

Course description (syllabus) form for higher education, doctoral, postgraduate and skills development programmes

A. General course description

Field name	Comments
Course title	Paediatrics
Unit organising the course	Faculty of Medicine of the Collegium Medicum UMK Department of Paediatrics, Haematology and Oncology
Unit for which the course is organised	Faculty of Medicine of the Collegium Medicum UMK uniform master degree studies
Course ID	1655-Lek5PEDI-J
ISCED code	0912
ECTS credit allocation	5
Form of course completion assessment	Examination
Language of instruction	English
Indication whether attempts at obtaining course credit can be repeated	No
Affiliation of the course to a course group	Non-procedural clinical sciences (Group E)
Total student workload	<p>1. Study hours involving teacher participation:</p> <ul style="list-style-type: none"> - lectures: 10 hours - seminars: 45 hours - tutorials: 45 hours - credit: 5 hours (practical exam 3 hours, theoretical exam 2 hours) <p>Total workload involving teacher participation is 105 hours (3,60 ECTS points).</p> <p>2. Study hours involving individual student work:</p> <ul style="list-style-type: none"> - lectures: 10 hours - seminars: 45 hours - tutorials: 45 hours - preparation for tutorials and seminars (incl. case reports and literature review): 21 hours - preparation for the credit and the credit: 20 + 5 = 25 hours <p>Total workload involving individual student participation is 146 hours (5,00 ECTS points).</p> <p>3. Workload related to achievement of learning outcomes in medical simulation settings (group E):</p> <ul style="list-style-type: none"> - tutorials: 5 hours <p>Total workload related to achievement of learning outcomes in medical simulation settings is 5 hours (0,17 ECTS points). Percentage of classes required to achieve necessary learning outcomes: 5%.</p>
Learning outcomes – knowledge	<p>In terms of knowledge, the graduate:</p> <p>W1: presents the importance of environmental influences and genetic factors, epidemiology, symptoms and principles of diagnosis and treatment of the most common:</p> <ul style="list-style-type: none"> • chronic respiratory diseases (tuberculosis, cystic fibrosis) (E.W3 p.3); • primary and secondary immunodeficiencies (E.W3 p.4); • rare diseases (including metabolic diseases, including the most common enzymopathies: galactosemia, fructosaemia, phenylketonuria), • metabolic disorders regarding acid-base and water-electrolyte metabolism (including rickets, tetany) (E.W3 point 1); • heart defects and cardiological diseases (heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathies, cardiac arrhythmias and

	<p>syncope, heart failure, arterial hypertension, pulmonary hypertension) (E.W3 p.2);</p> <ul style="list-style-type: none"> • respiratory diseases (bronchitis, bronchiectasis, respiratory infections, pneumonia and pleurisy) (E.W3 p.3); • diseases of the blood and hematopoietic system (anaemia, bleeding disorders, bone marrow failure) (E.W3 p.4); • childhood cancers (leucaemias and lymphomas, solid tumours of childhood) and phakomatoses (E.W3 p.4); • kidney and urinary system diseases (acute kidney injury, chronic kidney disease, urinary tract infections, glomerular diseases, tubulointerstitial diseases (tubulopathies, tubular acidosis), genetically determined kidney diseases, renal hypertension) (E.W3 p.6) ; • endocrine system disorders (growth disorders, thyroid and parathyroid diseases, adrenal gland diseases, diabetes, puberty disorders, gonadal dysfunction) (E.W3 p.7); • non-infectious diseases of the nervous system (cerebral palsy, seizures, epilepsy) (E.W3 p.8); • some autoinflammatory diseases (systemic connective tissue diseases, including juvenile idiopathic arthritis, systemic lupus erythematosus, dermatomyositis, systemic vasculitis) (E.W3 p.10). <p>W2: explains the principles of child nutrition in selected deficiency diseases, metabolic syndromes, diabetes (E.W1)</p> <p>W3: lists the etiological factors of the most common respiratory infections and other acute infections in children depending on location and age, and determines the need for hospitalization and notification of epidemiological services about the infection (E.W32);</p> <p>W4: outlines the risk of infections (especially bacterial, viral and fungal) in children with primary and acquired immunodeficiencies or chronic diseases, provides possible symptoms, principles of diagnosis and treatment (E.W33 p.1,2,4,5);</p> <p>W5: lists the epidemiology, risk, modes of inheritance and causes, symptoms, principles of diagnosis and therapeutic options in the most common hereditary diseases and syndromes (including spherocytosis, haemophilia, phakomatoses) (E.W36)</p>
Learning outcomes – skills	<p>In terms of skills, the graduate:</p> <p>U1. can establish contact with a small child and teenager using a method of communication appropriate to the child's age and obtain information about the patient's well-being and ailments (E.U2);</p> <p>U2. is able to collect a medical history with a child with difficult contact and with parents in a stressful situation (E.U2);</p> <p>U3. is able to plan and conduct a physical examination dependently on the child's age, general condition and leading complaints and diagnosis, including elements of a neurological, orthopaedic, laryngological or surgical examination (E.U6);</p> <p>U4. is able to perform anthropometric measurements, assess the child's physical and motor development, sexual maturity and nutritional status using appropriate indicators, percentile charts and norm tables (E.U8);</p> <p>U5. is able to perform additional physical examinations, including screening tests for vision and hearing, posture and musculoskeletal system (E.U8);</p> <p>U6. is able to measure basic vital parameters in a child (body temperature, heart rate, non-invasive blood pressure measurement, pulse oximetry), is able to adapt the examination method and instrumentation to the patient's age (E.U14 p.1);</p> <p>U7. is able to measure body temperature in children of different ages, implement basic diagnostics and symptomatic treatment of fever, taking into account other symptoms and estimating the need for hospitalization of the patient (E.U10 p.1, E.U12);</p> <p>U8. is able to plan initial tests and emergency treatment and determine indications for extended diagnostics or hospitalization of a child with symptoms of the respiratory system (cough, shortness of breath, nasal and ear discharge), circulatory system (palpitations, fainting, cyanosis) and nervous system (convulsions, headaches) (E.U10 p.2,3,4,10,11,12,21,22, E.U12);</p>

	<p>U9. is able to implement initial diagnostics, plan additional tests, provide the most common causes, determine indications for hospitalization or referral to specialist care, and propose treatment in the case of general symptoms in a child (urination disorders, rash, anaemia, growth disorders, osteoarticular pain, swelling, lymphadenopathy, red eye syndrome) (E.U10 p.5,6,7,9,13,14,15,23, E.U12);</p> <p>U10. is able to plan laboratory, microbiological and imaging tests depending on the patient's clinical situation, is able to arrange them according to the degree of urgency and informativeness of the results and justify the order (E.U10);</p> <p>U11. is able to interpret the obtained laboratory test results in the context of age norms and verify further diagnostic or therapeutic procedures (E.U10);</p> <p>U12. is able to interpret the obtained results of microbiological tests, verify their significance in relation to the patient's condition (contamination, carrier status, colonization, infection, alarm pathogen) and revise anti-infective treatment (E.U10, E.U22);</p> <p>U13. is able to plan necessary specialist consultations in accordance with the patient's medical problem (E.U10);</p> <p>U14. is able to prescribe intravenous and oral pharmacological treatment for children of different ages, taking into account the differences in pharmacotherapy in developmental age (E.U10);</p> <p>U15. is able to correctly write prescriptions for medications for home treatment, taking into account legal aspects (medical and registration indications) and obtain information on the use of the drug from the summary of product characteristics (C.U11, C.U12);</p> <p>U16. depending on the clinical condition, diagnosis or symptoms of the patient, makes a decision on the use of appropriate personal protective measures and indications for the appropriate type of isolation of the patient and is able to justify it (E.U15);</p> <p>U17. is able to recognize symptoms indicating the use of violence against a child, document it in the patient's documentation and implement procedures in accordance with applicable legal regulations (E.U29);</p> <p>U18. can write medical observations, describe the procedure performed, document the patient's condition and treatment, and complete medical documentation also using IT systems (E.U18).</p>
Learning outcomes - social competence	<p>In terms of social competences, the graduate:</p> <p>K1: considering indications for hospitalization, planning diagnostic tests and treatment of the child, takes into account the best interests of the child (K_K02);</p> <p>K2: follows the rules of respecting privacy and medical confidentiality during child examination and contacts with the family (K_K03, D.U3);</p> <p>K3: applies the principles of obtaining the consent of an underage patient for diagnostic and treatment procedures, taking into account the position of legal and actual guardians (K_K01, D.U3);</p> <p>K4: has the habit and ability to search for information about the patient (K_K05, D.U04, D.U05);</p> <p>K5: accepts and promotes the principles of a healthy lifestyle, nutrition, physical activity, hygiene, proper conditions for child development, and encourages the child and family to comply with current health care regulations and recommendations (K_K06).</p>
Teaching methods	<p>Lectures:</p> <ul style="list-style-type: none"> • conventional lecture <p>Seminars:</p> <ul style="list-style-type: none"> • panel discussion • case analysis • problem-based learning <p>Tutorials:</p> <ul style="list-style-type: none"> • clinical tutorials • case studies • utilization of medical simulation methods
Prerequisites	<p>Student is expected to have knowledge of basic (preclinical) sciences (in particular: anatomy, physiology and pathophysiology, genetics, pharmacology, laboratory diagnostics, immunology, pathology, microbiology) and knowledge and skills in the basics of paediatrics: healthy child development, physical</p>

	examination of a healthy child, nutrition of a child, medical care for healthy children)
Brief course description	<p>The subject of the course deals with selected issues of developmental age and aims to familiarize with the most common diseases in the field of paediatric haematology and oncology, nephrology, pulmonary diseases, immunology, cardiology, paediatric neurology and endocrinology and basic knowledge of metabolic diseases.</p> <p>During the classes, students improve the skills of recognising, diagnosing and treatment of childhood diseases, and the skills of communication with the paediatric patient and its parents.</p>
Full course description	<p>The subject of the course deals with selected issues of developmental age and aims to familiarize with the childhood diseases in the field of:</p> <ul style="list-style-type: none"> • pulmonology • clinical immunology • cardiology • endocrinology and diabetology • haematology and oncology • nephrology • neurology • metabolic errors and inherited conditions <p>During the tutorials, students have direct contact with paediatric patients and their parents and improve the skills of examination of a child. At the same time, they train communication with a paediatric patient and its parents. They practice the skills of recognising, diagnosing, differentiation and treatment of most common diseases of childhood.</p> <p>Students also have the opportunity to observe and participate in the work of a paediatrician in the inpatient and outpatient facility setting, and learn about the practical application of laboratory, microbiological, genetic, immunological and imaging diagnostics in specific patients.</p>
Literature	<ul style="list-style-type: none"> • Illustrated Textbook of Paediatrics: with STUDENT CONSULT Online Access Tom Lissauer, Graham Clayden, Mosby; 4 edition (30 Sep 2011) • Nelson Essentials of Paediatrics: Karen J. Marcandante, Robert M. Kliegman
Assessment methods and criteria	<p>Lectures: Theoretical test exam ($\geq 60\%$): W1–W5, U10-U14</p> <p>Seminars:</p> <ul style="list-style-type: none"> • Theoretical test exam ($\geq 60\%$): W1–W5, U10-U14 • Practical exam ($\geq 60\%$): U1-U18, K1-K5 <p>Tutorials:</p> <ul style="list-style-type: none"> • Practical exam ($\geq 60\%$): U1-U18, K1-K5 • Extended observation ($> 50\%$): K1-K3, K5
Work placement	not applicable

B) Description of the course within the period of instruction

Field name	Comments
Period of instruction	Academic year 2024/2025
Form of assessment of course completion in the period of instruction	Examination
Form(s) of classes, number of hours and completion assessment methods	Lectures: 10 hours Seminars: 45 hours Tutorials: 45 hours
Name of course coordinator in the period of instruction	Jan Styczyński, Robert Dębski

Names of persons managing student groups for the course	<p>Lectures: Jan Styczyński, Sylwia Kołtan, Andrzej Kołtan, Barbara Tejza</p> <p>Seminars: Sylwia Kołtan, Andrzej Kołtan, Krzysztof Czyżewski, Robert Dębski, Barbara Tejza, Elżbieta Grzešek, Anna Dąbrowska, Monika Pogorzała, Agnieszka Jatczak-Gaca, Monika Richert-Przygońska, Agata Marjańska, Ewa Demidowicz, Roman Stankiewicz, Ilona Olszak-Szot, Ewa Zbucka-Jachowska, Krzysztof Narębski</p> <p>Tutorials: Sylwia Kołtan, Andrzej Kołtan, Krzysztof Czyżewski, Robert Dębski, Barbara Tejza, Elżbieta Grzešek, Anna Dąbrowska, Monika Pogorzała, Agnieszka Jatczak-Gaca, Monika Richert-Przygońska, Agata Marjańska, Ewa Demidowicz, Roman Stankiewicz, Ilona Olszak-Szot, Ewa Zbucka-Jachowska, Krzysztof Narębski, Natalia Bartoszewicz, Joanna Cisek, Piotr Książniakiewicz, Agnieszka Majk</p>
Course attributes	University-wide courses, obligatory
Course groups including description and limit to the number of students within the groups	<p>Lectures: whole year</p> <p>Seminars: groups 20-24 students</p> <p>Tutorials: groups 5-6 students</p>
Time and place of classes	Detailed schedule is announced on the Department's own website and on the information board in the Department.
Number of study hours involving distance learning methods	not applicable
Course website	not applicable
Learning outcomes defined for a given form of classes within the course	<p>Lectures: The graduate:</p> <p>W1: presents the importance of environmental influences and genetic factors, epidemiology, symptoms and principles of diagnosis and treatment of the most common:</p> <ul style="list-style-type: none"> • primary and secondary immunodeficiencies (E.W3 p.4); • rare diseases (including metabolic diseases, including the most common enzymopathies: galactosemia, fructosaemia, phenylketonuria), • childhood cancers (leucaemias and lymphomas, solid tumours of childhood) and phakomatoses (E.W3 p.4); <p>W4: outlines the risk of infections (especially bacterial, viral and fungal) in children with primary and acquired immunodeficiencies or chronic diseases, provides possible symptoms, principles of diagnosis and treatment (E.W33 p.1,2,4,5);</p> <p>W5: lists the epidemiology, risk, modes of inheritance and causes, symptoms, principles of diagnosis and therapeutic options in the most common hereditary diseases and syndromes (including spherocytosis, haemophilia, phakomatoses) (E.W36)</p> <p>Seminars: The graduate:</p> <p>W1: presents the importance of environmental influences and genetic factors, epidemiology, symptoms and principles of diagnosis and treatment of the most common:</p> <ul style="list-style-type: none"> • chronic respiratory diseases (tuberculosis, cystic fibrosis) (E.W3 p.3); • primary and secondary immunodeficiencies (E.W3 p.4); • rare diseases (including metabolic diseases, including the most common enzymopathies: galactosemia, fructosaemia, phenylketonuria), • metabolic disorders regarding acid-base and water-electrolyte metabolism (including rickets, tetany) (E.W3 point 1); • heart defects and cardiological diseases (heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathies, cardiac arrhythmias and syncope, heart failure, arterial hypertension, pulmonary hypertension) (E.W3 p.2);

	<ul style="list-style-type: none"> • respiratory diseases (bronchitis, bronchiectasis, respiratory infections, pneumonia and pleurisy) (E.W3 p.3); • diseases of the blood and hematopoietic system (anaemia, bleeding disorders, bone marrow failure) (E.W3 p.4); • childhood cancers (leucaemias and lymphomas, solid tumours of childhood) and phakomatoses (E.W3 p.4); • kidney and urinary system diseases (acute kidney injury, chronic kidney disease, urinary tract infections, glomerular diseases, tubulointerstitial diseases (tubulopathies, tubular acidosis), genetically determined kidney diseases, renal hypertension) (E.W3 p.6) ; • endocrine system disorders (growth disorders, thyroid and parathyroid diseases, adrenal gland diseases, diabetes, puberty disorders, gonadal dysfunction) (E.W3 p.7); • non-infectious diseases of the nervous system (cerebral palsy, seizures, epilepsy) (E.W3 p.8); • some autoinflammatory diseases (systemic connective tissue diseases, including juvenile idiopathic arthritis, systemic lupus erythematosus, dermatomyositis, systemic vasculitis) (E.W3 p.10). <p>W2: explains the principles of child nutrition in selected deficiency diseases, metabolic syndromes, diabetes (E.W1)</p> <p>W3: lists the etiological factors of the most common respiratory infections and other acute infections in children depending on location and age, and determines the need for hospitalization and notification of epidemiological services about the infection (E.W32);</p> <p>W4: outlines the risk of infections (especially bacterial, viral and fungal) in children with primary and acquired immunodeficiencies or chronic diseases, provides possible symptoms, principles of diagnosis and treatment (E.W33 p.1,2,4,5);</p> <p>W5: lists the epidemiology, risk, modes of inheritance and causes, symptoms, principles of diagnosis and therapeutic options in the most common hereditary diseases and syndromes (including spherocytosis, haemophilia, phakomatoses) (E.W36)</p> <p>Tutorials: The graduate:</p> <p>W1: presents the importance of environmental influences and genetic factors, epidemiology, symptoms and principles of diagnosis and treatment of the most common:</p> <ul style="list-style-type: none"> • chronic respiratory diseases (tuberculosis, cystic fibrosis) (E.W3 p.3); • primary and secondary immunodeficiencies (E.W3 p.4); • rare diseases (including metabolic diseases, including the most common enzymopathies: galactosemia, fructosaemia, phenylketonuria), • metabolic disorders regarding acid-base and water-electrolyte metabolism (including rickets, tetany) (E.W3 point 1); • heart defects and cardiological diseases (heart defects, myocarditis, endocarditis and pericarditis, cardiomyopathies, cardiac arrhythmias and syncope, heart failure, arterial hypertension, pulmonary hypertension) (E.W3 p.2); • respiratory diseases (bronchitis, bronchiectasis, respiratory infections, pneumonia and pleurisy) (E.W3 p.3); • diseases of the blood and hematopoietic system (anaemia, bleeding disorders, bone marrow failure) (E.W3 p.4); • childhood cancers (leucaemias and lymphomas, solid tumours of childhood) and phakomatoses (E.W3 p.4); • kidney and urinary system diseases (acute kidney injury, chronic kidney disease, urinary tract infections, glomerular diseases, tubulointerstitial diseases (tubulopathies, tubular acidosis), genetically determined kidney diseases, renal hypertension) (E.W3 p.6) ;
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	<ul style="list-style-type: none"> • endocrine system disorders (growth disorders, thyroid and parathyroid diseases, adrenal gland diseases, diabetes, puberty disorders, gonadal dysfunction) (E.W3 p.7); • non-infectious diseases of the nervous system (cerebral palsy, seizures, epilepsy) (E.W3 p.8); • some autoinflammatory diseases (systemic connective tissue diseases, including juvenile idiopathic arthritis, systemic lupus erythematosus, dermatomyositis, systemic vasculitis) (E.W3 p.10). <p>W2: explains the principles of child nutrition in selected deficiency diseases, metabolic syndromes, diabetes (E.W1)</p> <p>U1. can establish contact with a small child and teenager using a method of communication appropriate to the child's age and obtain information about the patient's well-being and ailments (E.U2);</p> <p>U2. is able to collect a medical history with a child with difficult contact and with parents in a stressful situation (E.U2);</p> <p>U3. is able to plan and conduct a physical examination dependently on the child's age, general condition and leading complaints and diagnosis, including elements of a neurological, orthopaedic, laryngological or surgical examination (E.U6);</p> <p>U4. is able to perform anthropometric measurements, assess the child's physical and motor development, sexual maturity and nutritional status using appropriate indicators, percentile charts and norm tables (E.U8);</p> <p>U5. is able to perform additional physical examinations, including screening tests for vision and hearing, posture and musculoskeletal system (E.U8);</p> <p>U6. is able to measure basic vital parameters in a child (body temperature, heart rate, non-invasive blood pressure measurement, pulse oximetry), is able to adapt the examination method and instrumentation to the patient's age (E.U14 p.1);</p> <p>U7. is able to measure body temperature in children of different ages, implement basic diagnostics and symptomatic treatment of fever, taking into account other symptoms and estimating the need for hospitalization of the patient (E.U10 p.1, E.U12);</p> <p>U8. is able to plan initial tests and emergency treatment and determine indications for extended diagnostics or hospitalization of a child with symptoms of the respiratory system (cough, shortness of breath, nasal and ear discharge), circulatory system (palpitations, fainting, cyanosis) and nervous system (convulsions, headaches) (E.U10 p.2,3,4,10,11,12,21,22, E.U12);</p> <p>U9. is able to implement initial diagnostics, plan additional tests, provide the most common causes, determine indications for hospitalization or referral to specialist care, and propose treatment in the case of general symptoms in a child (urination disorders, rash, anaemia, growth disorders, osteoarticular pain, swelling, lymphadenopathy, red eye syndrome) (E.U10 p.5,6,7,9,13,14,15,23, E.U12);</p> <p>U10. is able to plan laboratory, microbiological and imaging tests depending on the patient's clinical situation, is able to arrange them according to the degree of urgency and informativeness of the results and justify the order (E.U10);</p> <p>U11. is able to interpret the obtained laboratory test results in the context of age norms and verify further diagnostic or therapeutic procedures (E.U10);</p> <p>U12. is able to interpret the obtained results of microbiological tests, verify their significance in relation to the patient's condition (contamination, carrier status, colonization, infection, alarm pathogen) and revise anti-infective treatment (E.U10, E.U22);</p> <p>U13. is able to plan necessary specialist consultations in accordance with the patient's medical problem (E.U10);</p> <p>U14. is able to prescribe intravenous and oral pharmacological treatment for children of different ages, taking into account the differences in pharmacotherapy in developmental age (E.U10);</p> <p>U15. is able to correctly write prescriptions for medications for home treatment, taking into account legal aspects (medical and registration</p>
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	<p>indications) and obtain information on the use of the drug from the summary of product characteristics (C.U11, C.U12);</p> <p>U16. depending on the clinical condition, diagnosis or symptoms of the patient, makes a decision on the use of appropriate personal protective measures and indications for the appropriate type of isolation of the patient and is able to justify it (E.U15);</p> <p>U17. is able to recognize symptoms indicating the use of violence against a child, document it in the patient's documentation and implement procedures in accordance with applicable legal regulations (E.U29);</p> <p>U18. can write medical observations, describe the procedure performed, document the patient's condition and treatment, and complete medical documentation also using IT systems (E.U18).</p> <p>K1: considering indications for hospitalization, planning diagnostic tests and treatment of the child, takes into account the best interests of the child (K_K02);</p> <p>K2: follows the rules of respecting privacy and medical confidentiality during child examination and contacts with the family (K_K03, D.U3);</p> <p>K3: applies the principles of obtaining the consent of an underaged patient for diagnostic and treatment procedures, taking into account the position of legal and actual guardians (K_K01, D.U3);</p> <p>K4: has the habit and ability to search for information about the patient (K_K05, D.U04, D.U05);</p> <p>K5: accepts and promotes the principles of a healthy lifestyle, nutrition, physical activity, hygiene, proper conditions for child development, and encourages the child and family to comply with current health care regulations and recommendations (K_K06).</p>
<p>Assessment methods and criteria for a given form of classes within the course</p>	<p>Lectures: Theoretical test exam ($\geq 60\%$): W1–W5, U10-U14</p> <p>Seminars:</p> <ul style="list-style-type: none"> • Theoretical test exam ($\geq 60\%$): W1–W5, U10-U14 • Practical exam ($\geq 60\%$): U1-U18, K1-K5 <p>Tutorials:</p> <ul style="list-style-type: none"> • Practical exam ($\geq 60\%$): U1-U18, K1-K5 • Extended observation ($> 50\%$): K1-K3, K5
<p>Course content</p>	<p>Lecture topics:</p> <ol style="list-style-type: none"> 1. Leukaemia and lymphoma of childhood. 2. Inborn errors of immunity 3. Introduction to paediatric oncology. 4. Cellular therapies 5. Rare diseases. <p>Seminar topics:</p> <ol style="list-style-type: none"> 1. Acute inflammation of the nose and paranasal sinuses. Sore throat, pharyngitis. Hypertrophy of the pharyngeal tonsil and palatine tonsils. 2. Chronic lung diseases (tuberculosis, CF) 3. Bronchitis and bronchiolitis in children. Child whistling. 4. Pneumonia and pleurisy 5. Respiratory failure in children. 6. Systemic diseases of connective tissue 7. Systemic vasculitis (Kawasaki disease, Schoenlein-Henoch purpura). 8. Fever. Sepsis. 9. Bleeding disorders. 10. Anaemia in children 11. Childhood leukaemias and lymphomas. 12. Solid tumours 13. Phakomatoses 14. Puberty disorders. Gonadal dysfunction. 15. Congenital and acquired thyroid dysfunctions.

16. Diabetes. Hypoglycaemia.
17. Growth disorders, dwarfism
18. Convulsions and seizure syndromes.
19. Cerebral palsy
20. Headaches, CNS tumours.
21. Congenital heart defects
22. Myocarditis in children.
23. Fainting. Rhythm disturbances.
24. Arterial hypertension in children and adolescents
25. Acute kidney injury in children. Chronic kidney disease in children
26. Urinary tract infections.

Tutorial topics:

1. Patients with respiratory diseases - history, physical examination, diagnostics, differential diagnosis, interpretation of laboratory and imaging test results, treatment
2. Patients with primary and secondary immunodeficiencies - history, physical examination, diagnostics, differential diagnosis, interpretation of laboratory test results, treatment, principles of care. Protective isolation of patients. Rehabilitation, nutrition and home care plan.
3. Patients with fever of unknown cause and sepsis - assessment, examination, interpretation of microbiological tests and planning of anti-infective treatment. Prescribing and dosing of anti-infective drugs - differences in paediatrics. Indications for isolation, types of insulation.
4. Patients with cancer - history, physical examination, diagnostics, differential diagnosis, interpretation of laboratory and imaging test results, treatment, supportive therapy, nutrition.
5. Classes at the Laboratory for Clinical and Experimental Oncology. Medical aspects of laboratory diagnosis of cancer. Advanced haematological diagnostics - principles of conducting invasive tests of the hematopoietic system in children.
6. Participation in diagnostic bone marrow biopsies and lumbar punctures in children.
7. Patients with enlarged lymph nodes - history, physical examination, diagnostics, differential diagnosis, interpretation of laboratory and imaging test results, management.
8. Patients with diseases of the hematopoietic system - history, physical examination, diagnostics, differential diagnosis, interpretation of laboratory and imaging test results, treatment, nutrition. Principles of using blood components. Transfusion of blood components – legal regulations in clinical practice.
9. Patients with neurological problems (headaches, seizures, visual disturbances, behavioral disorders) - interview, physical examination, diagnostics, differential diagnosis, interpretation of imaging test results, management
10. Exercises in the paediatric cardiology department. Interview and physical examination of children with cardiovascular diseases; basic cardiological diagnostics.
11. Exercises in the paediatric nephrology department. Interview and physical examination of children with urinary tract diseases. Laboratory and functional tests of the urinary system in children. Differential diagnosis of the most common urinary system diseases.
12. Observation of the work of a doctor in a clinical clinic (immunology, oncology, haematology, pulmonology, phakomatoses).
13. Participating in the work of the Paediatric Emergency. Indications for hospitalization, basic laboratory tests, imaging and consultations in initial diagnostics. Organization of the E&A.
14. Clinical communication in paediatrics - medical simulation in clinical conditions. Providing information about the child's health condition. Communicating with patients of different ages.
15. Classes at the Centre for Medical Simulations - emergencies in paediatrics - classes according to scenarios.

Teaching methods	<p>Lectures:</p> <ul style="list-style-type: none"> • conventional lecture <p>Seminars:</p> <ul style="list-style-type: none"> • panel discussion • case analysis • problem-based learning <p>Tutorials:</p> <ul style="list-style-type: none"> • clinical tutorials • case studies • utilization of medical simulation methods
Literature	The same as in part A