosis. Complications of CHD, prognosis. Principles of treatment of CHD, indications and timing of surgical treatment. Providing emergency medical care for a dyspnea-cyanotic attack in a patient with tetralogy of Fallot. Prevention of congenital heart disease. Rehabilitation of children with congenital heart disease.

Care of patients with congenital heart disease: collection of complaints and anamnesis of the disease; physical examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

#### 4.2. Carditis

The role of viral infection in the etiology of non-rheumatic carditis. Pathogenesis of carditis. Classification of carditis. Clinical manifestations of carditis depending on age and course of the disease. Diagnosis of carditis, changes in the electrocardiogram, radiographic and echocardiographic signs of myocardial damage, laboratory changes. Differential diagnosis of carditis and cardiomyopathy. Treatment and prevention of carditis. Rehabilitation of children with carditis.

Care of patients with carditis: collection of complaints and anamnesis of the disease; physical examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

#### 4.3. Heart failure

Definition, etiology, pathogenesis, classification of heart failure. Clinical manifestations and diagnostic criteria of acute, chronic heart failure. Features of heart failure in young children. Treatment of heart failure. Providing emergency medical care for acute heart failure Principles of prescribing cardiac glycosides in children. Symptoms of intoxication with cardiac glycosides.

Care of patients with heart failure: collecting complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of the results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

### 5. Allergic diseases

#### 5.1. Bronchial asthma

Definition, etiology (the role of allergy and heredity), classification of allergens, triggers, pathogenesis (immunological basis) of bronchial asthma (BA). Classification of BA. Peculiarities of the clinical course of bronchial asthma depending on the period of the disease (typical attack, cough variant, spastic bronchitis, asthmatic status). Clinical and laboratory diagnostics of bronchial asthma, diagnostic criteria, differential diagnostics. Basic treatment of bronchial asthma (hypoallergenic lifestyle and nutrition, specific immunotherapy, medications depending on the severity). Providing emergency medical care during an attack of bronchial asthma. Prevention of bronchial asthma. Education in an asthma school. Rehabilitation of children with bronchial asthma.

Care of patients with bronchial asthma: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

#### 5.2. Food allergy. Atopic dermatitis

Food allergy: etiology, types, pathogenesis, clinical manifestations. Laboratory diagnostics. Tactics of managing patients with food allergies.

Atopic dermatitis: definition, epidemiology, etiology, classification. Diagnostic criteria for atopic dermatitis.

Laboratory diagnostics of atopic dermatitis: skin testings and blood testings. Differential diagnostics of atopic dermatitis. Principles of treatment of atopic dermatitis.

Care of patients with atopic dermatitis: collection of complaints and anamnesis of the disease; objective examination; preparation of an examination plan; interpretation of the results of laboratory and instrumental research methods; justification of diagnosis and treatment.

#### 6. Diseases of the stomach and duodenum

Anatomical and physiological features of the esophagus and stomach. Features of the se Functional gastric dyspepsia: definition, etiology and pathogenesis, classification, clinical manifestations. Instrumental examination methods, differential diagnostics, treatment, prevention.

Chronic gastritis, gastroduodenitis: definition, classification, etiology, role of Helicobacter infection. Pathomorphological changes in the gastric and duodenal

mucosa. Clinical manifestations of chronic gastritis, gastroduodenitis, instrumental examination methods and their role in diagnostics, diagnostic criteria. Treatment of chronic gastritis, gastroduodenitis. Helicobacter infection eradication schemes. Prevention of chronic gastritis, gastroduodenitis in children.

Peptic ulcer disease: definition, prevalence in childhood, etiology, pathomorphological changes in the gastric and duodenal mucosa, classification. Clinical and endoscopic stages of peptic ulcer disease, diagnostic criteria, complications. Treatment of peptic ulcer, indications for surgical treatment, anti-relapse measures, prevention.

Care of patients with diseases of the stomach and duodenum: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

#### 7. Diseases of the kidneys and urinary tract

#### 7.1. Urinary tract infections. Pyelonephritis. Cystitis

Anatomical and physiological features of the kidneys and urinary tract in children. Semiotics of lesions. Methods of examination of the urinary system.

The concept of urinary tract infections, frequency among children, etiology and routes of infection.

Pyelonephritis: definition, classification. Diagnostic criteria for pyelonephritis. Features of clinical manifestations of pyelonephritis in young children. Methods for diagnosing pyelonephritis, indications and contraindications for excretory urography. Principles of pyelonephritis treatment. Antibiotic therapy. Rehabilitation of children with pyelonephritis.

Cystitis: definition, clinical manifestations of acute and chronic cystitis, treatment, anti-relapse treatment.

Curation of patients with urinary tract infections: collection of complaints and disease history; objective examination; preparation of an examination plan; interpretation of laboratory and instrumental examination results; diagnosis; preparation of a treatment plan.

## 7.2. Glomerulonephritis

Acute glomerulonephritis: definition, etiology, pathogenesis, clinical classification, role of  $\beta$ -hemolytic streptococcus, mechanism of edema syndrome. Characteristics of nephritic, nephrotic syndromes with hematuria and hypertension. Treatment of acute glomerulonephritis. Rehabilitation of children with acute glomerulonephritis. Chronic glomerulonephritis: definition, morphological variants, clinical and laboratory characteristics of hematuric, nephrotic and mixed forms, treatment principles, relapse prevention.

#### 7.3. Acute and chronic renal failure

Definition of acute renal failure, etiology, pathogenesis, clinical and diagnostic criteria. Treatment principles, indications for renal replacement therapy.

Definition of chronic renal failure, risk factors, etiology, morphological picture, classification, syndromes, principles of conservative treatment, indications for program dialysis. Rehabilitation of patients with acute renal failure.

Curation of patients with acute, chronic renal failure: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of the results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

### 8. Diseases of the blood system

#### 8.1. Anemia in children

Iron metabolism in the human body, iron requirement. Etiology, pathogenesis, classification of iron deficiency anemia. Clinical manifestations of iron deficiency anemia, laboratory diagnostics, differential diagnostics with sideroachrostic B12 and folate deficiency anemia, Principles of treatment and prevention of iron deficiency anemia.

General characteristics of hemolytic anemias, classification. Hereditary microspherocytosis, glucose-6-phosphate dehydrogenase deficiency, sickle cell disease, thalassemia: type of inheritance, pathogenesis, clinical picture, diagnostics.

Hereditary and acquired aplastic anemia with general and partial damage to hematopoiesis. Clinical picture of aplastic anemia, differential diagnostics, treatment principles.

Care of patients with anemia: collection of complaints and medical history; objective examination; preparation of an examination plan; interpretation of laboratory and instrumental examination results; diagnosis; treatment plan.creto-, acid- and enzyme-forming function of the stomach. Research methods.

#### 8.2. Hemorrhagic diathesis and diseases

Hemostasis system. Physiology of the blood coagulation process (hemostasis links). Types of bleeding. The concept of hemorrhagic diathesis.

Hemorrhagic vasculitis: etiology, pathogenesis, classification, clinical and laboratory diagnostics, treatment, prevention.

Hemophilia: etiology, pathogenesis, clinical and laboratory diagnostics, treatment, prevention.

Immune thrombocytopenic purpura: etiology, pathogenesis, clinical manifestations, diagnostics, treatment.

Care of patients with hemorrhagic diseases: collection of complaints and anamnesis of the disease; objective examination; drawing up an examination plan; interpretation of results of laboratory and instrumental examination methods; diagnosis; drawing up a treatment plan.

#### 8.3. Leukemia

Leukemia: definition, etiology, pathogenesis, classification. Morphological substrate of acute and chronic leukemia. Clinical syndromes and types of blood pictures in leukemia. Diagnostic criteria for leukemia. Clinical manifestations of acute lymphoblastic leukemia, hemogram and myelogram parameters, treatment principles.

Chronic myeloid leukemia: clinical manifestations, hemo-, myelogram parameters, treatment principles, prognosis.

Curation of patients with leukemia: collection of complaints and disease history; objective examination; drawing up an examination plan; interpretation of laboratory and instrumental examination results; diagnosis; drawing up a treatment plan.

#### 9. Physiology and pathology of the neonatal period

# 9.1. Basic principles of care for newborns. Anatomical and physiological characteristics of full-term children

Levels of care for newborns. Sanitary and epidemiological regime of neonatal departments. Outpatient follow-up of newborns depending on the health group. Modern principles of organizing feeding of newborns.

Anatomical and physiological characteristics of a full-term baby. Criteria for morphological and functional maturity of newborns. Borderline conditions of newborns. Tactics for managing newborns with borderline conditions.

Care of newborns: collecting pregnancy and childbirth history; physical examination; assessing morphological and functional maturity; drawing up an examination plan; interpreting laboratory and instrumental examination results; substantiating the risk group.

#### 9.2. Jaundice in newborns

Characteristics of bilirubin metabolism in newborns. Classification of jaundice. Clinical and laboratory manifestations of icteric syndrome depending on pathogenetic mechanisms. Differential diagnosis of physiological and pathological jaundice. Basic principles of jaundice treatment.

Care of newborns with neonatal jaundice: collecting pregnancy and childbirth history; physical examination; drawing up an examination plan; interpreting laboratory and instrumental examination results; substantiating the diagnosis and treatment tactics.

#### 9.3. Purulent-inflammatory diseases in newborns

Frequency and proportion of purulent-inflammatory diseases in newborns in the structure of morbidity and mortality. Modern etiology of purulent-inflammatory diseases.

Localized purulent-inflammatory diseases (PID) in newborns: classification of local forms of PID (skin, subcutaneous fat layer, glandular tissue, umbilical wound). Clinical picture of localized PID. Diagnostics, differential diagnostics, principles of treatment and prevention of localized PID in newborns.

Sepsis in newborns: definition of the concepts «neonatal sepsis», «systemic inflammatory response syndrome (SIRS)». Risk factors for the development of sepsis in newborns. Classification, pathogenesis, clinical manifestations, diagnostic criteria for SIRS, neonatal sepsis, principles of treatment, outcomes, prevention.

Care of newborns with purulent-inflammatory diseases: collection of pregnancy and childbirth anamnesis; objective examination; preparation of an examination plan; interpretation of the results of laboratory and instrumental examination methods; justification of diagnosis and treatment tactics.

#### 9.4. Respiratory disorders in newborns

Definition, frequency, classification, risk factors and causes of respiratory disorders in newborns. Surfactant system and its functions. Assessment of the severity of respiratory disorders according to the Silverman and Daunos scales. Diagnosis of respiratory disorders (prenatal, postnatal). Prevention of respiratory disorders in newborns.

Respiratory distress syndrome type I: pathogenesis, pathomorphological changes by stages, clinical manifestations, diagnostic criteria, treatment.

Pulmonary atelectasis: causes of development, clinical manifestations, diagnosis, treatment.

Meconium aspiration syndrome: causes, pathogenesis, clinical and diagnostic criteria, treatment.

Transient tachypnea (RDS type II): causes, pathogenesis, clinical manifestations, treatment.

Bronchopulmonary dysplasia: risk factors and causes of development, pathogenesis, pathomorphological changes by stages, clinical manifestations, diagnosis, treatment principles.

Pneumonia in newborns

Features of the respiratory system of newborns that predispose to the development of pneumonia. Classification, etiology and routes of infection, pathogenesis, features of clinical manifestations, diagnostic criteria, treatment, prevention of pneumonia in newborns.

Care of newborns with respiratory disorders: collection of pregnancy and childbirth anamnesis; objective examination; preparation of an examination plan; interpretation of laboratory and instrumental examination results; justification of diagnosis and treatment tactics.

13
EDUCATIONAL AND METHODOLOGICAL CARD OF THE ACADEMIC DISCIPLINE «PEDIATRICS»

#		Number of class hours		dent			Forms of control	
Section, topic #	Section (topic) name	lectures	practical	Supervised student independent work	Literature	Practical skill	of practical skill	of current / intermediate assessment
		7 se	mester					
	Lectures	6	-	3				
1.	Rickets. Hypervitaminosis D. Spasmophilia	1,5	-	1,5	1-4			testing
2.	Protein-energy malnutrition. Obesity	1,5	-	-	1-4			
3.1.	Acute pneumonia	1,5	-	-	1-4			
4.2.	Carditis	1,5	-	-	1-4			
4.3.	Heart failure	-	-	1,5	1-4			testing
	Practical classes	-	42	-	1-4			
1.	Rickets. Hypervitaminosis D. Spasmophilia	-	6	-	1-4	Collecting anamnesis of life and disease	performing a practical skill at the patient's bedside	testing
2.	Protein-energy deficiency. Obesity	-	6	-	1-4	Drawing up a plan for diagnostic examination of children	solving a situational task	testing, interview
3.1.	Bronchitis	-	6	-	1-4	Writing prescriptions for medicine in accordance with the treatment plan	writing a presription	testing, quick survey
3.2.	Acute pneumonia	-	6	-	1-4	Drawing up a treatment plan  Providing medical care at the pre-hospital stage in case of hyperthermic syndrome	solving a situational task*	interview

					1 1			
4.1.	Congenital heart defects	-	6	-	1-4	Interpretation of the results of laboratory and instrumental research methods	solving a situational task	reports
4.2.	Carditis	-	6	-	1-4	Interpretation of the results of laboratory and instrumental research methods	solving a situational task	testing, quick survey
4.3.	Heart failure	-	6	-	1-4	Collecting anamnesis of life and disease	performing a practical skill at the patient's bedside	testing*
		8 se	mester	•				
	Lectures	6	-	-				
6.1.	Diseases of the stomach and duodenum	1,5	-	-	1-4			
7.1.	Urinary tract infections. Pyelonephritis. Cystitis	1,5	-	-	1-4			
7.2	Glomerulonephritis	1,5	-	_	1-4			
7.3	Acute and chronic renal failure	1,5	-	-	1-4			
	Practical classes	-	36	-	1-4			
5.1.	Bronchial asthma	-	6	-	1-4	Providing medical care at the pre-hospital stage in case of bronchial asthma attack	solving a situational task*	assessment based on thematic game
5.2.	Food allergy. Atopic dermatitis	-	6	-	1-4	Drawing up a treatment plan	solving a situational task	thesis defense
6.1.	Diseases of the stomach and duodenum	-	6	-	1-4	Writing prescriptions for medicine in accordance with the treatment plan	writing a presription	solving situational tasks
7.1.	Urinary tract infections. Pyelonephritis. Cystitis	1	6	-	1-4	Writing prescriptions for medicine in accordance with the treatment plan	writing a presription	solving situational tasks*
7.2.	Glomerulonephritis	-	6	-	1-4	Interpretation of the results of laboratory and instrumental research methods	solving a situational task*	defense of thesis, testing
7.3	Acute and chronic renal failure	-	6	-	1-4	Interpretation of the results of laboratory and	solving a situational task	testing, credit

					13			
						instrumental research		
						methods		
	<u></u>	9 se	mester		1			
	Lectures	6	-	3				
8.1.	Anemia in children	-	-	1,5	1-4			testing
8.2.	Hemorrhagic diathesis and diseases	1,5	-	-	1-4			
8.3.	Leukemia	1,5	-	1,5	1-4			testing
9.2.	Jaundice of newborns	1,5	-	-	1-4			
9.3.	Purulent-inflammatory diseases in newborns	1,5	-	-	1-4			
	Practical classes	-	42	-	1-4			
8.1.	Anemia in children	-	6	-	1-4	Maintaining medical records	filling out a medical record for an inpatient	defense of thesis, testing
8.2.	Hemorrhagic diathesis and diseases	-	6	-	1-4	Drawing up a treatment plan	solving a situational task	defense of thesis;testing
8.3.	Leukemia	-	6	-	1-4	Interpretation of the results of laboratory and instrumental research methods	solving a situational task	solving situational tasks*
9.1	Basic principles of care for newborn children. Anatomical and physiological characteristics of full-term children	-	6	-	1-4	Organization of care for a newborn child at home: treatment of the umbilical wound, toilet of the newborn	solving a situational task	electronic testing
9.2	Jaundice in newborns	-	6	-	1-4	Examination of a newborn baby	performing a practical skill at the patient's bedside*	solving situational tasks
9.3	Purulent-inflammatory diseases in newborns	-	6	-	1-4	Drawing up a treatment plan	solving a situational task	testing
9.4.	Respiratory disorders in newborns		6		1-4	Interpretation of the results of laboratory and instrumental research methods	solving a situational task	electronic testing
	Total hours	18	120	6				Examination

<sup>\*</sup> is a mandatory form of current certification

#### INFORMATION AND INSTRUCTIONAL UNIT

#### **LITERATURE**

#### **Basic** (relevant)

- 1. Pediatric diseases: textbook / I. A. Kozyro. Minsk: BSMU, 2024. 347 p.
- 2. Paramonova, N. S. Pediatrics: textbook for students of the Faculty of Foreign Students with English as the language of instruction: N. S. Paramonova, V. A. Zhemoytyak, P. R. Gorbachevsky, T. S. Protasevich. Minsk: New knowledge, 2021. 599 p.

#### **Additional:**

3. Nelson textbook of pediatrics / A. Nelson [et al.]; ed. by Robert M. Kliegman. – 22nd ed. – Philadelphia, 2024. – 4896 p.

# Electronic courseware for the educational discipline «Pediatrics»

4. https://etest.bsmu.by/course/view.php?id=338

# METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

The time allocated for independent work may be used by students to:

prepare for lectures, practical classes;

prepare for testings and exams in the academic discipline;

solve situational tasks;

prepare thematic essays, presentations;

take notes from educational literature;

compile testings by students to organize mutual control.

# METHODOLOGICAL RECOMMENDATIONS FOR THE ORGANIZATION AND PERFORMANCE OF SUPERVISED STUDENT INDEPENDENT WORK IN THE ACADEMIC DISCIPLINE

#### APPROXIMATE LIST OF TASKS FOR SUPERVISED STUDENT INDEPENDENT WORK:

writing and presenting an essay;

delivering a report;

taking notes from primary sources (sections of anthologies, collections of documents, monographs, textbooks);

computer testinging;

writing testings by students to organize mutual control.

# FORMS OF CONTROL OF SUPERVISED STUDENT INDEPENDENT WORK: testing.

#### LIST OF AVAILABLE DIAGNOSTIC TOOLS

The following forms of current certification are used to diagnose competencies: testing;

interview;

electronic testing;

quick survey;

report; thesis defense; solving situational tasks; assessment based on a thematic game; assessment using electronic-mechanical simulators and robotic trainers.

#### LIST OF AVAILABLE TEACHING METHODS

Traditional method; active (interactive) methods: Problem-Based Learning (PBL); Team-Based Learning (TBL); Case-Based Learning (CBL); Research-Based Learning (RBL); simulation-based learning.

#### LIST OF PRACTICAL SKILLS

NY 0 1 1 1 11	T 0 1 1 1 1 1 1
Name of practical skill	Form of practical skills
	control
1. Collecting anamnesis of life and disease depending	performing a practical skill at
on the nosological form	the patient's bedside
2. Examination of a newborn child and children of all	performing a practical skill at
age groups depending on the nosological form	the patient's bedside
3. Organization of care for a newborn baby at home:	solving a situational task
treatment of the umbilical wound, toilet of the newborn	-
4. Drawing up a plan for diagnostic examination of	solving a situational task
children depending on the nosological form of the	_
disease	
5. Interpretation of the results of laboratory and	solving a situational task
instrumental research methods	
6. Drawing up a treatment plan depending on the	solving a situational task
nosological form of the disease	
7. Writing prescriptions for medicine in accordance	writing a prescription
with the treatment plan	
8. Maintaining medical records	filling out a medical record
	for an inpatient
9. Providing medical care at the pre-hospital stage in	solving a situational task
case of hyperthermic syndrome	
10. Providing medical care at the pre-hospital stage in	solving a situational task
case of bronchial asthma attack	

# PROTOCOL OF CURRICULUM APPROVAL

Name of the academic	Name of the Department	Proposals for changes in the	The decision taken by the
discipline that requires		content of the educational	department that developed the
approval		institution's curriculum for the	curriculum (indicating the date
		academic discipline	and protocol number)
1. Pediatric Infectious	Pediatric Infectious	No proposals	Protocol # 14 dated 13.03.2024)
Diseases	Diseases		
2. Pediatric Surgery	Pediatric Surgery	No proposals	Protocol # 14 dated 13.03.2024)

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Curriculum content, composition and the accompanying documents comply with the established requirements.

Dean of the Medical Faculty for International Students of the educational institution «Belarusian State Medical University»

24.06.2024

Methodologist of the Educational and Methodological Department of the Office of Educational Activities of the educational institution «Belarusian State Medical University»

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