

**Thematic plan of seminar classes for the course “Pediatrics”  
for students admitted in 2022, 2023  
in the educational program 31.05.01 General Medicine,  
specialization (profile) General Medicine (Specialist Degree program),  
full-time mode of study  
for the 2026–2027 academic year**

| No                  | Thematic blocks  | Practical training within thematic block <sup>3</sup> | Hours (academic) <sup>4</sup> |
|---------------------|--|---|-------------------------------|
| <b>7th semester</b> |  |   |                               |
| 1.                  | Organization of maternal and child health in our country. Physical development of the child. <sup>1</sup><br>Introduction to the organization of work of a children's hospital. Physical development of children and adolescents at different ages. Fundamental laws of child growth and development. Assessment of physical development of children and adolescents. <sup>2</sup>   | WP  | 6                             |
| 2.                  | Neuropsychic development of the child. <sup>1</sup><br>Assessment of neuropsychic development in children and adolescents. Semiotics of nervous system lesions in children. Main neurological syndromes characteristic of young children with nervous system lesions   | WP  | 6                             |
| 3.                  | Nutrition of young children. <sup>1</sup><br>Breastfeeding and its importance for child development. Benefits of breastfeeding. Composition and caloric content of colostrum and mature breast milk. Breastfeeding techniques. Daily nutritional requirements for essential nutrients and calories. Complementary feeding. Complementary foods and rules for introducing complementary foods. Mixed and artificial feeding. Basic rules of artificial feeding. Characteristics of infant formulas  | -   | 6                             |
| 4.                  | Diseases of young children: chronic nutritional disorders, rickets. <sup>1</sup><br>Semiotics of pathological manifestations of the skin and subcutaneous tissue in children with somatic and infectious diseases. Semiotics of musculoskeletal disorders.<br>Chronic eating disorders in children. Etiological factors. Clinical presentation of chronic eating disorders. Principles of treatment for chronic eating disorders.<br>Rickets. Etiology, pathogenesis, classification of rickets, clinical, biochemical, and radiographic manifestations depending on severity, duration of the disease, and progression. Differential diagnosis of rickets with rickets-like diseases. Nonspecific and specific prevention of rickets. Treatment of rickets. <sup>Spasmophilia</sup><br>Etiology, association with rickets, clinical features, emergency care, and prevention. | WP  | 6                             |
| 5.                  | Problems of modern neonatology . Pathology of the neonatal period (part 1). <sup>1</sup><br><sup>of</sup> prematurity. Perinatal damage to the central nervous system. Major neurological syndromes characteristic of young children with damage to the nervous system.  | WP  | 6                             |

|                     |  |        |   |
|---------------------|--|--------|---|
| 6.                  | Problems of modern neonatology . Pathology of the neonatal period (part 2). <sup>1</sup><br>Intrauterine fetal infections (toxoplasmosis, rubella, cytomegalovirus , herpes, mycoplasma , etc.). Purulent-septic diseases of newborns. Sepsis. Hemolytic disease of the newborn. Differential diagnosis of jaundice in the neonatal period. <sup>2</sup>   | –      | 6 |
| <b>8th semester</b> |  |        |   |
| 7.                  | Atopic diseases in children: atopic dermatitis, respiratory allergies , bronchial asthma. <sup>1</sup><br>Atopic dermatitis. Etiopathogenesis . Clinical presentation, diagnostic criteria, and course. Treatment principles.<br>Features of pathogenesis, clinical picture and course of respiratory allergies in children and adolescents.<br>Etiology and forms of bronchial asthma in children and adolescents. Pathogenesis and clinical features in young children. Diagnosis. Differential diagnosis of bronchial asthma from other diseases. Emergency treatment measures during an asthma attack and treatment during <sup>the</sup> non-attack period. | WP, SM | 6 |
| 8.                  | Cardiovascular diseases in children and adolescents (part 1). <sup>1</sup><br>Basic methods for examining the cardiovascular system in children. Syndromes and semiotics of cardiovascular damage in children of different ages. Chronic heart failure in children .   | WP     | 6 |
| 9.                  | Cardiovascular diseases in children and adolescents (part 2). <sup>1</sup><br>Arterial hypertension in children and adolescents: risk factors, diagnosis, prevention, and treatment. Heart rhythm disorders in children and adolescents. Rheumatic fever: classification, diagnostic criteria, principles of staged treatment and prevention. Non-rheumatic carditis: etiology, clinical features, diagnosis, and treatment .  | WP, SM | 6 |
| 10.                 | Cardiovascular diseases in children and adolescents (part 3). <sup>1</sup><br>Congenital heart defects in children: classification, main syndromes of congenital heart defects, diagnosis. Chronic heart failure in children. <sup>2</sup>   | WP, SM | 6 |
| 11.                 | Features of the hemogram in children. Diseases of the hematopoietic system (part 1). <sup>1</sup><br>Hemogram of healthy children of various ages. Main syndromes and semiotics of blood system and hematopoietic organ disorders in children and adolescents. Semiotics of lymph node changes.<br>Deficiency anemias. Clinical and hematological manifestations of deficiency anemias. Laboratory diagnostics. Differential diagnosis with other types of anemia. Principles of treatment and prevention of deficiency anemias. <sup>2</sup>  | WP     | 6 |
| 12.                 | Features of the hemogram in children. Diseases of the hematopoietic system (part 2). <sup>1</sup><br>Hemorrhagic diathesis and systemic vasculitis in children. Etiology, pathogenesis, and clinical manifestations of certain forms of hemorrhagic diathesis and systemic vasculitis (hemophilia, thrombocytopenic purpura, hemorrhagic vasculitis ), including their clinical course in children. Differential diagnosis using leading clinical and laboratory syndromes. Treatment principles.<br>Leukemia in Children. Clinical Features and Diagnosis of Acute Leukemia in Children. Modern Treatment Methods .   | WP     | 6 |

| <b>9th semester</b> |   |        |   |
|---------------------|---|--------|---|
| 13.                 | <p>Respiratory diseases. Acute bronchitis and acute pneumonia in children.<sup>1</sup></p> <p>Basic methods of respiratory system examination. Syndromes and semiotics of respiratory damage in children of different ages. Respiratory failure in children.</p> <p>Bronchitis in children: classification, etiology, epidemiology, clinical features, diagnostics, principles of bronchitis treatment. Obstructive syndrome, emergency therapy.</p> <p>Pneumonia in children. Classification of pneumonia in children. Etiology, epidemiology, clinical features, and diagnosis of pneumonia. Principles of treatment and prevention of pneumonia.</p>                                       | WP, SM | 6 |
| 14.                 | <p>Diseases of the urinary system in children.<sup>1</sup></p> <p>Basic research methods and semiotics of urinary system diseases. Urinary tract infections in children. Pyelonephritis. Etiology and pathogenesis, classification, clinical features, and clinical course of acute and chronic pyelonephritis in young and older children. Laboratory and radiological diagnostic methods. Treatment principles.</p> <p>Acute and chronic glomerulonephritis. Etiology and pathogenesis, clinical forms, and their characteristics. Pathogenetic therapy. Prognosis. Acute and chronic renal failure in children: causes, pathogenesis, and clinical and laboratory diagnostic criteria.</p> | WP     | 6 |
| 15.                 | <p>Gastrointestinal diseases in children.<sup>1</sup></p> <p>Basic research methods, basic syndromes and semiotics of digestive organ damage in children.</p> <p>Chronic gastritis, duodenitis, and peptic ulcer disease: clinical presentation and course in children, modern diagnostic methods, treatment, and prevention. Biliary dyskinesia. Modern methods of clinical, instrumental, and laboratory diagnostics, treatment, and prevention. Helminthic infestations (ascariasis, enterobiasis, trichuriasis). Clinical and laboratory diagnostics, treatment, and prevention. <sup>Giardiasis</sup>: etiology, clinical presentation, diagnostics, treatment, and prevention.</p>      | WP     | 6 |
| 16.                 | <p>Juvenile Idiopathic arthritis. Diffuse connective tissue diseases in children.<sup>1</sup></p> <p>Current theories of the etiology and pathogenesis of diffuse connective tissue diseases. Diagnostic criteria for systemic lupus erythematosus, dermatomyositis, systemic sclerosis, and periarteritis nodosa in children and adolescents. Treatment principles for specific diseases.</p> <p>Juvenile Idiopathic arthritis: modern concepts of etiology and pathogenesis, clinical course variants in children, modern principles of therapy.<sup>2</sup></p>  | WP     | 6 |
| 17.                 | <p>Endocrine diseases in children and adolescents.<sup>1</sup></p> <p>Characteristics of diabetes mellitus in children and adolescents. Basic treatment principles. Diabetic coma and differential diagnosis.</p> <p>Thyroid diseases in children and adolescents: thyrotoxicosis, congenital hypothyroidism, endemic goiter. Clinical manifestations, diagnosis, treatment principles, prevention.<sup>2</sup></p>   | -      | 6 |
| 18.                 | Development of skills and abilities for physical examination of a   | WP, SM | 6 |

|  |  |       |     |
|--|--|-------|-----|
|  | child and identification of objective signs of disease. <sup>1</sup> |       |     |
|  |  | Total | 108 |

<sup>1</sup> – topic

<sup>2</sup> – essential content

<sup>3</sup> – SM – simulation modules, WP – work with the patient

<sup>4</sup> – one thematic block includes several lessons, the duration of one lesson is 45 minutes, with a break between lessons of at least 5 minutes

Reviewed and approved at the meeting of the Department of Children's Diseases, Minutes №16, dated "26" May 2026.

Head of the Department



M.Ya. Ledyayev