

MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY
Department of Pediatrics



APPROVED

Vice-rector for scientific and pedagogical work
____ Eduard BURYACHKIVSKY
" 01 " _____ 09 _____ 2025 yr

WORKING PROGRAM FOR THE EDUCATIONAL DISCIPLINE "PEDIATRICS"

Level of higher education: second (master's degree)

Field of knowledge: 22 "Health care"

Specialty: 222 "Medicine"

Educational and professional program: Medicine

2025

1. Description of the academic discipline:

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the academic discipline
The total number of: Credits: 6 Hours: 180 Content modules: 5	Knowledge area 22 "Health care "	<i>Full-time education</i>
		<i>Mandatory discipline</i>
	Specialty 222 "Medicine"	<i>Year of training: 6</i>
		<i>Semesters XI - XII</i>
	Level of higher education second (master's level)	<i>Lectures (0 hours)</i>
		<i>Seminars (0 hours)</i>
		<i>Practical (120 hours)</i>
		<i>Laboratory (0 hours)</i>
		<i>Independent work (60 hours) including individual tasks</i>
	<i>Final control form - structured exam</i>	

2. The purpose and tasks of the educational discipline, competences, program learning outcomes.

Purpose: The application's acquisition of the higher education of knowledge and formation of elements of professional competences in the field of pediatrics and improvement of skills and competences acquired during the study of previous disciplines.

Task:

1. Formation of skills and abilities: on differential diagnosis, the most common diseases in children.
2. Improving the skills of substantiating a clinical diagnosis, drawing up a plan for laboratory and instrumental research.
3. Mastering the ability to determine emergency aid tactics, treatment and prevention of the most common diseases in children.

The process of studying the discipline is aimed at forming elements of the following competencies :

Integral (IC)

IC – Ability to solve typical and complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy

• **General competencies (GC):**

- GC1 – Ability to abstract thinking, analysis and synthesis .
- GC3 – Ability to apply knowledge in practical situations.
- GC4 – Knowledge and understanding of the subject area and understanding of professional activity.
- GC5 – Ability to adapt and act in a new situation.
- GC6 – Ability to make informed decisions.
- GC7 – Ability to work in a team.
- GC8 – Ability to interpersonal interaction.
- GC11 – Ability to search, process and analyze information from various sources.
- GC12 – Determination and perseverance regarding the assigned tasks and assumed responsibilities.
- GC13 – Awareness of equal opportunities and gender issues.

- **Special competencies (SC):**

- SC1 – Ability to collect medical information about the patient and analyze clinical data.
- SC2 – Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.
- SC3 – Ability to establish a preliminary and clinical diagnosis of the disease.
- SC5 – Ability to determine the nature of nutrition in the treatment and prevention of diseases.
- SC6 – Ability to determine the principles and nature of treatment and prevention of diseases.
- SC7 – Ability to diagnose emergency conditions.
- SC8 – Ability to determine tactics and provide emergency medical assistance.
- SC10 – Ability to perform medical manipulations.
- SC11 – The ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility, including an early intervention system.
- SC13 – Ability to carry out sanitary and hygienic and preventive measures.
- SC16 – Ability to fill medical documentation, including electronic forms.
- SC24 – Adherence to ethical principles when working with patients and laboratory animals.
- SC26 – Ability to determine the management tactics of persons subject to dispensary supervision.

Program learning outcomes (PLO):

- PLO1 - Having a thorough knowledge of the structure of professional activity. Being able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
- PLO2 - Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.
- PLO3 - Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems, including an early intervention system.
- PLO4 - Identifying leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
- PLO5 - Collecting complaints, history of life and diseases, assessing the psychomotor and physical development of the patient, the state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluation of the information regarding the diagnosis (according to list 4), taking into account the age of the patient.
- PLO6 - Establishing the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis, observing the relevant ethical and legal norms, under the control of the managing physician in the conditions of the health care institution (according to the list 2).
- PLO7 - Assigning and analyzing additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
- PLO8 - Determination of the main clinical syndrome or symptom that determines the severity of the victim's/victim's condition (according to list 3) by making a reasoned decision about the person's condition under any circumstances (in the conditions of a health care facility, outside its borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.
- PLO9 - Determination of the nature and principles of treatment (conservative, operative) of

patients with diseases (according to list 2), taking into account the patient's age, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, based on a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical institution.

PLO10 - Determination of the necessary mode of work, rest and nutrition based on the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO12 - Assessment of the general condition of a newborn child by making a reasoned decision according to existing algorithms and standard schemes, observing the relevant ethical and legal norms.

PLO13 - Assessment and monitoring of the child's physical and psychomotor development, provision of recommendations on feeding and nutritional features depending on age, and organization of preventive vaccinations according to the calendar.

PLO14 - Determination of tactics and providing emergency medical care in emergencies (according to list 3) in limited time conditions according to existing clinical protocols and standards of treatment.

PLO17 - Performing medical manipulations (according to list 5) in the conditions of a medical institution, at home or work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLO18 - To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents

PLO21 - Searching for the necessary information in the professional literature and databases of other sources, analysing, evaluating and application of this information.

PLO29 - Plan, organize and carry out measures for the specific prevention of infectious diseases, including in accordance with the National calendar of preventive vaccinations, both mandatory and recommended. Manage vaccine residues, organize additional vaccination campaigns, including immunoprophylaxis measures.

PLO30 - Determination of the management tactics of persons subject to dispensary supervision (children, pregnant women, workers whose professions require mandatory dispensary examination)

As a result of studying the academic discipline, the applicant of higher education must:

Know: Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention of common diseases in children of different ages.

Be able:

- Communicate with the child and his parents, collect complaints, life history and diseases.
- Assess the physical and psychomotor development of children, provide recommendations on feeding and specifics of nutrition depending on age.
- Conduct clinical examination of children of different ages according to standard methods.
- Analyze the results of laboratory, functional and instrumental research.
- Carry out differential diagnosis and substantiate the clinical diagnosis.
- Determine the tactics and provide emergency medical care in emergency situations in children.
- To determine the nature and principles of treatment of sick children on the basis of a

preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

- Perform medical manipulations (according to list 5) for common diseases in children.
- Keep medical records for common diseases in children.

3. Content of the academic discipline

Content module 1.

Dispensary care for healthy and sick children in outpatient settings. Emergency care for major emergencies.

Topic 1. Integrated management of childhood diseases.

The Strategy of Integrated management of childhood diseases and its purpose. General signs of danger of the child's condition. Assessment, classification, treatment, consultation and follow-up for cough, difficulty breathing, diarrhea, ear problems, sore throat, fever, nutritional disorders and anemia, in the presence of HIV infection in children aged 2 months to 5 years. Assessment, classification, treatment, consultation and follow-up in children under the age of 2 months with jaundice, diarrhea, feeding problems and low body weight, extremely severe disease and local bacterial infection, the need for classification to HIV infection, immunization status and vitamin D prescription.

Topic 2. Emergency conditions in children, including those caused by external factors in children.

Anaphylactic shock in children. Definition, causes, clinical manifestations, diagnosis, emergency care, prevention. Acute urticaria and angioedema in children. Causes, classification, diagnosis, differential diagnosis, treatment. Emergency care for angioedema in life-threatening areas in children. Clinical signs, diagnosis, emergency care for emergency conditions caused by the action of external factors in children (aspiration of a foreign body into the respiratory tract, insect bites, snake bites, electric shock, burns, poisoning with drugs, household chemicals).

Topic 3. Medical observation of children in the first three years of life in a polyclinic.

The procedure for mandatory preventive examinations of a child under the age of three. Rational feeding and nutrition of a child under the age of three. Assessment of problems of natural feeding in the context of Integrated management of childhood diseases. Assessment of physical and psychomotor development of a child up to three years of age. Tactics of a general practitioner in case of physical and neuropsychological development disorders of children in the first three years of life. Principles of effective counseling. Differential diagnosis and prevention of the most common deficiency conditions (rickets, iron-deficiency anemia, protein-energy deficiency) in young children. Peculiarities of observation of premature children and those born with low birth weight. Preventive vaccinations for children under three years of age.

Topic 4. Differential diagnosis of jaundice in newborn children. Perinatal lesions of the central nervous system in children. Dispensary care of children with perinatal pathology of the central nervous system.

Clinical variants and complications of the course of jaundice in newborns at the polyclinic stage of observation. Data of laboratory and instrumental studies in the diagnosis of hemolytic, conjugation, parenchymatous and mechanical jaundice in newborns. Differential diagnosis of jaundice in newborns. Tactics of management of newborns with manifestations of jaundice in the ward in the context of integrated management of childhood diseases.

Leading clinical symptoms and syndromes in children with perinatal pathology of the nervous system. Data of laboratory and instrumental studies in perinatal lesions of the nervous system in children. Differential diagnosis of perinatal CNS lesions in infants. Tactics of managing children with perinatal lesions of the central nervous system in polyclinic conditions. Emergency care for convulsions in children according to the algorithm of the Integrated

management of childhood diseases.

Topic 5. Pallor in children. Differential diagnosis. Tactics of the doctor. Emergency care for bleeding. Lymphadenopathy in children. Differential diagnosis. Tactics of the doctor. Hepatomegaly in children. Differential diagnosis. Tactics of the doctor. Splenomegaly in children. Differential diagnosis. Tactics of the doctor.

Pallor in children: a problem-oriented approach in pediatrics. Differential diagnosis of diseases and conditions accompanied by pallor in children. Treatment of diseases and conditions that are accompanied by pallor in children. Emergency care for acute bleeding. Lymphadenopathy in children. Differential diagnosis. Tactics of the doctor. Indications for consultation with a pediatric hematologist. Hepatomegaly in children. Differential diagnosis. Tactics of the doctor. Splenomegaly in children. Differential diagnosis. Tactics of the doctor. Tactics for managing children of early age with anemia according to the algorithm for the Integrated management of childhood illnesses.

Topic 6. Peculiarities of medical monitoring of adolescent children. Differential diagnosis of arterial hypertension. Emergency care for hypertension and hypotension in adolescents.

The procedure for mandatory preventive medical examinations of adolescent children. Rational nutrition: prevention of obesity, diabetes. Assessment of puberty. Medical and psychological counseling. Tactics of a general practitioner in arterial hypo- and hypertension. Differential diagnosis of primary and secondary arterial hypertension in adolescent children. Assessment of the degree of arterial hypertension using percentile tables, taking into account the percentile evaluation of height. Tactics of managing a patient with arterial hypo- and hypertension in outpatient conditions. Provision of emergency care for syncopal states and hypertensive crisis. Prevention of arterial hypo- and hypertension in children. Dispensary observation.

Content module 2.

Differential diagnosis of the most common respiratory diseases in children. Emergency care for major emergencies.

Topic 7. Cough and fever in children. Differential diagnosis. Tactics of the doctor. Differential diagnosis pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.

Cough: a problem-oriented approach in pediatrics. The main types and causes of cough. Differential diagnosis of diseases whose main symptom is cough. Laboratory-instrumental examinations of children with cough. Differential use of medicines for cough in children. Tactics for managing young children with cough according to the Integrated management algorithm for childhood illnesses. Mastery of communication skills in children with chronic cough, and management tactics for children with chronic cough.

Differential diagnosis pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.

Leading clinical symptoms and syndromes, data of laboratory and instrumental studies in various clinical variants of pneumonia and its complications in children. Differential diagnosis of pneumonia in children. Establishing a preliminary diagnosis. Patient management tactics in different clinical variants of the course of pneumonia and its complications. Emergency care for acute respiratory failure depending on the cause and degree of severity. Management of pneumonia in children in the context of Integrated management of childhood diseases. Prevention of pneumonia and its complications in children.

Fever in children: problem-oriented approach in pediatrics. Causes and types of fever. Differential diagnosis of diseases accompanied by fever in children. Therapeutic approaches to fever in childhood. Indications for the use of antipyretics in pediatrics. Emergency care for

febrile seizures. Management of young children with fever according to the algorithm for the Integrated management of childhood illnesses.

Topic 8. Differential diagnosis bronchial obstruction syndrome in children. Emergency care for a severe attack of bronchial asthma in children.

Leading clinical symptoms and syndromes in bronchial asthma, bronchiolitis and acute obstructive bronchitis in children. Data of laboratory and instrumental studies in bronchial asthma, bronchiolitis and acute obstructive bronchitis in children. Peculiarities of the course of bronchial asthma in children depending on the degree of severity and level of control. Differential diagnosis of bronchial obstruction syndrome in children of different ages. Establishing a preliminary diagnosis. Patient management tactics in different clinical variants of the course of broncho-obstructive syndrome and its complications in children. Emergency care for severe attack of bronchial asthma. Helping children with bronchial obstruction syndrome according to the to the algorithm for the Integrated management of childhood illnesses. Prevention of bronchial asthma and bronchial obstruction syndrome in children of different ages. Dispensary observation. Communication with the child's mother in order to determine the probability of development of bronchial asthma in the child.

Topic 9. Differential diagnosis hereditary and congenital diseases of the bronchopulmonary system in children.

Leading clinical symptoms and syndromes in hereditary and congenital diseases of the bronchopulmonary system (cystic fibrosis, idiopathic hemosiderosis of the lungs, primary ciliary dyskinesia, Wilms-Campbell syndrome, bronchomalacia, aplasia and hypoplasia and instrumental studies in hereditary and congenital diseases of the bronchopulmonary system and their complications. Differential diagnosis of hereditary and congenital diseases of the bronchopulmonary system and their complications in children. Patient management tactics for hereditary and congenital diseases of the bronchopulmonary system and their complications in children. Prevention of hereditary and congenital diseases of the bronchopulmonary system in children. Dispensary observation.

Differential diagnosis chronic diseases of the bronchopulmonary system in children.

Leading clinical symptoms and syndromes in chronic bronchitis, bronchiectasis, in children. Data of laboratory and instrumental studies in chronic bronchitis, bronchiectasis, and their complications. Differential diagnosis of chronic diseases of the bronchopulmonary system and their complications in children. Patient management tactics for chronic diseases of the bronchopulmonary system and their complications in children. Prevention of chronic diseases of the bronchopulmonary system in children. Dispensary observation.

Content module 3.

Differential diagnosis the most common diseases of the circulatory system in children.

Emergency care for major emergencies.

Topic 10. Differential diagnosis cyanosis, shortness of breath, cardiomegaly in inflammatory and non-inflammatory diseases of the cardiovascular system in children. Emergency care for acute heart failure.

Leading clinical symptoms and syndromes of inflammatory and non-inflammatory cardiovascular diseases systems in children accompanied by cardiomegaly (acute rheumatic fever, carditis, cardiomyopathy). Data of laboratory and instrumental studies in inflammatory and non-inflammatory heart diseases. Patient management tactics for inflammatory and non-inflammatory diseases, congenital and acquired heart defects in children. Emergency care for acute heart failure. Treatment and prevention of chronic heart failure. Dispensary observation.

Topic 11. Differential diagnosis cyanosis, shortness of breath, cardiomegaly in congenital and acquired heart defects in children. Treatment of chronic heart failure.

Leading clinical symptoms and syndromes of cardiovascular diseases systems in children accompanied by cardiomegaly (congenital and acquired heart defects). Data of laboratory and

instrumental studies in congenital and acquired heart defects in children. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in congenital and acquired heart defects in children. Patient management tactics for congenital and acquired heart defects in children. Treatment and prevention of chronic heart failure. Dispensary observation.

Topic 12. Differential diagnosis heart rhythm and conduction disorders in children. Emergency care for paroxysmal rhythm disturbances and Morgana-Adams-Stokes syndrome.

Leading clinical symptoms and syndromes in heart rhythm disorders: extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Clinical variants of the course of paroxysmal tachycardia and atrial fibrillation in children. Data of instrumental studies in extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Differential diagnosis of extrasystole, paroxysmal tachycardia, atrial fibrillation and complete atrioventricular block. Patient management tactics for heart rhythm and conduction disorders in children. Providing emergency care for paroxysmal tachycardia, atrial fibrillation, Morgana-Adams-Stokes syndrome in children. Prevention of heart rhythm and conduction disorders in children.

Topic 13. Differential diagnosis systemic connective tissue diseases and systemic vasculitis in children.

Leading clinical symptoms and syndromes in juvenile rheumatoid arthritis, systemic lupus erythematosus, acute rheumatic fever, dermatomyositis, scleroderma, Kawasaki disease, polyarteritis nodosa and other systemic vasculitis in children. Clinical variants of the course and complications of systemic connective tissue diseases and systemic vasculitis in children. Data of laboratory and instrumental studies in systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of arthritis in children. Tactics of managing patients with systemic connective tissue diseases and systemic vasculitis in children. Primary and secondary prevention of acute rheumatic fever in children. Dispensary observation.

Content module 4.

**Differential diagnosis the most common diseases of the digestive organs in children.
Emergency care for major emergencies.**

Topic 16. Abdominal pain syndrome in children. Differential diagnosis. Tactics of the doctor. Differential diagnosis of functional and organic diseases of the stomach and intestines in children.

Abdominal pain syndrome in children: a problem-oriented approach in pediatrics. Pathophysiology of abdominal pain in children. The main causes of abdominal pain in children. Differential diagnosis of diseases accompanied by abdominal pain syndrome in children. Laboratory and instrumental examinations of children with abdominal pain syndrome. Indications for consultation with a pediatric surgeon. Treatment of abdominal pain syndrome of various genesis in children. Emergency care for life-threatening conditions accompanied by abdominal pain in children.

Differential diagnosis of functional and organic diseases of the stomach in children.

Leading clinical symptoms and syndromes in functional and organic diseases of the stomach in children (functional dyspepsia, gastroesophageal reflux disease, gastritis, peptic ulcer disease of the stomach and duodenum). Clinical and instrumental examination and differential diagnosis of functional and organic diseases of the stomach in children. Clinical variants of the course of functional and organic diseases of the stomach. Tactics of managing children with functional and organic diseases of the stomach. Emergency care for gastric bleeding. Prevention and dispensary monitoring of functional and organic diseases of the stomach in children.

Differential diagnosis of functional and organic intestinal diseases in children. Leading clinical symptoms and syndromes in functional and organic intestinal diseases in children

(functional diarrhea, disaccharidase deficiency, exudative enteropathy, celiac disease, cystic fibrosis, Crohn's disease, nonspecific ulcerative colitis). Clinical and instrumental examination and differential diagnosis of functional and organic intestinal diseases in children. Clinical variants of the course of functional and organic intestinal diseases. Tactics of managing children with functional and organic intestinal diseases. Prevention and dispensary monitoring of functional and organic intestinal diseases in children.

Topic 15. Differential diagnosis of diseases the hepatobiliary system and pancreas in children. Emergency care for acute liver failure. Portal hypertension syndrome.

Leading clinical symptoms, syndromes and variants of the course in functional and organic diseases of the hepatobiliary system and pancreas in children (dysfunction of the gallbladder and sphincter of Oddi, acute and chronic cholecystitis, acute and chronic pancreatitis and chronic hepatitis). Data of laboratory and instrumental studies in diseases of the hepatobiliary system and pancreas in children. Differential diagnosis of diseases accompanied by exocrine insufficiency of the pancreas and functional and organic diseases of the hepatobiliary system in children. Treatment of children with functional and organic diseases of the hepatobiliary system and pancreas, correction of exocrine pancreatic insufficiency in children. Providing emergency care for acute liver failure and complications of portal hypertension syndrome. Prevention and dispensary monitoring of diseases of the hepatobiliary system and pancreas in children.

Content module 5.

**Differential diagnosis the most common diseases of the urinary system in children.
Emergency care for major emergencies.**

Topic 16. Differential diagnosis infectious and inflammatory diseases of the urinary system in children.

Leading clinical symptoms and syndromes in urinary system infection in children. Clinical variants of the course of infection of the urinary system. Differential diagnosis of the most common infections of the urinary system in children. Management tactics for urinary system infection in children. Emergency care for acute urinary retention in children. Dispensary observation.

Differential diagnosis hereditary diseases of the urinary system in children.

Leading clinical symptoms and syndromes in dysmetabolic nephropathies and hereditary tubulopathies (phosphate-diabetes, Debré-de-Thony-Fanconi syndrome, renal diabetes insipidus, renal tubular acidosis) in children. Clinical variants of the course in dysmetabolic nephropathies and hereditary tubulopathies. Data of laboratory and instrumental studies in dysmetabolic nephropathies and hereditary tubulopathies. Differential diagnosis of dysmetabolic nephropathies and hereditary tubulopathies in children. Management tactics for dysmetabolic nephropathies and hereditary tubulopathies in children. Principles of treatment of chronic renal failure in children.

Topic 17. Differential diagnosis of glomerulonephritis in children. Chronic kidney disease in children. Emergency care for acute kidney injury in children.

Conditions associated with hematuria in children. Differential diagnosis of acute poststreptococcal glomerulonephritis in children. Conditions associated with proteinuria in children. Differential diagnosis of nephrotic syndrome in children. Treatment of glomerulonephritis and chronic kidney disease in children. Conservative treatment of acute kidney injury (AKI) in children and indications for dialysis.

4. The structure of the academic discipline

Names of topics	Number of hours				
	Total	including			
		lectures	seminars	practical	laboratory

Content module 1.						
Dispensary care for healthy and sick children in outpatient settings. Emergency care for major emergencies						
Topic 1. Integrated management childhood diseases	12	0	0	8	0	4
Topic 2. Emergency conditions in children, including those caused by external factors in children.	12	0	0	8	0	4
Topic 3. Medical observation children in the first three years of life in a polyclinic.	12	0	0	8	0	3
Topic 4. Differential diagnosis jaundice in newborn children. Perinatal lesions the central nervous system in children. Dispensary observation children with perinatal pathology of the central nervous system.	10	0	0	6	0	4
Topic 5. Pallor in children. Differential diagnosis. Medical tactics. Emergency care for bleeding. Lymphadenopathy in children. Differential diagnosis. Tactics of the doctor. Hepatomegaly in children. Differential diagnosis. Medical tactics. Splenomegaly in children. Differential diagnosis. Medical tactics.	10	0	0	6	0	4
Topic 6. Peculiarities of medical monitoring adolescent children. Differential diagnosis arterial hypertension. Emergency care for hypertension and hypotension in adolescents.	10	0	0	6	0	4
<i>Together according to content module 1</i>	66	0	0	42	0	24
Content module 2.						

Differential diagnosis of the most common respiratory diseases in children. Emergency care for major emergencies.						
Topic 7. Cough and fever in children. Differential diagnosis. Tactics of the doctor. Differential diagnosis pneumonia in children. Complications of pneumonia. Emergency care for acute respiratory failure in children.	12	0	0	8	0	4
Topic 8. Differential diagnosis bronchial obstruction syndrome in children. Emergency care for a severe attack of bronchial asthma in children. Communication with the child's mother in order to determine the probability development of bronchial asthma in the child.	12	0	0	8	0	4
Topic 9. Differential diagnosis hereditary and congenital diseases of the bronchopulmonary system in children.	11	0	0	8	0	3
<i>Together according to content module 2</i>	35	0	0	24	0	11
Content module 3.						
Differential diagnosis of the most common diseases of the circulatory system in children. Emergency care for major emergencies.						
Topic 10. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in inflammatory and non-inflammatory diseases of the cardiovascular system in children. Emergency care for acute heart failure	9	0	0	6	0	3
Topic 11. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in congenital and acquired heart defects in	9	0	0	6	0	3

children. Treatment of chronic heart failure.						
Topic 12. Differential diagnosis heart rhythm and conduction disorders in children. Emergency care for paroxysmal rhythm disturbances and Morgana-Adams-Stokes syndrome.	9	0	0	6	0	3
Topic 13. Differential diagnosis systemic connective tissue diseases and systemic vasculitis in children.	9	0	0	6	0	3
<i>Together according to content module 3</i>	36	0	0	24	0	12
Content module 4. Differential diagnosis the most common diseases of the digestive organs in children. Emergency care for major emergencies						
Topic 14. Abdominal pain syndrome in children. Differential diagnosis. Tactics of the doctor. Differential diagnosis of functional and organic diseases of the stomach and intestines in children.	12	0	0	8	0	4
Topic 15. Differential diagnosis diseases of hepatobiliary system and pancreas in children. Emergency care for acute liver failure. Portal hypertension syndrome.	11	0	0	8	0	3
<i>Together according to content module 4</i>	23	0	0	16	0	7
Content module 5. Differential diagnosis of the most common diseases of the urinary system in children. Emergency care for major emergencies						
Topic 16. Differential diagnosis infectious and inflammatory diseases of the urinary system in children.	11	0	0	8	0	3
Topic 17. Differential diagnosis acute and chronic glomerulonephritis in	9	0	0	6	0	3

children. Emergency care for acute renal failure.						
<i>Together according to content module 5</i>	20	0	0	14	0	6
<i>Individual tasks</i>	0	0	0	0	0	0
Total hours	180	0	0	120	0	60

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lectures

Lectures are not provided.

5.2. Topics of seminar classes

Seminar classes are not provided.

5.3. Topics of practical classes

No	Topic name	The number of hours
1.	Practical lesson 1. Topic 1. Integrated management for childhood illnesses. Strategy of Integrated management for childhood illnesses and its objectives. General signs of danger in a child's condition. Communication with the mother of a hybrid patient. Interviewing, examining, and treating a child with acute ear and throat infection according to the algorithm for the Integrated management childhood illnesses.	2
2.	Practical lesson 2. Topic 1. Integrated management of childhood diseases, from 2 months to 5 years. Assessment, classification, treatment, consultation and follow-up for cough, shortness of breath, diarrhea, ear problems, sore throat, fever.	2
3.	Practical lesson 3. Topic 1. Integrated management of childhood diseases, from 2 months to 5 years. Assessment, classification, treatment, consultation and follow-up in children under 2 months of age with diarrhea, feeding problems, anemia, in the presence of HIV infection. Assessment of physical development in children of different ages using sigma nomograms.	2
4.	Practical lesson 4. Topic 1. Integrated management of childhood diseases up to 2 months of age. Assessment, classification, treatment, consultation and follow-up in children under 2 months of age with diarrhea, feeding problems, and low body weight, with extremely severe disease and local bacterial infection, the need for classification for HIV infection, immunization status and purpose of vitamin D. Communication with the parents of a hybrid patient: a newborn with a bacterial infection of the umbilical stump or skin.	2
5.	Practical lesson 5. Topic 2. Anaphylactic shock in children. Definition, causes, clinical manifestations, diagnosis, emergency care, prevention. Acute urticaria and angioedema in children. Causes, classification, diagnosis, differential diagnosis, treatment. Emergency care for angioedema in life-threatening areas in children.	2
6.	Practical lesson 6. Topic 2.	2

	Clinical signs, diagnosis, emergency care for emergency conditions caused by the action of external factors in children (intrusion of a foreign body into the respiratory tract, insect bites, snake bites). Anaphylactic shock in children. Definition, causes, clinical manifestations, diagnosis, emergency care, prevention. Acute urticaria and angioedema in children. Causes, classification, diagnosis, differential diagnosis, treatment. Emergency care for angioedema in life-threatening areas in children	
7.	Practical lesson 7. Topic 2. Clinical signs, diagnosis, emergency care for emergency conditions caused by the action of external factors in children (intrusion of a foreign body into the respiratory tract, insect bites, snake bites).	2
8.	Practical lesson 8. Topic 3. Clinical signs, diagnosis, emergency care for emergency conditions caused by the action of external factors in children (electric shock, burns, poisoning with medicines, household chemicals).	2
9.	Practical lesson 9. Topic 3. Medical observation of children of the first three years of life in the polyclinic. The procedure for mandatory preventive examinations of a child under the age of three. Rational feeding and nutrition of a child under the age of three. Communication of the general practitioner with a hybrid newborn patient facing feeding issues (breastfeeding positioning of the infant and maternal position during feeding) according to the algorithm for the integrated management of childhood illnesses (IMCI).	2
10.	Practical lesson 10. Topic 3. Medical observation of children of the first three years of life in the polyclinic. Assessment of physical and psychomotor development of a child up to three years of age. Peculiarities of observation of premature children and those born with low birth weight. Tactics of a general practitioner in case of physical and neuropsychological development disorders of children in the first three years of life. Principles of effective counseling.	2
11.	Practical lesson 11. Topic 3. Medical observation of children of the first three years of life in the polyclinic. Differential diagnosis and prevention of the most common deficiency conditions (rickets, iron-deficiency anemia, protein-energy deficiency) in young children. Communication with the mother of a hybrid patient. Interviewing, examining, and treating a child under one year of age with anemia and rickets according to the algorithm for the integrated management for childhood illnesses. Assessment of physical development in children of different ages using sigma nomograms.	2
12.	Practical lesson 12. Topic 3. Preventive vaccinations for children under three years of age.	2
13.	Practical lesson 13. Topic 4. Clinical variants and complications of the course of jaundice in newborns at the polyclinic stage of observation. Clinical variants and complications of the course of jaundice in newborns at the polyclinic stage of observation.	2
14.	Practical lesson 14. Topic 4. Data of laboratory and instrumental studies in the diagnosis of hemolytic, conjugation, parenchymatous and mechanical jaundice in newborns. Differential diagnosis of jaundice in newborns. Communication with the mother of a hybrid patient: a newborn with jaundice to the algorithm for the (IMCI) integrated management of childhood illnesses.	2
15.	Practical lesson 15. Topic 4.	2

	Perinatal lesions of the central nervous system in children. Dispensary observation of children with perinatal pathology of the central nervous system. Leading clinical symptoms and syndromes in children with perinatal pathology of the nervous system. Data of laboratory and instrumental studies in perinatal lesions of the nervous system in children. Differential diagnosis of perinatal CNS lesions in infants. Tactics of managing children with perinatal lesions of the central nervous system in polyclinic conditions. Emergency care for convulsions in children according to the algorithm of the Integrated management of childhood diseases.	
16.	Practical lesson 16. Topic 5. Pallor in children. Pallor in children: a problem-oriented approach in pediatrics. Differential diagnosis of diseases and conditions accompanied by pallor in children. Treatment of diseases and conditions accompanied by pallor in children. Emergency care in acute bleeding. Communication with the mother of a pediatric patient with hemorrhagic manifestations: thrombocytopenia, hemorrhagic vasculitis, hemophilia, acute leukemia.	2
17.	Practical lesson 17. Topic 5. Pallor in children. Lymphadenopathy in children. Differential diagnosis. Tactics of the doctor. Indications for consultation with a pediatric hematologist.	2
18.	Practical lesson 18. Topic 5. Pallor in children. Hepatomegaly in children. Differential diagnosis. Tactics of the doctor. Splenomegaly in children. Differential diagnosis. Tactics of the doctor. Tactics for managing children.	2
19.	Practical lesson 19. Topic 6. Peculiarities of medical monitoring of adolescent children. The procedure for mandatory preventive medical examinations of adolescent children. Rational nutrition: prevention of obesity, diabetes. Assessment of puberty. Medical and psychological counseling. Assessment of sexual development in boys and girls according to Tanner Stages.	2
20.	Practical lesson 20. Topic 6. Peculiarities of medical observation of adolescent children. Differential diagnosis of primary and secondary arterial hypertension in adolescent children. Assessment of arterial hypertension in children of different ages using percentile charts, considering height assessment via percentile nomograms.	2
21.	Practical lesson 21. Topic 6. Peculiarities of medical observation of adolescent children. Tactics of managing a patient with arterial hypo- and hypertension in outpatient conditions. Provision of emergency care for syncopal states and hypertensive crisis. Prevention of arterial hypo- and hypertension in children. Dispensary observation.	2
22.	Practical lesson 22. Topic 7. Cough: a problem-oriented approach in pediatrics. The main types and causes of cough. Differential diagnosis of diseases whose main symptom is cough. Laboratory-instrumental examinations of children with cough. Communication with the mother of a hybrid patient with a cough or acute respiratory illness according to the IMCI (Integrated management of childhood illness) algorithm, administration of medication via a spacer. Communication with the mother of a hybrid patient with a prolonged cough (due to a foreign body in the airways, prolonged post-infectious cough, recurrent microaspiration due to gastroesophageal reflux, or	2

	lymphogranulomatosis), lung auscultation, administration of medication via a spacer, assessment of the lymph node status.	
23.	<p>Practical lesson 23. Topic 7.</p> <p>Differential diagnosis of pneumonia in children. Leading clinical symptoms and syndromes, data of laboratory and instrumental studies in various clinical variants of pneumonia and its complications in children. Communication with the mother of a hybrid patient: a young child with pneumonia, following to the algorithm of the Integrated management of childhood illness (IMCI).</p> <p>Differential diagnosis of pneumonia in children. Communication with the mother of a hybrid patient, a young child with suspected pneumonia according to the IMCI (Integrated management of childhood illness) algorithm, administration of medication via a spacer.</p>	2
24.	<p>Practical lesson 24. Topic 7.</p> <p>Patient management tactics in different clinical variants of the course of pneumonia and its complications. Emergency care for acute respiratory failure depending on the cause and degree of severity. Management of pneumonia in children in the context of Integrated management of childhood diseases. Prevention of pneumonia and its complications in children.</p>	2
25.	<p>Practical lesson 25. Topic 7.</p> <p>Fever in children: problem-oriented approach in pediatrics. Causes and types of fever. Differential diagnosis of diseases accompanied by fever in children. Therapeutic approaches to fever in childhood according to the algorithm for the Integrated management of childhood illnesses. Indications for the use of antipyretics in pediatrics. Emergency care for febrile seizures.</p>	2
26.	<p>Practical lesson 26. Topic 8.</p> <p>Differential diagnosis of bronchial obstruction syndrome in children. Leading clinical symptoms and syndromes in bronchial asthma, bronchiolitis and acute obstructive bronchitis in children. Communication with the child's mother in order to determine the probability of development of bronchial asthma in the child.</p>	2
27.	<p>Practical lesson 27. Topic 8.</p> <p>Peculiarities of the course of bronchial asthma in children depending on the degree of severity and level of control. Data of laboratory and instrumental studies in bronchial asthma, bronchiolitis and acute obstructive bronchitis in children.</p>	2
28.	<p>Practical lesson 28. Topic 8.</p> <p>Differential diagnosis of bronchial obstruction syndrome in children of different ages. Justification of the previous diagnosis. Communication with the mother of a hybrid patient to determine the likelihood of developing bronchial asthma in a child under 5 years of age.</p>	2
29.	<p>Practical lesson 29. Topic 8.</p> <p>Patient management tactics in different clinical variants of the course of broncho-obstructive syndrome and its complications in children. Emergency care for asthmatic conditions. Helping children with bronchial obstruction syndrome according to the Integrated management of childhood diseases system. Prevention of bronchial asthma and bronchial obstruction syndrome in children of different ages. Dispensary observation.</p>	2
30.	<p>Practical lesson 30. Topic 8.</p> <p>Differential diagnosis of hereditary and congenital diseases of the bronchopulmonary system in children. Leading clinical symptoms and syndromes in hereditary and congenital diseases of the bronchopulmonary system (cystic fibrosis, idiopathic pulmonary hemosiderosis, primary ciliary</p>	2

	dyskinesia, Wilms-Campbell syndrome, bronchomalacia, aplasia and hypoplasia and instrumental studies in hereditary and congenital diseases of the bronchopulmonary system and their complications.	
31.	Practical lesson 31. Topic 9. Patient management tactics for hereditary and congenital diseases of the bronchopulmonary system and their complications in children. Communication with the mother of a hybrid patient, a child with persistent cough (due to cystic fibrosis, bronchial asthma, lymphogranulomatosis), lung auscultation, administration of medication via spacer, assessment of lymph nodes. Prevention of hereditary and congenital diseases of the bronchopulmonary system in children. Dispensary observation.	2
32.	Practical lesson 32. Topic 9. Differential diagnosis of chronic diseases of the bronchopulmonary system and their complications in children. Leading clinical symptoms and syndromes in chronic bronchitis, bronchiectasis in children.	2
33.	Practical lesson 33. Topic 9. Data of laboratory and instrumental studies in chronic bronchitis, bronchiectasis, and their complications. Patient management tactics. Prevention of chronic diseases of the bronchopulmonary system in children. Dispensary observation.	2
34.	Practical lesson 34. Topic 10. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in inflammatory and non-inflammatory diseases of the cardiovascular system in children. Leading clinical symptoms and syndromes of inflammatory and non-inflammatory diseases of the cardiovascular system in children, accompanied by cardiomegaly (acute rheumatic fever, carditis, cardiomyopathy).	2
35.	Practical lesson 35. Topic 10. Data of laboratory and instrumental studies in inflammatory and non-inflammatory heart diseases (acute rheumatic fever, carditis, cardiomyopathy).	2
36.	Practical lesson 36. Topic 10. Patient management tactics for inflammatory and non-inflammatory diseases, congenital and acquired heart defects in children. Emergency care for acute heart failure. Treatment and prevention of chronic heart failure. Dispensary observation.	2
37.	Practical lesson 37. Topic 11. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in congenital and acquired heart defects in children. Leading clinical symptoms and syndromes.	2
38.	Practical lesson 38. Topic 11. Data of laboratory and instrumental studies in congenital and acquired heart defects in children. Differential diagnosis of cyanosis, shortness of breath, cardiomegaly in congenital and acquired heart defects in children.	2
39.	Practical lesson 39. Topic 11. Patient management tactics for congenital and acquired heart defects in children. Treatment and prevention of chronic heart failure. Dispensary observation.	2
40.	Practical lesson 40. Topic 12. Differential diagnosis of heart rhythm and conduction disorders in children.	2

	Leading clinical symptoms and syndromes in heart rhythm disorders: extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Clinical variants of the course of paroxysmal tachycardia and atrial fibrillation in children.	
41.	Practical lesson 41. Topic 12. Data of instrumental studies in extrasystole, paroxysmal tachycardia, atrial fibrillation, complete atrioventricular block. Differential diagnosis of extrasystole, paroxysmal tachycardia, atrial fibrillation and complete atrioventricular block.	2
42.	Practical lesson 42. Topic 12. Emergency care for paroxysmal rhythm disturbances and Morgana-Adams-Stokes syndrome. Prevention of heart rhythm and conduction disorders in children.	2
43.	Practical lesson 43. Topic 13. Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children. Leading clinical symptoms and syndromes in juvenile idiopathic arthritis, systemic lupus erythematosus, acute rheumatic fever, dermatomyositis, scleroderma, Kawasaki disease, polyarteritis nodosa and other systemic vasculitis in children. Clinical variants of the course and complications of systemic connective tissue diseases and systemic vasculitis in children.	2
44.	Practical lesson 44. Topic 13. Data of laboratory and instrumental studies in systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of systemic connective tissue diseases and systemic vasculitis in children. Differential diagnosis of arthritis in children	2
45.	Practical lesson 45. Topic 13. Tactics of managing patients with systemic connective tissue diseases and systemic vasculitis in children. Primary and secondary prevention of acute rheumatic fever in children. Dispensary observation.	2
46.	Practical lesson 46. Topic 14. Differential diagnosis of functional and organic diseases of the stomach in children. Leading clinical symptoms and syndromes in functional and organic diseases of the stomach in children (functional dyspepsia, gastroesophageal reflux disease, gastritis, peptic ulcer disease of the stomach and duodenum). Clinical and instrumental examination. Clinical variants of the course.	2
47.	Practical lesson 47. Topic 14. Tactics of managing children with functional and organic diseases of the stomach. Emergency care for gastric bleeding. Prevention and dispensary monitoring of functional and organic diseases of the stomach in children.	2
48.	Practical lesson 48. Topic 14. Differential diagnosis of functional and organic intestinal diseases in children. Leading clinical symptoms and syndromes in functional diarrhea, disaccharidase deficiency, exudative enteropathy, celiac disease, cystic fibrosis, Crohn's disease, nonspecific ulcerative colitis. Clinical and instrumental examination. Child care tactics, prevention. Assessment, Classification, Treatment, Consultation, and follow-up in cases of diarrhea, dehydration, and presence of blood in stools. Management strategy according to the algorithm of the Integrated management of childhood illness (IMCI).	2
49.	Practical lesson 49. Topic 14. Abdominal pain syndrome in children: a problem-oriented approach in	2

	<p>pediatrics. Pathophysiology of abdominal pain in children. The main causes of abdominal pain in children. Differential diagnosis of diseases accompanied by abdominal pain syndrome in children. Laboratory and instrumental examinations in children with abdominal pain syndrome. Tactics of the doctor. Indications for referral to a pediatric surgeon. Treatment of abdominal pain syndrome of various origins in children. Emergency care in life-threatening conditions accompanied by abdominal pain in children.</p>	
50.	<p>Practical lesson 50. Topic 15. Differential diagnosis of diseases of the hepatobiliary system and pancreas in children. Leading clinical symptoms, syndromes and variants of the course in functional and organic diseases of the hepatobiliary system and pancreas in children (dysfunction of the gallbladder and sphincter of Oddi, acute and chronic cholecystitis, gallstone disease acute, chronic autoimmune hepatitis).</p>	2
51.	<p>Practical lesson 51. Topic 15. Data of laboratory and instrumental studies in diseases of the hepatobiliary system in children. Treatment of children with functional and organic diseases of the hepatobiliary system. Emergency care in acute liver failure and complications of portal hypertension syndrome.</p>	2
52.	<p>Practical lesson 52. Topic 15. Differential diagnosis of pancreatic diseases in children. Leading clinical symptoms, syndromes, and clinical variants in pancreatic diseases in children (chronic pancreatitis). Differential diagnosis of diseases accompanied by exocrine pancreatic insufficiency in children. Treatment of children with pancreatic diseases, correction of exocrine pancreatic insufficiency in children. Prevention and dispensary observation.</p>	2
53.	<p>Practical lesson 53. Topic 16. Differential diagnosis of infectious-inflammatory diseases of the urinary system in children. Leading clinical symptoms and syndromes in urinary system infection in children. Clinical variants of the course of infection of the urinary system.</p>	2
54.	<p>Practical lesson 54. Topic 16. Differential diagnosis of the most common infections of the urinary system in children. Management tactics for urinary tract infections in children. Emergency care for acute urinary retention in children. Dispensary observation</p>	2
55.	<p>Practical lesson 55. Topic 16. Differential diagnosis of hereditary diseases of the urinary system in children. Leading clinical symptoms and syndromes in dysmetabolic nephropathies (oxalate, uric), hereditary tubulopathies (phosphate-diabetes, Debre-de-Thony-Fanconi syndrome, renal diabetes insipidus, renal tubular acidosis, cystinosis) in children. Clinical variants of the course in children.</p>	2
56.	<p>Practical lesson 56. Topic 16. Management tactics for infection and hereditary diseases of the urinary system in children. Emergency care for acute urinary retention in children. Management tactics for infectious-inflammatory and hereditary diseases in children. Principles of treatment of chronic renal failure in children</p>	2
57.	<p>Practical lesson 57. Topic 17. Differential diagnosis of glomerulonephritis in children. Conditions associated with hematuria in children. Differential diagnosis of acute poststreptococcal glomerulonephritis in children</p>	2
58.	<p>Practical lesson 58. Topic 17.</p>	2

	Conditions associated with proteinuria in children. Differential diagnosis of nephrotic syndrome in children.	
59.	Practical lesson 59. Topic 17. Treatment of glomerulonephritis and chronic kidney disease in children. Conservative treatment of acute kidney injury (AKI) in children and indications for dialysis.	2
Total		120

5.4. Laboratory topics classes

Laboratory classes are not provided.

6. Self-make work of the application of higher education

No	Title of the topic / types of tasks	Hours
1.	Topic 1. Preparation for practical classes 1-4	4
2.	Topic 2. Preparation for practical classes 5-8	4
3.	Topic 3. Preparation for practical classes 9-12	4
4.	Topic 4. Preparation for practical classes 13-15	4
5.	Topic 5. Preparation for practical classes 16-18	4
6.	Topic 6. Preparation for practical classes 19-21	4
7.	Topic 7. Preparation for practical classes 22 - 25	4
8.	Topic 8. Preparation for practical classes 26-29	4
9.	Topic 9. Preparation for practical classes 30-33	3
10.	Topic 10. Preparation for practical classes 34-36	3
11.	Topic 11. Preparation for practical classes 37-39	3
12.	Topic 12. Preparation for practical classes 40-42	3
13.	Topic 13. Preparation for practical classes 43-45	3
14.	Topic 14. Preparation for practical classes 46-49	4
15.	Topic 15. Preparation for practical classes 50-52	3
16.	Topic 16. Preparation for practical classes 53-56	3
17.	Topic 17. Preparation for practical classes 57-59	3
Total		60

7. FORMS AND METHODS OF TEACHING

Practical classes: conversation, role-playing, solving clinical situational problems, practicing patient examination skills, practicing manipulation skills according to list 5, instruction and practicing skills on simulation dummies and a hybrid patient, training exercises on differential diagnosis of the most common diseases in children, tests in the format of Step-2, tasks in the format of OSCE-2.

Self-make work: independent work with the recommended basic and additional literature, with electronic information resources, independent work with the Step-2 test task bank, independent mastering of communication algorithms with a sick child and his parents.

8. FORMS OF CONTROL AND CRITERIA FOR ASSESSING LEARNING OUTCOMES

Current control: oral survey, testing, assessment of performance of practical skills, assessment of communication skills during role-play, solving situational clinical tasks, assessment of activity in class.

Final control: oral structured exam, OSKE-2.

Evaluation of the current educational activity in a practical lesson:

1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
 2. Evaluation of practical skills and manipulations on the subject of the lesson:
 - methods: assessment of the correctness of the performance of practical skills
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
 3. Evaluation of work with a patient on the subject of the lesson:
 - methods: assessment of: a) communication skills of communicating with the patient and his parents, b) the correctness of prescribing and evaluating laboratory and instrumental studies, c) compliance with the differential diagnosis algorithm, d) substantiation of the clinical diagnosis, e) drawing up a treatment plan;
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
- The grade for one practical lesson is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Criteria for assessing the learning outcomes of higher education applicants during current control

Rating	Evaluation criteria
Excellent "5"	The applicant is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a sick child and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
Good "4"	The applicant has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a sick child and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
Satisfactory "3"	The applicant does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a sick child and the interpretation of clinical, laboratory and instrumental research data with significant errors.
Unsatisfactory "2"	The applicant does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of a sick child and the interpretation of clinical, laboratory and instrumental research data.

Only those applicants who have fulfilled the requirements of the curriculum for the discipline, have no academic debts, and whose average grade for current academic performance in the discipline is at least 3.00 are admitted to the final assessment in the form of an exam.

The exam, as a form of final (semester) assessment, is conducted as a separate assessment event. Exams are taken by applicants: during examination sessions at the end of the semester (autumn and spring) according to the schedule — under the linear (stream-based) system of education; according to the academic process schedule after completing the study of the educational component as per the curriculum — under the cyclic class schedule.

The methodology for conducting final (semester) assessment in the form of an exam for an educational component is unified and involves the use of standardized forms. The number of questions included in the standardized exam corresponds to the volume of ECTS credits allocated for studying the discipline. The format of the examination ticket is standardized and

consists of structural elements (components). An examination ticket may consist only of theoretical questions or include an additional clinical case (situational task). Each ticket contains 3 to 5 questions. Questions are short, simple, clear, precise, and transparent, formulated in such a way that a complete answer takes no more than 5 minutes. The timing of the oral structured exam is standardized — no more than 30 minutes. For each question, a checklist (answer key) is prepared, which includes key points mandatory for a complete response. Each answer key specifies the literary source with page numbers. During the oral structured exam, the student sees the questions, while the examiner has the checklist with model answers and determines which components were mentioned or omitted by the student.

The overall grade for the oral structured exam is calculated as the arithmetic mean of all grades received for answers to the questions (including clinical cases).

Criteria for evaluating the learning outcomes of students during final control:

Rating	Evaluation criteria
Perfectly «5»	The applicant is fluent in the material, quickly and fully answers questions from each block, knows the definition, etiology, pathogenesis, clinical manifestations of the disease, interprets data from laboratory and instrumental studies, justifies the diagnosis, management tactics, prescribes treatment (drugs and doses), demonstrates clinical thinking.
Good «4»	The applicant has a good command of the material, answers questions from each block, knows the definition, etiology, pathogenesis, clinical manifestations of the disease, interprets data from laboratory and instrumental studies, justifies the diagnosis, management tactics, prescribes treatment (drugs and doses) with some errors that are corrected after a leading question, and demonstrates clinical thinking.
Satisfactorily «3»	The applicant does not have sufficient knowledge of the material, does not fully answer questions from each block, partially knows the definition, etiology, pathogenesis, clinical manifestations of the disease, interprets data from laboratory and instrumental studies, justifies the diagnosis, management tactics, prescribes treatment (drugs and doses), makes mistakes, demonstrates elements of clinical thinking.
Unsatisfactory «2»	The applicant does not possess the material, does not fully answer the questions from each block, does not know the definition, etiology, pathogenesis, clinical manifestations of the disease, does not interpret the data of laboratory and instrumental studies, does not substantiate the diagnosis, management tactics, does not prescribe treatment (drugs and doses), makes significant errors, does not demonstrate clinical thinking.

OSKE-2

According to the Regulations on the organization and procedure for conducting an objective structured practical (clinical) examination (hereinafter referred to as OSP(K)I) at the Odessa National Medical University, approved by the Academic Council on January 30, 2025.

Only those applicants who have fulfilled the requirements of the curriculum in the discipline, have no academic debt and their average score for current educational activities in the discipline is at least 3.00 and have passed a structured exam in the discipline are allowed to take the final control in the form of OKSE-2.

Criteria for assessing the results of higher education applicants in the exam

According to the Regulations on the organization and procedure for conducting an objective structured practical (clinical) exam (hereinafter referred to as OSP(K)I) at the Odessa National Medical University, approved by the Academic Council on January 30, 2025.

9. Distribution of points received by applicants of higher education

Grades in the academic discipline for students who have successfully completed the program are converted into the traditional four-point scale based on absolute criteria provided in the table below:

National assessment for discipline	The sum of points for the discipline
Excellent ("5")	185 - 200
Good ("4")	151 - 184
Satisfactory ("3")	120-150
Unsatisfactory ("2")	Below 120

The multi-point scale (200-point scale) reflects the actual academic performance of each student in mastering the discipline. The conversion of the traditional grade into the 200-point scale is performed by the University's Information Technology Department using the "Kontingent" software according to the following formula: Average grade for current performance in the discipline $\times 40$.

Under the ECTS rating scale, student achievements in the discipline — for those enrolled in the same year and specialty — are evaluated by ranking based on the points obtained, as follows:

Evaluation on the ECTS scale	Statistical indicator
A	Top 10% applicants
B	The next 25% of applicants
C	The next 30% of applicants
D	The next 25% of applicants
E	The next 10% of applicants

The ECTS scale determines an applicant's ranking within the reference group of peers (same faculty and specialty), i.e. whether they belong to the top or lower performers. When converting from the multi-point scale, the boundaries for ECTS grades "A", "B", "C", "D", and "E" generally do not coincide with the boundaries of the traditional grades "5", "4", and "3". An "A" on the ECTS scale does not equate to "excellent", and a "B" does not equate to "good", etc. Applicants who receive "FX" or "F" ("2") are not included in the ranked list. After retaking the exam, such applicants automatically receive an "E". "FX" is assigned to applicants who have earned the minimum points for current academic performance but failed the final assessment. "F" is assigned to applicants who attended all classroom sessions in the discipline but did not achieve the minimum average grade (3.00) for current performance and were not admitted to the final assessment.

10. Methodological support

- Working program of the academic discipline
- Syllabus
- Methodical developments for practical classes
- Methodical recommendations for independent work of higher education applicants
- Multimedia presentations
- Situational clinical tasks
- Scenarios of role-playing games (if necessary)
- Electronic bank of test tasks by subdivisions of the discipline

Educational and methodical literature:

- Nelson Textbook of Pediatrics, 2-Volume Set, 22nd Edition, 2024. Robert M. Kliegman, Joseph W. St. Geme III, Nathan J. Blum, et al.
- Nelson Textbook of Pediatrics, 2-Volume Set, 21st, 2020.

- Robert M. Kliegman, Joseph W. St. Geme III, Nathan J. Blum, et al.
- Клінічна педіатрія : навчальний посібник: у 2 т. Т. 2 / М. Л. Аряєв, Л. І. Сеньківська, Н. Г. Лотиш та ін. – Одеса : Олді+, 2025. – 222 с
 - Клінічна педіатрія : навчальний посібник: у 2 т. Т. 1 / М. Л. Аряєв, Л. І. Сеньківська, Н. Г. Лотиш та ін. – Одеса : Олді+, 2025. – 620 с
 - Неонатологія: підручник у 3 т. / Т. К. Знаменська, Ю.Г. Антипкін, М.Л. Аряєв та ін.; за ред. Т.К. Знаменської. Львів: Видавець Марченко Т.В., 2020, Т. 1. 407 с; Т. 2. 455 с.; Т. 3. 379 с.
 - Педіатрія. Диференційна діагностика. Невідкладні стани. / за ред. Аряєва М.Л., Котової Н.В. Одеса: ОНМедУ, 2017. 280 с.
 - Нефрологія дитячого віку : навч. посіб. / Т. В. Стоєва, М.В. Федін, та інш.; за ред. Т. В. Стоєвої. – Одеса: Політехперіодика, 2018. – 181 с.
 - Пульмонологія дитячого віку: навч. посібник / Т. В.Стоєва, Н. Л.Весілик, та інш.; за ред. Т. В. Стоєвої.— Одеса: Політехперіодика, 2020.— 222 с.: 59 іл., 88 табл.— (Серія «Путівник з педіатрії»).

11. QUESTIONS FOR PREPARATION FOR THE FINAL TEST

BLOCK-1

1. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of severe pneumonia or very severe illness in a child aged 2 months to 5 years.
2. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of suspected pneumonia in a child aged 2 months to 5 years.
3. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of cough or acute respiratory illness in a child aged 2 months to 5 years.
4. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of diarrhea and severe dehydration in a child aged 2 months to 5 years.
5. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of diarrhea with moderate dehydration in a child aged 2 months to 5 years.
6. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of diarrhea without dehydration in a child aged 2 months to 5 years.
7. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of prolonged diarrhea without signs of dehydration in a child aged 2 months to 5 years.
8. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of prolonged diarrhea with signs of dehydration in a child aged 2 months to 5 years.
9. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of diarrhea with blood in the stools in a child aged 2 months to 5 years.
10. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of ear problems, mastoiditis, in a child aged 2 months to 5 years.

11. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of ear problems, acute ear infection, in a child aged 2 months to 5 years.
12. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of ear problems, chronic ear infection, in a child aged 2 months to 5 years.
13. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of throat problems, pharyngeal abscess, in a child aged 2 months to 5 years.
14. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of throat problems, acute tonsillitis, likely bacterial, in a child aged 2 months to 5 years.
15. Strategy of Integrated management of childhood illness and its purpose. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up in cases of throat problems, acute pharyngitis, in a child aged 2 months to 5 years.
16. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with fever or very severe illness, aged 2 months to 5 years.
17. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with fever lasting more than 5 days without obvious causes, aged 2 months to 5 years.
18. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with fever lasting less than 5 days without obvious causes, aged 2 months to 5 years.
19. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with complicated severe malnutrition, aged 2 months to 5 years.
20. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with uncomplicated severe malnutrition, aged 2 months to 5 years.
21. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with moderate malnutrition, aged 2 months to 5 years.
22. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with moderate anemia, aged 2 months to 5 years.
23. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with severe anemia, aged 2 months to 5 years.
24. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with unspecified hiv status, aged 2 months to 5 years.
25. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with very severe illness, aged under 2 months.
26. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with bacterial infection of the umbilical wound, aged under 2 months.

27. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with severe jaundice, aged under 2 months.
28. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with jaundice, aged under 2 months.
29. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with very severe dehydration, aged under 2 months.
30. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with feeding problems (breastfeeding), aged under 2 months.
31. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with feeding problems (maternal body position), aged under 2 months.
32. Feeding infants in the first year of life. Assessment of physical and psychomotor development of the child.
33. Pneumonia in children. Differential diagnosis. Management tactics for patients with different clinical variants of pneumonia and its complications. Emergency care for acute respiratory failure depending on the cause and severity.
34. Obstructive bronchitis in children. Differential diagnosis of bronchial obstruction syndrome.
35. Bronchiolitis in children. Differential diagnosis of bronchial obstruction syndrome.
36. Rational feeding and nutrition for children aged one to three years. Assessment of physical and psychomotor development of children up to three years.
37. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with confirmed HIV infection, aged 2 months to 5 years.
38. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with confirmed HIV infection, aged under 2 months.
39. Definition and purpose of Integrated management of childhood illness. General signs of danger in a child's condition. Assessment, classification, treatment, consultation, and follow-up for a child with unspecified HIV status, aged under 2 months, born to an HIV-infected mother.
40. Definition and purpose of Integrated management of childhood illness and its purpose. General signs of danger of the child's condition. Assessment, classification, treatment, consultation and follow-up of a child with feeding problems (low body weight), age up to 2 months.

BLOCK 2

1. Pallor in children: problem-oriented approach in pediatrics. Differential diagnosis of diseases and conditions accompanied by pallor in children. Treatment of diseases and conditions accompanied by pallor in children. Emergency care for acute hemorrhage.
2. Lymphadenopathy in children. Differential diagnosis. Physician's tactics. Indications for consultation with a pediatric hematologist.
3. Hepatomegaly in children. Differential diagnosis. Physician's tactics.
4. Splenomegaly in children. Differential diagnosis. Physician's tactics.
5. Procedure for mandatory preventive medical examinations of adolescents. Rational nutrition: prevention of obesity and diabetes. Assessment of sexual maturity. Medical and psychological counseling.
6. Arterial hypertension (AH) in children. Differential diagnosis of primary and secondary hypertension. Management tactics for patients with ah in outpatient settings. Providing emergency care for hypertensive crisis.

7. Arterial hypotension in children. Differential diagnosis. Management tactics for patients with arterial hypotension in outpatient settings. Providing emergency care for syncopal states.
8. Anaphylactic shock in children. Emergency conditions in children, including those caused by external factors.
9. Bronchial asthma. Differential diagnosis of bronchial obstruction syndrome in children.
10. Bronchial asthma. Differential diagnosis of bronchial obstruction syndrome in children.
11. Cystic fibrosis. Differential diagnosis of hereditary and congenital diseases of the bronchopulmonary system.
12. Chronic bronchitis in children. Differential diagnosis of chronic diseases of the bronchopulmonary system in children.
13. Bronchiectasis. Causes. Clinical features. Differential diagnosis of chronic diseases of the bronchopulmonary system in children.
14. Differential diagnosis and management tactics for inflammatory and non-inflammatory diseases of the cardiovascular system in children. Acute myocarditis.
15. Differential diagnosis and management tactics for inflammatory and non-inflammatory diseases of the cardiovascular system in children. Infective endocarditis.
16. Differential diagnosis and management tactics for acquired heart defects in children. Obstructive hypertrophic cardiomyopathy (OHC).
17. Differential diagnosis and management tactics for acquired heart defects in children. Cardiomyopathies (CMP). Dilated cardiomyopathy (DCMP).
18. Differential diagnosis and management tactics for acquired heart defects in children. Cardiomyopathies (CMP). Restrictive cardiomyopathy (RCMP).
19. Differential diagnosis and management tactics for acquired heart defects. Mitral valve insufficiency (MVI).
20. Differential diagnosis and management tactics for acquired heart defects. Mitral valve stenosis (MVS).
21. Differential diagnosis and management tactics for acquired heart defects. Aortic stenosis (AS).
22. Differential diagnosis and management tactics for congenital heart defects. Atrial septal defect (ASD).
23. Differential diagnosis and management tactics for congenital heart defects. Ventricular septal defect (VSD).
24. Differential diagnosis and management tactics for congenital heart defects (chd). Patent ductus arteriosus (PDA).
25. Differential diagnosis and management tactics for congenital heart defects (chd). Tetralogy of fallot (TOF).
26. Differential diagnosis and management tactics for congenital heart defects. Coarctation of the aorta (coa).
27. Differential diagnosis and management tactics for arrhythmias and conduction disorders in children. Atrial fibrillation (AF): atrial flutter (AFL) and atrial fibrillation (AF).
28. Differential diagnosis and management tactics for arrhythmias and conduction disorders in children. Ventricular fibrillation (VF) and ventricular flutter (VFL).
29. Differential diagnosis and management tactics for arrhythmias and conduction disorders in children. Extrasystole (ES).
30. Differential diagnosis and management tactics for arrhythmias and conduction disorders in children. Atrioventricular block (AVB). Morgagni-Adams-Stokes syndrome in children.
31. Acute rheumatic fever.
32. Differential diagnosis and management tactics for systemic connective tissue diseases and systemic vasculitides in children. Dermatomyositis.
33. Differential diagnosis and management tactics for systemic connective tissue diseases and systemic vasculitides in children. Systemic lupus erythematosus.

34. Differential diagnosis and management tactics for systemic connective tissue diseases and systemic vasculitides in children. Scleroderma.
35. Differential diagnosis and management tactics for systemic connective tissue diseases and systemic vasculitides in children. Polyarteritis nodosa.
36. Differential diagnosis and management tactics for arrhythmias and conduction disorders in children. Sinoatrial block (SAB) in children.
37. Differential diagnosis and prevention of the most common deficiency states (iron deficiency anemia) in young children.
38. Acute urticaria and angioedema in children. Emergency conditions in children, including those caused by external factors.
39. Differential diagnosis and prevention of the most common deficiency states (protein-energy malnutrition) in young children.
40. Differential diagnosis and prevention of the most common deficiency states, rickets in young children.

BLOCK 3

1. Functional stomach diseases in older children. Functional dyspepsia (FD). Leading clinical symptoms and syndromes, diagnosis, and management tactics.
2. Functional stomach diseases in children. Abdominal pain syndrome in children. Differential diagnosis. Physician's tactics.
3. Irritable bowel syndrome (IBS). Functional intestinal diseases in older children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
4. Functional constipation. Functional intestinal diseases in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
5. Crohn's disease. Organic intestinal diseases in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
6. Cystitis. Differential diagnosis and management tactics for urinary tract infections in children.
7. Acute glomerulonephritis with nephritic syndrome. Differential diagnosis of acute glomerulonephritis in children.
8. Acute glomerulonephritis with nephrotic syndrome in children. Differential diagnosis of acute glomerulonephritis in children.
9. Acute glomerulonephritis with isolated urinary syndrome. Differential diagnosis of acute glomerulonephritis in children.
10. Cholelithiasis. Organic diseases of the hepatobiliary system in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
11. Chronic cholecystitis. Organic diseases of the hepatobiliary system in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
12. Chronic kidney disease.
13. Chronic glomerulonephritis, hematuric form. Differential diagnosis of chronic glomerulonephritis in children.
14. Autoimmune hepatitis. Organic diseases of the hepatobiliary system in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
15. Functional gastrointestinal diseases in young children. Regurgitation, rumination, infant colic. Leading clinical symptoms and syndromes, diagnosis, and management tactics.
16. Chronic glomerulonephritis, mixed form. Differential diagnosis of chronic glomerulonephritis in children.
17. Interstitial nephritis. Differential diagnosis and management tactics for urinary tract infections in children.
18. Pyelonephritis. Differential diagnosis and management tactics for urinary tract infections in children.
19. Urate nephropathy. Differential diagnosis of hereditary urinary system diseases in children, dysmetabolic nephropathies.

20. Hypoxic-ischemic injuries of the central nervous system in the perinatal period. Hypoxic-ischemic encephalopathy, intraventricular hemorrhages. Differential diagnosis of perinatal CNS injuries in infants.
21. Fanconi syndrome. Differential diagnosis of hereditary urinary system diseases in children.
22. Nephrogenic diabetes insipidus. Differential diagnosis of hereditary urinary system diseases in children.
23. Oxalate nephropathy. Differential diagnosis of hereditary urinary system diseases in children, dysmetabolic nephropathies.
24. Neonatal encephalopathy. Emergency care for seizures. Differential diagnosis of perinatal CNS injuries in infants.
25. Cystinosis. Differential diagnosis of hereditary urinary system diseases in children, dysmetabolic nephropathies.
26. Peptic ulcer disease. Organic stomach diseases in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
27. Organic stomach diseases. Chronic gastroduodenitis. Leading clinical symptoms and syndromes, differential diagnosis, and management tactics.
28. Dysfunction of the gallbladder and oddi sphincter. Functional diseases of the hepatobiliary system in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
29. Acute and chronic pancreatitis. Organic diseases of the pancreas in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.
30. Functional stomach diseases in older children. Gastroesophageal reflux disease. Leading clinical symptoms and syndromes, diagnosis, and management tactics.
31. Acute glomerulonephritis with nephrotic syndrome, hematuria, and/or hypertension. Differential diagnosis of acute glomerulonephritis in children.
32. Chronic glomerulonephritis, nephrotic form. Differential diagnosis of chronic glomerulonephritis in children.
33. Phosphate diabetes. Differential diagnosis of hereditary urinary system diseases in children.
34. Subacute glomerulonephritis. Differential diagnosis of chronic glomerulonephritis in children.
35. Foreign body aspiration in airways. Emergency conditions in children, including those caused by external factors.
36. Emergency conditions in children, including those caused by external factors. Poisoning.
37. Emergency conditions in children, including those caused by external factors. Burns. Providing pre-hospital care.
38. Emergency conditions in children, including those caused by external factors: animal and insect bites. Providing pre-hospital care.
39. Emergency conditions in children, including those caused by external factors: animal and insect bites (dogs, snakes, spiders). Providing pre-hospital care.
40. Ulcerative colitis. Organic intestinal diseases in children. Leading clinical symptoms and syndromes, diagnosis, differential diagnosis, and management tactics.

List of tasks for OSCE-2

1. Assessment of the degree of arterial hypertension, congenital heart defect, coarctation of the aorta.
2. Assessment of the degree of arterial hypertension, acute glomerulonephritis.
3. Assessment of the degree of arterial hypertension, essential hypertension.
4. Assessment of physical development. Protein-energy malnutrition due to congenital cyanotic heart defect with veno-arterial shunt (Tetralogy of Fallot).
5. Assessment of physical development. Protein-energy malnutrition due to secondary disaccharidase deficiency.
6. Assessment of physical development. Protein-energy malnutrition due to cystic fibrosis.

7. Assessment of physical development. Protein-energy malnutrition. Celiac disease.
8. Assessment of physical development. Secondary (adrenal) obesity. Cushing's disease.
9. Assessment of physical development. Obesity, alimentary-constitutional type.
10. Assessment of physical development. Pituitary dwarfism.
11. Assessment of physical development. Obesity, hypothalamic form.
12. Assessment of physical development. Growth retardation due to Turner syndrome.
13. Assessment of sexual development in girls according to Tanner.
14. Assessment of sexual development in boys according to Tanner.
15. Communication skills according to the Integrated management of childhood illness (IMCI) algorithm, hybrid patient. Providing medical care to newborns with feeding problems (maternal positioning during feeding).
16. Communication skills according to the IMCI algorithm, hybrid patient. Providing medical care to newborns with feeding problems (child's positioning during feeding).
17. Communication skills according to the IMCI algorithm, hybrid patient. Interaction with the mother of a newborn with jaundice.
18. Communication skills according to the IMCI algorithm, hybrid patient. Interaction with the mother of a newborn with omphalitis.
19. Communication skills according to the IMCI algorithm, hybrid patient. Providing medical care to children with acute ear infection.
20. Communication skills according to the IMCI algorithm, hybrid patient. Providing medical care to children with acute tonsillopharyngitis, likely bacterial.
21. Communication skills according to the IMCI algorithm, hybrid patient. Interaction with the mother of a child with cough or acute respiratory disease.
22. Communication skills according to the IMCI algorithm, hybrid patient. Interaction with the mother of a child with pneumonia.
23. Communication skills according to the IMCI algorithm, hybrid patient. Interaction with the mother of a child with probable pneumonia.
24. Communication skills according to the IMCI algorithm, hybrid patient. History taking, examination, and management of an infant with anemia.
25. Communication with the mother of a hybrid patient with prolonged cough due to foreign body aspiration.
26. Communication with the mother of a hybrid patient with prolonged cough (cystic fibrosis).
27. Communication with the mother of a hybrid patient with prolonged cough (lymphogranulomatosis).
28. Communication with the mother of a hybrid patient aged 0–5 years with unlikely bronchial asthma.
29. Communication with the mother of a hybrid patient aged 0–5 years with moderate risk of bronchial asthma.
30. Communication with the mother of a hybrid patient aged 0–5 years with high risk of bronchial asthma.
31. Hybrid patient. History, examination, and medical management of an infant with rickets due to vitamin D deficiency ("nutritional" rickets).
32. Hybrid patient. History, examination, and medical management of an infant with vitamin D-independent phosphopenic rickets.
33. Hybrid patient. History, examination, and medical management of an infant with secondary rickets due to malabsorption syndrome.
34. Communication with the mother of a hybrid patient with hemorrhagic manifestations due to thrombocytopenia.
35. Communication with the mother of a hybrid patient with hemorrhagic manifestations due to hemorrhagic vasculitis.

36. Communication with the mother of a hybrid patient with hemorrhagic manifestations due to hemophilia.
37. Communication with the mother of a hybrid patient with hemorrhagic manifestations due to leukemia.
38. Emergency care for a child with anaphylactic shock after insect bite.
39. Emergency care for a child with anaphylactic shock after antibiotic administration.
40. Emergency care for a child during an asthma attack.
41. Diagnosis and emergency care for a child with severe pneumonia.
42. Diagnosis and emergency care for a child with severe pneumonia with stridor.
43. Initial and resuscitation care for a newborn born after rupture of clear amniotic fluid.
44. Emergency care for a child during a seizure.
45. Emergency care for a child during febrile seizures.
46. Emergency care for a child in hypoglycemic coma.
47. Emergency care for a child with diabetic ketoacidosis.
48. Emergency care for a child with cardiac arrest in outpatient settings without a defibrillator.
49. Emergency care for an infant with foreign body aspiration.
50. Emergency care for a newborn with late-onset sepsis (omphalitis, pneumonia).
51. Emergency care for a child with adrenogenital syndrome with salt loss, acute adrenal insufficiency, and hypovolemic shock.

12. Recommended literature

Main:

1. Nelson Textbook of Pediatrics, 2-Volume Set, 22nd Edition, 2024. Robert M. Kliegman, Joseph W. St. Geme III, Nathan J. Blum, et al.
2. Nelson Textbook of Pediatrics, 2-Volume Set, 21st, 2020. Robert M. Kliegman, Joseph W. St. Geme III, Nathan J. Blum, et al.
3. Клінічна педіатрія : навчальний посібник: у 2 т. Т. 2 / М. Л. Аряєв, Л. І. Сеньківська, Н. Г. Лотиш та ін. – Одеса : Олді+, 2025. – 222 с
4. Клінічна педіатрія : навчальний посібник: у 2 т. Т. 1 / М. Л. Аряєв, Л. І. Сеньківська, Н. Г. Лотиш та ін. – Одеса : Олді+, 2025. – 620 с
5. Неонатологія: підручник у 3 т. / Т. К. Знаменська, Ю.Г. Антипкін, М.Л. Аряєв та ін.; за ред. Т.К. Знаменської. Львів: Видавець Марченко Т.В., 2020, Т. 1. 407 с; Т. 2. 455 с.; Т 3. 379 с.
6. Педіатрія. Диференційна діагностика. Невідкладні стани. / за ред. Аряєва М.Л., Котової Н.В. Одеса: ОНМедУ, 2017. 280 с.
7. Нефрологія дитячого віку : навч. посіб. / Т. В. Стоєва, М. В. Федін, та інш.; за ред. Т. В. Стоєвої. – Одеса : Політехперіодика, 2018. – 181 с.
8. Пульмонологія дитячого віку: навч. посібник / Т. В. Стоєва., Н. Л.Весілик, та інш.; за ред. Т. В. Стоєвої.— Одеса: Політехперіодика, 2020.— 222 с.: 59 іл., 88 табл.— (Серія «Путівник з педіатрії»).

Additional:

1. Aryayev M., Senkivska L., Lowe J.B. Psycho-Emotional and Behavioral Problems in Children With Growth Hormone Deficiency. *Front. Pediatr.* 2021. 9:707648. doi: 10.3389/fped.2021.707648
2. Biryukov V., Orlova A., Sabzalieva E. Risk assessment of drug interactions in polypharmacy in children/The XVII International Scientific and Practical Conference «Multidisciplinary academic notes. Theory, methodology and practice», May 03 – 06, 2022, Tokyo, Japan. P.414-420. DOI – 10.46299/ISG.2022.1.17 Approach to a child with bleeding in the emergency room (2013 URL: <https://pubmed.ncbi.nlm.nih.gov/23269640/>)

3. Senkivska L, Aryayev M. Compliance and barriers to growth hormone therapy in children. *Pediatrics Polska - Polish Journal of Paediatrics*. 2021. № 96(3). P. 181-184. <https://doi.org/10.5114/polp.2021.109303>
4. Bleeding and Hemophilia in the Pediatric ED (2014) URL: <https://www.aliem.com/bleeding-hemophilia-pediatric-ed/>
5. Pediatric Dilated Cardiomyopathy (2019). URL: <https://emedicine.medscape.com/article/895187-overview>
6. Congenital heart defects in children (2021) URL: <https://www.mayoclinic.org/diseases-conditions/congenital-heart-defects-children/diagnosis-treatment/drc-20350080>
7. Stop the Bleed Training: Rescuer Skills, Knowledge, and Attitudes of Hemorrhage Control Techniques (2020). URL: <https://pubmed.ncbi.nlm.nih.gov/31525629/>
8. How to stop bleeding URL: <https://theprepared.com/survival-skills/guides/stop-bleeding/>
9. Chapter 126: Congenital and Acquired Pediatric Heart Disease (2016) URL: <https://accessemergencymedicine.mhmedical.com/content.aspx?bookid=1658§ionid=109432652>
10. Acquired Heart Conditions in Children (2022). URL: <https://www.ohsu.edu/doernbecher/acquired-heart-conditions-children>
11. The Facts On Childhood Drowning (2016). URL: <https://www.childrensafetynetwork.org/infographics/facts-childhood-drowning>

13. Electronic information resources

1. <http://moz.gov.ua> – Міністерство охорони здоров'я України
2. www.ama-assn.org – Американська медична асоціація / American Medical Association
3. www.oapn.od.ua- ГО "Одеська Асоціація лікарів-педіатрів та неонатологів"
4. www.who.int – Всесвітня організація охорони здоров'я
5. www.dec.gov.ua/mtd/home/ - Державний експертний центр МОЗ України
6. <http://bma.org.uk> – Британська медична асоціація
7. www.gmc-uk.org- General Medical Council (GMC)
8. www.bundesaerztekammer.de – Німецька медична асоціація
9. https://www.who.int/workforcealliance/members_partners/member_list/ipa/en/ - Міжнародна асоціація педіатрів / International Pediatric Association (IPA).
10. https://ginasthma.org/wp-content/uploads/2024/05/GINA-2024-Strategy-Report-24_05_22_WMS.pdf GINA Global Initiative For Asthma. 2024
11. <https://kdigo.org/wp-content/uploads/2017/02/KDIGO-2021-Glomerular-Diseases-Guideline-English-LN-2024-Update.pdf> KDIGO 2021 Clinical Practice Guideline for the Management of Glomerular Diseases
12. <https://aamsmedacademy.com/> American Academy of Medical Sciences (AAMS)
13. <https://nam.edu/> The National Academy of Medicine (NAM)
14. <https://cutt.ly/utqqtt7I> Nelson's Textbook of Pediatrics - Elsevier eBook on VitalSource, 21st Edition