MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
Petro Mohyla Black Sea National University
Medical Institute
Department of Therapeutic and Surgical Disciplines

"APPROVE"
The first vice-rector
Ishchenko NM
_____
"__" _____ 2021

COURSE DISCRIPTION

" Propaedeutics of pediatrics "

Specialty 222 "Medicine"

Developer	Chernyshov O. V. _____
Head of the Department of Developer	Zak M. Yu. _____
Guarantor of the educational program	Klymenko M. O. _____
Director of the institute	Grishchenko G.V. _____
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Mykolaiv– 2021

1.

Description of the discipline

Characteristic	Characteristics of the discipline	
Name of discipline	Propaedeutics of pediatrics	
Branch of knowledge	22 "Health care	
Specialty	222 "Medicine"	
Specialization (if any)		
Educational program	Medicine	
Level of higher education	Master	
Discipline status	Normative	
Curriculum	3	
Academic year	2021 - 2022	
Semester numbers:	Full-time	Correspondence form
	5th - 6th	
Total number of ECTS credits / hours	4, 5 loan s (2 / 2.5) / 1 3 6 hours	
Course structure: - lectures - practical classes - hours of independent work of students	Full-time	Correspondence form
	18 (6 /12) 55 (20 / 35) 63 (24 /39)	
Percentage of classroom work	54 %	
Language of instruction		
Form of intermediate control (if any)	Attestation for the 5th semester	
Form of final control	Dif . credit - 6th semester	

2 . Purpose, tasks and planned learning outcomes

The purpose of teaching the discipline "Propaedeutics of Pediatrics" is the formation of skills to apply knowledge of propaedeutics of pediatrics in the process of further study and in professional activities.

The main tasks of studying the discipline "Propaedeutics of Pediatrics" are to gain knowledge about:

- Pediatrics as a science of healthy and sick children
- Periods of childhood
- Features of physical and psychomotor development of children of different ages
- Anatomical and physiological features and methods of examination of organs and systems in children of different ages
- Semiotics of diseases of various organs and systems in children
- Rational feeding of infants and children older than 1 year

Expected learning outcomes. As a result of studying the discipline, students have:

1. With byraty data on complaints of the patient's case history, the history of life, conduct and evaluate rezultatyfizykalnoho examination.
2. Identify the leading clinical symptom or syndrome. Establish the most likely or syndromic diagnosis of the disease.
3. Perform medical manipulations .
4. To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general educational and cultural level.
5. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.
6. Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in individual activities.
7. Students master the basic methods (clinical, instrumental) examination of children, be able to examine the internal organs and evaluate the results.

Interdisciplinary connections. Propaedeutics of pediatrics is a kind of introduction to clinical pediatrics, a link between fundamental theoretical disciplines and clinical disciplines, an important discipline in the education of students and in the system of training doctors.

Competences. The developed program corresponds to the ***educational-professional program (EPP)*** and is focused on the formation of ***competencies:***

general (GC) - GC 1- GC 10 EPP :

GC 1. Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.
GC 2. Ability to apply knowledge in practical situations.
GC 3. Knowledge and understanding of the subject area and understanding of professional activity.
GC 4. Ability to adapt and act in a new situation.
GC 5. Ability to make an informed decision; work in a team; interpersonal skills.
GC 6. Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language.
GC 7. Skills in the use of information and communication technologies.
GC 8. Definiteness and persistence in terms of tasks and responsibilities.
GC 9. The ability to act socially responsibly and consciously.
GC 10. The desire to preserve the environment.

professional (PC) - PC1 -FC6 EPP:

PC1. Patient interviewing skills.
PC2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
PC3. Ability to establish a preliminary and clinical diagnosis of the disease.
PC4. Ability to determine the required mode of work and rest in the treatment of diseases .
PC5. Ability to determine the nature of nutrition in the treatment of diseases.
PC6. Ability to determine the principles and nature of disease treatment.

According to the educational-professional program, the expected ***program learning outcomes (PLO)*** include the skills of ***PLO 11, PLO 13-18, PLO 22, PLO, PLO 28, PLO 30, PLO 32, PLO 33, PLO 35, PLO 41 EPP*** :

- Collect data on patient complaints, medical history, life history (including professional history), in a health care facility, its unit or at the patient's home, using the results of the interview with the patient, according to the standard scheme of the patient. Under any circumstances (in the health care facility, its unit, at the patient's home , etc.), using knowledge about the person, his organs and systems, according to certain algorithms:

• collect information about the general condition of the patient (consciousness, constitution) and appearance (examination of the skin, subcutaneous fat layer, palpation of lymph nodes, thyroid and mammary glands);

assess the psychomotor and physical development of the child;

• examine the condition of the cardiovascular system (examination and palpation of the heart and superficial vessels, determination of percussion boundaries of the heart and blood vessels, auscultation of the heart and blood vessels);

• examine the condition of the respiratory organs (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs);

• examine the condition of the abdominal organs (examination of the abdomen, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pancreas, kidneys, pelvic organs, finger examination of the rectum);

examine the condition of the musculoskeletal system (examination and palpation);
examine the state of the nervous system;
examine the condition of the genitourinary system;

• assess the state of fetal development according to the calculation of fetal weight and auscultation of its heartbeat.

In the conditions of the health care institution, its subdivision and among the attached population:

• Be able to identify and record the leading clinical symptom or syndrome (according to list 1) by making an informed decision, using previous patient history, physical examination of the patient, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

• Be able to establish the most probable or syndromic diagnosis of the disease (according to list 2) by making an informed decision, by comparing with standards, using previous patient history and patient examination data , based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

In the conditions of a health care institution, its subdivision:

• Assign a laboratory and / or instrumental examination of the patient (according to list 4) by making an informed decision, based on the most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms.

• Carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, knowledge of the person, his organs and systems, following relevant ethical and legal norms.

• Establish a preliminary clinical diagnosis (according to list 2) by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination data , conclusions of differential diagnosis, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

- Determine the necessary mode of work and rest in the treatment of the disease (according to list 2), in a health care facility, at home with the patient and at the stages of medical evacuation, including in the field, on the basis of preliminary clinical diagnosis, using knowledge about a person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- To determine the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of preliminary clinical diagnosis, using knowledge about the person,

its bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- To determine the nature of treatment (conservative, operative) of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a previous clinical diagnosis, using knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- To determine the principles of treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including field conditions, based on a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- Establish a diagnosis (according to list 3) by making an informed decision and assessing the person's condition, under any circumstances (at home, on the street, health care facility, its units), including in emergencies, in the field conditions, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

- Perform medical manipulations (according to list 5) in a medical institution, at home or at work on the basis of previous clinical diagnosis and / or indicators of the patient's condition, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by adopting reasonable solutions and using standard techniques.

- To form, in the conditions of a health care institution, its division on production, using the generalized procedure of an estimation of a state of human health, knowledge of the person, its bodies and systems, adhering to the corresponding ethical and legal norms, by acceptance of the reasonable contingent, among the fixed contingent population: dispensary groups of patients;

- groups of healthy people subject to dispensary supervision (newborns, children, adolescents, pregnant women, representatives of professions that must undergo a mandatory dispensary examination).

- Organize secondary and tertiary prevention measures among the assigned contingent of the population, using a generalized procedure for assessing human health (screening, preventive medical examination, seeking medical care), knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms , by making an informed decision, in a health care facility, in particular:

to form groups of dispensary supervision;

- to organize medical and health-improving measures differentiated from the group of medical examination.

- To carry out in the conditions of health care institution, its division:

- • detection and early diagnosis of infectious diseases (according to list 2);

- * primary anti-epidemic measures in the center of an infectious disease.

- In the health care institution, or at the patient's home on the basis of the obtained data on the patient's health, using standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making an informed decision:

- • determine the tactics of examination and secondary prevention of patients subject to dispensary supervision;

- • determine the tactics of examination and primary prevention of healthy individuals subject to dispensary supervision;

- • calculate and prescribe the necessary food for children in the first year of life.

- To determine the presence and degree of restrictions on life, type, degree and duration of disability with the issuance of relevant documents in a health care institution on the basis of data on the disease and its course, features of professional activity.

- On the territory of service according to standard methods of descriptive, analytical epidemiological and medical-statistical researches:

- • conduct screening to identify major non-communicable diseases;

- • assess in the dynamics and in comparison with the average static data indicators of morbidity, including chronic non-communicable diseases, disability, mortality, integrated health indicators;

- identify risk factors for the occurrence and course of diseases;

to form risk groups of the population. In the conditions of the health care institution, its subdivision and among the attached population:

• Be able to identify and record the leading clinical symptom or syndrome (according to list 1) by making an informed decision, using previous patient history, physical examination of the patient, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

• Be able to establish the most probable or syndromic diagnosis of the disease (according to list 2) by making an informed decision, by comparing with standards, using previous patient history and patient examination data , based on the leading clinical symptom or syndrome, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

In the conditions of a health care institution, its subdivision:

• Assign a laboratory and / or instrumental examination of the patient (according to list 4) by making an informed decision, based on the most probable or syndromic diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms.

• Carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, knowledge of the person, his organs and systems, following relevant ethical and legal norms.

• Establish a preliminary clinical diagnosis (according to list 2) by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory and instrumental examination data , conclusions of differential diagnosis, knowledge of the person, his organs and systems, adhering to relevant ethical and legal norms.

Determine the necessary mode of work and rest in the treatment of the disease (according to list 2), in a health care facility, at home of the patient and at the stages of medical evacuation, including in the field, on the basis of preliminary clinical diagnosis, using knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

Determine the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

Determine the nature of treatment (conservative, operative) of the disease (according to list 2), in a health care facility, at home at the patient and at the stages of medical evacuation, including in the field on the basis of a previous clinical diagnosis, using knowledge about the person , its bodies and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

Determine the principles of treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including field conditions, based on a preliminary clinical diagnosis, using knowledge about the person, his organs and systems , adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

- Establish a diagnosis (according to list 3) by making an informed decision and assessing the person's condition, under any circumstances (at home, on the street, health care facility, its units), including in emergencies, in the field conditions, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

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- In the conditions of a health care institution or its subdivision according to standard methods:

- • select and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine;

- • participate in the development of local protocols for medical care;

- • control the quality of medical care on the basis of statistical data, expert evaluation and sociological research data using indicators of structure, process and results of activities;

- • identify factors that hinder the improvement of the quality and safety of medical care.

3. The program of the discipline

The educational process is organized according to the European Credit Transfer and Accumulation System (ECTS).

The curriculum consists of two blocks:

BLOCK 1 . Child development. Breastfeeding .

SECTIONS *:*

1. Periods of childhood.
2. Physical and psychomotor development of children .
3. Natural breastfeeding of infants
4. Artificial feeding of infants
5. Mixed infant feeding
6. Breastfeeding children older than one year

BLOCK 2. Anatomical and physiological features, methods of examination and semiotics of diseases in children.

SECTIONS *:*

1. Nervous system in children.
2. Leather, subcutaneous basis
3. Musculoskeletal system in children.
4. Respiratory system in children.
5. Cardiovascular system in children.
6. Blood system in children
7. Digestive systems in children.
8. Isolation system in children.
9. Endocrine system in children. Writing and defending the history of a child's development

BLOCK 1 . Child development. Breastfeeding

Topic 1. The subject and place of pediatrics in the system of general medicine , the main stages of development.

Specific goals:

• know the subject and place of pediatrics in the general medicine system
• know the main stages of development of world and domestic pediatrics
• know outstanding pediatricians of Ukraine

Pediatrics as a science of healthy and sick children, its place in the system of general medicine. The value of pediatrics for physician training. Tasks of the course on propaedeutic pediatrics. The main historical stages of development of pediatrics in Ukraine. Professors IV Troitsky, V.Ye. Chernov, MD Ponomarev and VF Yakubovych as the organizers of the first pediatric departments in Ukraine. The contribution of professors OM Хохол, B.O. Belousova, FD Rumyantseva, L.O. Finkelstein, OI Skrotsky, IM Rudneva, P.M. Gudzenka, VM Сидельникова, Б.Я. Reznik, SI. Ignatova, VD Chebotaryova and others in the development of domestic clinical pediatrics.

Topic 2. Periods of childhood.

Specific goals:

• collect a history of disease and life
• assess the peculiarities of the course of childhood in children
• assess the general condition of the child

Periods of childhood, their characteristics. Features and methods of collecting medical history in children. Methods of clinical objective examination of healthy and sick children. General examination of healthy and sick children. Criteria for assessing the general condition of sick children.

Topic 3. Features of the neonatal period.

Specific goals:

• make a conclusion about the condition of the newborn child
• to interpret the identified changes in the newborn on the basis of knowledge of anatomical and physiological features

Features of the newborn period. Physiological conditions. The concept of newborn maturity. Signs of prematurity. Primary toilet and newborn care. Features of the method of examination and care of the newborn.

Topic 4. Physical development of children and anthropometry . Assessment of physical development of children.

Specific goals:

- measure the basic parameters of the child's body (weight, height, head circumference, chest).
- calculate anthropometric indices - BMI.
- calculate appropriate indicators of physical development.
- on the basis of the received data to estimate physical development on nomograms and centile tables.

The concept of physical development, the importance of its evaluation. Anthropometry. Methods of assessing the physical development of children. Semiotics of physical development disorders in children.

Topic 5. Psychomotor development of children. Assessment of psychomotor development of children. Features of the nervous system in children.

Specific goals:

- know the basic criteria and indicators of psychomotor development of children of different ages
- explain the features of psychomotor development of newborns
- to assess the psychomotor development of the child of the 1st year of life by months
- to assess the psychomotor development of children of preschool, preschool, primary and secondary school age
- to identify in the anamnesis the factors influencing changes in psychomotor development

The concept of psychomotor development of children, its features in different periods of childhood. Features of assessment of neuropsychological development of the newborn. Semiotics of disorders of neuropsychological development of children.

Topic 6. Natural breastfeeding of infants .

Specific goals:

- collect a history of breastfeeding and evaluate it.

- calculate the daily amount of food for a child, depending on age.
- calculate the required amount of food per feeding, depending on the age of the baby.
- to compile a one-day menu for a breastfed infant.
- evaluate the daily diet of the child and correct it (if necessary).

Breastfeeding babies. Modern aspects in breastfeeding infants. Principles of breastfeeding support. The importance of breastfeeding for the health of the child and mother. Breast milk: composition and biological properties. Functions of lactation and its violation. Difficulties in breastfeeding. Methods of calculating the daily amount of food and feeding regime. Rules and techniques of breastfeeding. Supplementary feeding and nutrition correction. The child's need for food ingredients. The concept of free feeding.

Topic 7. Artificial and mixed breastfeeding. Nutrition for children older than one year.

Specific goals:

- explain the definition of artificial feeding of infants, the classification of milk formulas.
- collect a history of breastfeeding and evaluate it.
- calculate the daily amount of food, make a one-day menu for a child who is on artificial feeding, depending on age.
- to organize the correct artificial feeding, to evaluate its effectiveness.
- to correct the nutrition of a child who is on artificial feeding.
- explain the definition of mixed breastfeeding.
- to collect the anamnesis of breastfeeding and evaluate it, to prevent the progression of hypogalactia in the mother.
- calculate the daily amount of food, the required amount of food per feeding and make a one-day menu for a child who is on mixed feeding depending on age.
- adjust the nutrition of a child who is on mixed feeding.
- collect a history of nutrition of a child older than one year.
- assess the adequacy of nutrition to the necessary needs for the full physical and psychomotor development of the child.
- to make a one-day menu for a healthy child older than one year, taking into account the needs of food ingredients.
- adjust the diet of a child older than one year.

The concept of artificial feeding of infants. Classification and characteristics of milk formulas. Techniques and rules of artificial feeding. The daily requirement of the child and proteins, fats, carbohydrates and calories during artificial feeding.
Supplementary feeding during artificial feeding. The child's daily need for food ingredients. The concept of mixed feeding. Feeding techniques and rules. Milk formulas used for supplementary feeding. Scheme of mixed supplementary feeding. Organization and principles of nutrition of healthy children older than one year.

Final lesson , including control of practical skills, solving situational problems, test control of theoretical training.

BLOCK 2. Anatomical and physiological features, methods of examination and semiotics of diseases in children.

Topic 8. Anatomical and physiological features, research methods and semiotics of diseases of the nervous system in children.

Specific goals:

- know the anatomical and physiological features of the nervous system in children of different ages.
- be able to choose from the anamnesis data that reflect the presence of a child's lesions of the peripheral and central nervous system.
- be able to study and assess the state of the nervous system.
- interpret the symptoms of nervous system lesions in children and combine them into syndromes.

Anatomical and physiological features of the nervous system in children. Methods of studying nervous systems. Semiotics of lesions and diseases of the nervous system.

Topic 9. Anatomical and physiological features, research methods and semiotics of diseases of the skin, subcutaneous basis and musculoskeletal system in children.

Specific goals:

- to conduct an objective examination of the skin, subcutaneous basis, taking into account the peculiarities of the method of examination in children.
- to collect anamnesis, to conduct an objective examination of the musculoskeletal system in children.
- to appoint a set of additional methods of examination to determine the state of the musculoskeletal system in children.
- to carry out syndromic diagnosis of skin and bone system diseases in children.

Morphological and functional features of skin and its derivatives in children. Features of the structure of subcutaneous tissue. Methods of examination. Semiotics of skin and subcutaneous tissue lesions.

Anatomical and physiological features of the musculoskeletal system in children. Methods of research of bone and muscular systems. Semiotics of lesions and diseases of the musculoskeletal system.

Topic 10. Anatomical and physiological features, methods of clinical research of the respiratory system in children.

Specific goals:

– collect a history of a patient with diseases of the respiratory system.
– conduct an objective examination of the respiratory organs, taking into account the age of the child.
– interpret the obtained research data.

Features of embryogenesis of respiratory organs and anomalies of their development. Anatomical and physiological features of the respiratory system in children. Methods of clinical examination of respiratory organs in children (examination, palpation, topographic and comparative percussion, lung auscultation).

Topic 11. Paraclinical research methods and semiotics of respiratory diseases.

Specific goals:

– prescribe a set of laboratory and instrumental methods of examination for respiratory diseases.
– carry out syndromic diagnostics of diseases of the respiratory system in children.

Semiotics of lesions of major respiratory diseases in children. Syndromes of respiratory disorders and respiratory failure, the main clinical manifestations. Spirography.

Topic 12. Anatomical and physiological features, methods of clinical research of the cardiovascular system in children.

Specific goals:

- to collect the anamnesis from a patient with a disease of the cardiovascular system.
- to conduct an objective examination of the cardiovascular system, taking into account the age of the child.
- interpret the obtained data.

Embryogenesis of the cardiovascular system and congenital anomalies of the heart and blood vessels. Features of blood circulation in utero. Anatomical and physiological features of the heart and blood vessels in childhood. Methods of examination, palpation of the cardiovascular system in children. Percussion of absolute and relative boundaries of the heart in children. Auscultation of the heart in children.

Topic 13. Paraclinical research methods and semiotics of diseases of the cardiovascular system.

Specific goals:

- to appoint a set of laboratory and instrumental methods of examination in diseases of the cardiovascular system in children.
- to carry out syndromic diagnostics of diseases of the cardiovascular system in children.

The main clinical signs of damage to the cardiovascular system in children (cyanosis, bradycardia, tachycardia, etc.). Semiotics of congenital and acquired cardiovascular diseases in children. Features of ECG and FCG in healthy children of different ages. Echocardiography.

Topic 14. Anatomical and physiological features of the digestive system, research methods and semiotics of lesions of the digestive system in children.

Specific goals:

- collect a history of a patient with a disease of the digestive system.
- to conduct an objective study of the digestive organs of the child.
- interpret the obtained data.
- to appoint laboratory and instrumental methods of research of digestive system at children.
- to carry out syndromic diagnosis of diseases of the digestive system in children.

Age anatomical and physiological features of the digestive system in children. Methods of clinical examination of the digestive organs (examination, palpation, percussion, auscultation). Semiotics of diseases of the digestive system in children. Paraclinical methods of examination (sonography, endoscopy, thermography).

Topic 15. Anatomical and physiological features of the excretory system, research methods and semiotics of diseases of the urinary system in children. Curation of the patient to write a medical history and practical skills.

Specific types:

- to conduct a subjective and objective examination of a sick child and to interpret the condition of the urinary organs.
- prescribe the necessary set of diagnostic measures in a patient with pathology of the excretory system.
- interpret the identified changes as a result of examination of the child.
- to analyze the main syndromes of lesions of the urinary system in children.
- prescribe laboratory and instrumental methods of research of the urinary system in children and interpret the results.
- to carry out syndromic diagnosis of diseases of the urinary system in children.

Anatomical and physiological features of the urinary system in childhood. Brief information about the embryogenesis of the urinary system as the basis of congenital anomalies. Methods of examination of the urinary system in children.

Symptoms of the most common diseases of the urinary system in children. Semiotics of microscopic changes of urine sediment (protein-, erythrocyte-, leukocyte- and cylindruria, etc.). Syndromes of acute and chronic renal failure.

Topic 16. Anatomical and physiological features, research methods and semiotics of diseases of the blood and immune system in children.

Specific goals:

- to conduct a clinical examination of the immune system and blood system, taking into account age.
- distinguish clinical signs of immunodeficiency, anemia, identify the leading syndromes of blood and immune system.
- interpret the results of laboratory and instrumental research methods.

Features of the blood system in children of different ages. Methods of clinical and laboratory examination of children with lesions of the blood system. Clinical and hematological semiotics of the main syndromes (anemic, hemolytic, hemorrhagic, etc.) and diseases of the blood system in children.

Anatomical and physiological features of the immune system in children, research methods, semiotics of lesions. Features of the immune response in vaccination in children. The concept of immunodeficiency, classification and semiotics of immunodeficiency states. Clinical and immunological semiotics of HIV infection in children.

Topic 17. Anatomical and physiological features, research methods and semiotics of diseases of the endocrine system in children.

Specific goals:

- to conduct a clinical examination of the endocrine system, taking into account the peculiarities of the method in children.
- to prescribe the necessary set of diagnostic measures in a patient with pathology of the endocrine system to clarify the pathological changes.
- interpret the identified changes as a result of examination of the child on the basis of knowledge of anatomical and physiological features.
- to form a complex syndromic diagnosis.
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Anatomical and physiological features of the endocrine system in children. Semiotics of syndromes of hyper- and hypofunction of endocrine glands and diseases of the endocrine system in children. Research methods.

Topic 18. Features of metabolism in children.

Specific goals:

- explain the features of energy, protein, carbohydrate, lipid, water, mineral and acid-base metabolism in children.
- to conduct a clinical examination in children with metabolic disorders.
- to recognize clinical signs of the specified metabolisms, to reveal leading syndromes.
- interpret the results of laboratory and instrumental research methods.

Energy metabolism in children. Patterns of age-related changes in energy metabolism in children. Features of neuroendocrine regulation of metabolic processes in children. General ideas about metabolic diseases. Thermal balance of the child's body. Features of thermogenesis and

thermoregulation in childhood. Semiotics of hypo- and hyperthermia in children of different ages.

Protein metabolism in children. Features of protein metabolism and semiotics of its disorders in children.

Carbohydrate metabolism in children. Features of carbohydrate metabolism and semiotics of its disorders in children.

Lipid metabolism in children. Features of lipid metabolism and semiotics of its disorders in children.

Water-electrolyte and acid-base metabolism in children. Age features of water and mineral metabolism and acid-base status of the body in children.
Disorders of water-mineral metabolism and clinical manifestations.

Vitamins, their importance for child development. The value of vitamins for the metabolic processes of the child's body. Semiotics of hypo- and hypervitaminosis in children.

Topic 19. Writing and defense of medical history .

Specific goals:

- analyze the data of objective examination of the child.
- distinguish clinical syndromes.
- to establish a syndromic diagnosis.
- assign and interpret the results of laboratory and instrumental research methods.

Final lesson , including control of practical skills, solving situational problems, test - control of theoretical training.

The structure of the discipline

Topic	Lectures	Practical training	CPC
Block 1: "Child development. Breastfeeding "			
Section 1. Periods of childhood.			
1. Subject pediatrics place in health care nick basic stages of development.	0.5		1
2. Organization of medical and preventive care for children in Ukraine.			1
3. Periods of childhood.	0.25	2	1
4. Features of the neonatal period.	0.25	2	1
Together by section	1	4	4
Section 2 . Physical and psychomotor development of children			
5. Physical development of children, anthropometry	0.25	2	1
6. Psychomotor development of children.	0.25	2	1
7. Assessment of physical development and psychomotor development of children.	0.5	2	1
Together by section	1	6	3
Section 3 . Natural breastfeeding of infants.			
8 . Natural breastfeeding of infants.	1	1	1
9 . Natural breastfeeding of infants after the introduction of complementary foods.	1	1	1

10 . Breastfeeding premature infants			1
Together by section	2	2	3
Section 4. Artificial feeding of infants.			
1 1 . Artificial feeding of infants.	0.5	2	2
Together by section	0.5	2	2
Section 5. A mixture of non-breastfeeding infants.			
1 2 . Mixed infant feeding.	0.5	1	2
Together by section	0.5	1	2 1
Section 6. Feeding children older than one year .			
1 3 . Organization and principles of nutrition of children older than one year.	0.25	1	2
1 4 . Energy metabolism. Protein metabolism in children.	0.25	-	1
1 5 . Carbohydrate metabolism in children. Lipid metabolism in children.	0.25	-	1
1 6 . Water-electrolyte and acid-base metabolism in children.		-	2
1 7 . Vitamins, their importance for child development.	0.25		
Together by section	1	1	6
Final test (practical part)	-	2	2
Final test (theoretical part)	-	2	2
hours - 5 0	**6**	**2 0**	**2 4**
Block 2: " Anatomical and physiological features, research methods and semiotics of diseases in children "			
Section 1. Nervous system in children.			
1. Anatomical and physiological features, methods of examination of the nervous system in children.	0.5	2	2
2. Semiotics of diseases of the nervous system in children.	0.5	2	2
Together by section	1	4	4
Section 2. Skin, subcutaneous basis in children.			
3. Anatomical and physiological features, methods of examination of the skin and subcutaneous basis. Semiotics of skin diseases , subcutaneous basis in children.	1	2	1
Together by section	1	2	1
Section 3. Musculoskeletal system in children.			
4 . Anatomical and physiological characteristics, methods of bone-examination of ' muscle system	1	1	1
5 . Semiotics of diseases of the musculoskeletal system in children	1	1	1

Together by section	2	2	2
Section 4. Respiratory system in children.			
6 . Anatomical and physiological features, methods of examination of respiratory organs in children	0.5	2	2
7 . Percussion of the lungs in children.	0.5	1	2
8 . Auscultation of the lungs in children. Semiotics of respiratory diseases.	1	1	1
Together by section	2	4	5
Section 5. Cardiovascular system in children .			
9 . Anatomical and physiological features, methods, examination of the cardiovascular system in children.	0, 2 5	1	1
1 0 . Percussion and auscultation of the heart in children.	0, 2 5	1	1
1 1 . Semiotics of diseases of the cardiovascular system (endocarditis, myocarditis, pericarditis, differential diagnosis of congenital and acquired heart defects). Electrocardiography, phonocardiography, echocardiography.	0.5	2	1
Together by section	1	4	3
Section 6. The blood system in children .			
1 2 . Anatomical and physiological features, methods of examination of the blood system in children	0.5	2	2
1 3 . Clinical and hematological semiotics of the main syndromes (anemic, hemolytic, hemorrhagic, etc.) and diseases of the blood system in children. Laboratory methods for studying the functional state of organs and systems of the child's body. Rules and techniques of taking material for research.	0.5	2	2
Together by section	1	4	4
Section 7. Digestive system in children .			
1 4 . Anatomical and physiological features, methods of examination of the digestive system in children.	1	2	1
1 5 . Semiotics of lesions of the digestive system in children. Abdominal syndrome.	0.5	1	1
1 6 . Semiotics of digestive lesions in children .. Pylorospasm, pylorostenosis. Pathology of stools	0.5	1	2
Together by section	2	4	4
Section 8. Urinary system in children .			
1 7 . Anatomical and physiological features, methods of examination of the excretory system in children.	0.5	1	1
1 8 . Semiotics of lesions of the excretory	0.5	1	1

system in children. Semiotics of microscopic changes of urine sediment (protein-, erythrocyte-, leukocyte- and cylindruria, etc.). Syndrome of acute and chronic renal failure.			
Together by section	1	2	2
Section 9. Endocrine system in children . Writing and defending the history of a child's development			
19 . Curation of children	-	2	3
2 0 . Anatomical and physiological features, examination methods, semiotics of diseases of the endocrine system in children.	0.5	2	2
2 1 . Protection of the child's development history.	-	1	3
2 2 . Anatomical and physiological features, examination methods, semiotics of diseases of the immune system in children.	0.5	-	2
Together by section	1	3	10
Results and control work (practical part)	-	2	2
Results and control work (theoretical part)	-	2	2
Total hours - 86	**1 2**	**35**	**3 9**
hours - 136	**18**	**55**	**63**

4. The content of the discipline

4.1. Lecture plan

№	TOPIC	Number of hours
1	Subject pediatrics place in health care nick basic stages of development. Periods of childhood, their features. Features of the newborn period. Physical and psychomotor development of children and methods of their assessment.	2
2	Natural breastfeeding of infants. Benefits of breastfeeding. The importance of breastfeeding for the health of the child and mother. Quantitative and qualitative composition of breast milk. Immunobiological role of breast milk. Methods of calculating the daily amount of food and diet. Rules and techniques of breastfeeding. Feeding (feeding) and nutrition correction. A child's need for protein, fat, carbohydrates and calories. The diet and nutrition of a nursing woman. Difficulties in breastfeeding. Prevention of hypogalactia and mastitis. Features of feeding premature infants. The concept of "free feeding", its forms and indications for use.	2

3	Artificial feeding of infants. Classification and characterization of milk formulas for artificial feeding of infants. Warranty cow's milk. Technique of artificial feeding and criteria for evaluating its effectiveness. Supplementary feeding and correction of nutrition during artificial feeding. Daily requirement of the child for proteins, fats, carbohydrates and calories at artificial feeding Mixed feeding. Feeding techniques and rules. Milk formulas used for supplementary feeding. Scheme of mixed feeding of children of the first year of life. Supplementary feeding and nutrition correction. The child's need for protein, fat, carbohydrates and calories during mixed feeding. The concept of "free feeding", its forms and indications for use. Organization and principles of nutrition of healthy children older than one year. Patterns of age-related changes in energy metabolism in children. Features of neuroendocrine regulation of metabolic processes in children. General ideas about metabolic diseases. Features of protein metabolism and semiotics of its disorders in children. Features of carbohydrate and lipid metabolism in childhood. Semiotics of metabolic disorders in children. Age features of water and mineral metabolism and acid-base status of the body in children. Disorders of water-mineral metabolism and clinical manifestations.	2
4	Features of embryogenesis of the nervous system and developmental abnormalities. Anatomical and physiological features of the nervous system. Assessment of the nervous system Semiotics of lesions and major diseases of the nervous system in children. Morphological and functional features of skin and its derivatives in children. Features of the structure of subcutaneous tissue. Total semiotics of its main changes. Semiotics of skin and subcutaneous tissue lesions.	2
5	Features of embryogenesis of the skeletal system. Anatomical and physiological features of the skeletal system in children. Semiotics of lesions and diseases of the skeletal system. Features of embryogenesis of the muscular system. And the atomic and physiological features of the muscular system in children. Semiotics of lesions and diseases of the muscular system.	2
6	Anatomical and physiological features of the respiratory system in children. Features of embryogenesis of respiratory organs and anomalies of their development. General semiotics of respiratory lesions in children. The main clinical manifestations of diseases of the respiratory system. Syndromes of respiratory disorders and respiratory failure,	2

7	Embryogenesis of the cardiovascular system and congenital anomalies of the heart and blood vessels. Features of blood circulation in utero. Anatomical and physiological features of the heart and blood vessels in childhood Clinical signs of cardiovascular disease in children. Semiotics of congenital and acquired cardiovascular diseases in children. Features of ECG and Echo-CG in healthy children of different ages . Embryogenesis of the blood system. Features of the blood system in children of different ages. Clinical and hematological semiotics of the main syndromes (anemic, hemolytic, hemorrhagic, etc.). Diseases of the blood system in children (anemia, acute and chronic leukemia, thrombocytopenic purpura, hemophilia, etc.).	2
8	Embryogenesis of the digestive system and congenital anomalies of the digestive system. Age anatomical and physiological features of the digestive system in children. Semiotics of digestive lesions and major diseases (gastritis, peptic ulcer, cholecystitis, pancreatitis) in children. Acute abdomen syndrome.	2
9	Embryogenesis of the excretory system and congenital anomalies of the excretory system. Anatomical and physiological features of the excretory system in childhood. Semiotics of the most common diseases of the urinary system in children (pyelonephritis, glomerulonephritis, cystitis, etc.). Semiotics of microscopic changes of urine sediment (protein-, erythrocyte-, leukocyte-, cylindruria, etc.). Syndrome of acute and chronic renal failure. Anatomical and physiological features of the endocrine system in children. Semiotics of syndromes of hyper- and hypofunction of individual endocrine glands and diseases of the endocrine system in children. Anatomical and physiological features, general semiotics of diseases of the immune system in children.	2
	TOGETHER	**18**

4 . 2 . Topics of practical classes

№	TOPIC	Number of hours
1	Periods of childhood, their characteristics and features.	2
2	Newborn period	2
3	Psychomotor development of children	2
4	Physical development of children	2
5	Assessment of physical and psychomotor development	2
6	Natural breastfeeding of infants. Quantitative and qualitative composition of breast milk. Methods of calculating the daily amount of food and diet. Feeding (feeding) and nutrition correction. The child's daily need for food ingredients and energy.	2

7	Artificial feeding of infants. Classification and characterization of milk formulas for artificial feeding of infants. Warranty cow's milk. The technique of artificial feeding and criteria for evaluating its effectiveness. Supplementary feeding and nutrition correction during artificial feeding. Daily requirement of the child for proteins, fats, carbohydrates and calories at artificial feeding	2
8	Mixed feeding. Feeding techniques and rules. Milk formulas used for supplementary feeding. Schemes of mixed feeding of children of the first year of life. Supplementary feeding and correction of nutrition of children on mixed feeding. The child's daily need for proteins, fats, carbohydrates and calories during mixed feeding. Organization and principles of nutrition of healthy children older than one year	2
9	**Results and control of work (practical part):**	2
10	**Results and control of the work (theoretical part):**	2
11	Anatomical and physiological features, methods of clinical neurological examination of children.	2
12	Semiotics of major diseases of the nervous system in children (hydrocephalus, meningitis, encephalitis, cerebral palsy, etc.). Features of cerebrospinal fluid in children and the semiotics of its changes in pathology (purulent and serous meningitis, hydrocephalus, etc.).	2
thirteen	Anatomical and physiological features, examination methods. Semiotics of skin diseases , subcutaneous basis in children.	2
14	Anatomical and physiological features, examination methods Semiotics of diseases of the musculoskeletal system in children	2
15	Anatomical and physiological features, methods of examination of respiratory organs in children. Percussion of the lungs in children. Semiotics of lesions (cough, shortness of breath, etc.) of major respiratory diseases in children.	2
16	Auscultation of the lungs in children. Semiotics of respiratory diseases. Syndromes of respiratory disorders and respiratory failure, the main clinical manifestations.	2
17	Anatomical and physiological features, methods of examination of the cardiovascular system in children. Percussion of the heart in children. Auscultation of the heart in children. The main signs of damage to the cardiovascular system in children (cyanosis, bradycardia, tachycardia, etc.).	2
18	Semiotics of diseases of the cardiovascular system (endocarditis, myocarditis, pericarditis, differential diagnosis of congenital and acquired heart defects). Electrocardiography, echocardiography.	2
19	Features of the blood system in children of different ages. Methods of clinical and laboratory examination of children with lesions of the blood system.	2

20	Clinical and hematological semiotics of the main syndromes (anemic, hemolytic, hemorrhagic, etc.) and diseases of the blood system in children.	2
21	Anatomical and physiological features, methods of examination of the digestive system in children.	2
22	Semiotics of digestive lesions in children. Abdominal syndrome. Semiotics of digestive lesions. Pylorospasm, pylorostenosis. Stool disorders in children	2
23	Anatomical and physiological features, methods of examination of the excretory system in children. Semiotics of microscopic changes of urine sediment (protein-, erythrocyte-, leukocyte- and cylindruria, etc.). Syndrome of acute and chronic renal failure.	2
24	Curation of children.	2
25	Anatomical and physiological features, methods of examination, semiotics of diseases of the endocrine system in children.	2
26	Protection of the child's development history	1
27	**Results and control of work (practical part):**	2
28	**Results and control of the work (theoretical part):**	2
	TOGETHER	**55**

4 . 3 . Individual work

№	TOPIC	Number of hours	Kind Control
Block 1			
1.	Preparation for practical classes - theoretical training and development of practical skills	1 6	Current control in practical classes
2 .	Independent elaboration of topics that are not included in the lesson plan:		
	The subject and place of pediatrics, the main stages of development.	2	Results and control of work
	Organization of medical and preventive care for children in Ukraine.	2	Final control work
3.	Preparation of final nd Control no her work	4	Final control work
Block 2			
1.	Preparation for practical classes - theoretical training and development of practical skills	22	Current control in practical classes
2.	Independent elaboration of topics that are not included in the lesson plan:		
	Energy metabolism. Protein metabolism in children.	4	Final control work
	Carbohydrate metabolism in children. Lipid metabolism in children.	4	Final control work

	Water-electrolyte and acid-base metabolism in children. Vitamins, their importance for child development.	3	Final control work
	Anatomical and physiological features, examination methods, semiotics of diseases of the immune system in children.	2	Final control work
3.	Preparation for the final test	4	Final control work
l		**63**	

Individual tasks

Block 1 - Child development. Breastfeeding

1. Evaluation and interpretation of anthropometry parameters in children with diseases of the endocrine system.
2. Collection and selection of features of the anamnesis of life of the newborn child and the child of younger age.
3. Evaluation and interpretation of indicators of psychomotor development in young children.
4. Report on the contribution of Professor Chernov to the development of pediatrics in Ukraine.
5. Structure of medical and preventive institutions of Ukraine.
6. Organization of children's somatic inpatient department.
7. Organization of the children's clinic.
8. Organization of medical and preventive care for children in preschool and boarding schools.
9. Contribution to the development of pediatrics and obstetrics NM Maksimovich-Ambodik.
10. The contribution of professors OM Хохол, В.Д. Chebotaryova and others in the development of domestic clinical pediatrics.
11. Compiling a daily menu for a child in the first year of life who is breastfed.
12. Compilation of a daily menu for a child in the first year of life who is on artificial or mixed feeding
13. Drawing up a daily menu for a child in the second year of life
14. Drawing up a daily menu for a child of the third year of life
15. Report "Prevention of atopic dermatitis in young children "
16. Free Breastfeeding Report, a program to support breastfeeding of young children.
17. Features of feeding premature infants.
18. Therapeutic mixtures for children with various pathologies

Block 2 - Anatomical and physiological features, research methods and semiotics of diseases in children

1. Methods of studying the cardiovascular system in a child with carditis.
2. Methods of examination of skin and subcutaneous fat in a child with atopic dermatitis.
3. Methods of research of respiratory system at the child with acute pneumonia.
4. Methods of research of respiratory system at the child with obstructive bronchitis.
5. Methods of studying the digestive system in a child with exacerbation of chronic gastroduodenitis.
6. Methods of studying the digestive system in a child with exacerbation of chronic cholecystocholangitis.

7. Interpretation of the general analysis of blood at children with diseases of respiratory system.
8. Interpretation of the ECG in a child with cardiac arrhythmia.
9. Interpretation of the immunogram in a child with frequent colds
10. Interpretation of urine tests in children with inflammatory kidney disease

Tasks for independent work:

- Collect data on patient complaints, medical history, life history collect information about the general condition of the patient (consciousness, constitution) and appearance
- Est ichi psychomotor development of the child;
- Est ichi physical development of the child ;
- make diets for healthy children of different ages;
- examine the condition of the cardiovascular system (examination and palpation of the heart and superficial vessels, determination of percussion of the intercardiac and blood vessels, auscultation of the heart and blood vessels);
- examine the condition of the respiratory system (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs);
- examine the condition of the abdominal organs ;
- examine the condition of the musculoskeletal system (examination and palpation);
- examine the state of the nervous system;
- examine the condition of the excretory system;
- examine the state of the endocrine system ;
- examine the state of the blood system ;
- examine the state of the immune system ;

Typical test problems to be solved in practical classes:

1 . Does the neonatal period last (days)?

A. 7
B. 10
C. 20
D. 28
E. 38

2. Does the embryonic period last (weeks)?

A. 7
B. 10
C. 14
D. 20
E. 27

3. Does the early fetal period last (weeks)?

A. 15
B. 20
C. 24
D. 28
E. 34

4. On the Apgar scale evaluate :

A. Physical development
B. Psychomotor development
C. Gestational age
D. The degree of hypoxia

E. Morphological maturity

5. The criteria of the Apgar scale include everything except:
A. Muscle tone
B. Skin color
C. Reflex activity
D. Heart rate
E. Blood pressure

4.4. Ensuring the educational process

1. Multimedia projectors, computers, screens for multimedia presentations, lecture presentations.

2. Demonstration screens, laptops, files in Power Point and Word with tasks "Step- 2 " for practical and final classes.

3. Exam tickets.

5. Final control

List of final control issues (differentiated credit)

1. Definition of pediatrics as a science.
2. The main periods of formation and development of pediatrics in Ukraine.
3. The main areas of work of Professor IV Trinity.
4. The main directions of work of professor V.Ye. Draft.
5. Contribution to the development of pediatrics and obstetrics NM Maksimovich-Ambodik.
6. Contribution to the development of pediatrics by Professor S.Kh. Hotovytsky.
7. The contribution of professors OM Хохол, В.Д. Chebotaryova and others in the development of domestic clinical pediatrics.
8. Areas of scientific activity of professors VO Belousova, FD Rumyantseva, L.O.
9. Finkelstein, OI Skrotsky, IM Rudneva, PM Gudzenka, VM
10. Сидельникова, Б.Я. Reznik, SI Ignatov, their contribution to the development of pediatrics.
11. Structure of medical and preventive institutions of Ukraine.
12. Organization of children's somatic inpatient department.
13. Organization of medical and preventive care for children in preschool and boarding schools.
14. The main statistical indicators of medical and preventive institutions
15. Characteristics of childhood periods.
16. Characteristics of the main types of growth of the child's body.
17. Concepts: diagnosis, symptom, syndrome.
18. Features of the newborn period.
19. Signs of full-term and premature.
20. Physiological conditions of newborns.
21. Boundary conditions of newborns.
22. Definition of the concepts "physical development of the child", "acceleration of children's development", "harmony of physical development".
23. Basic hypotheses and mechanisms of acceleration.
24. Manifestations of delay and disharmonious physical development.
25. The main anthropometric indicators needed to assess the state of physical development of the child.
26. Formulas for determining the appropriate age parameters of physical development.

27. Determination of psychomotor development of the child.
28. Indicators of psychomotor development in children of different ages.
29. Reflexes, which determine the psychomotor status of the child in the first year of life.
30. Stages of formation of the child's speech function.
31. Stages of development of visual and auditory analyzers of the child in the first year of life.
32. Types of higher nervous activity of man, the main stages of its formation.
33. Factors that affect the psychomotor development of the child:
34. Semiotics of disorders of neuropsychological development of children.
35. Definition and benefits of breastfeeding.
36. The concept of "free feeding", its forms and indications for purpose.
37. The importance of breastfeeding for the health of the child and mother.
38. Quantitative and qualitative composition of breast milk.
39. Immunobiological role of breast milk.
40. The diet and nutrition of a nursing woman. Difficulties in breastfeeding.
41. Methods of calculating the daily amount of food and diet of children of different ages
42. Feeding (feeding) and nutrition correction of children who are on natural feeding.
43. The child's need for protein, fat, carbohydrates and calories in nature feeding.
44. Features of feeding premature infants.
45. The concept of artificial feeding of infants.
46. Classification and characteristics of milk formulas for artificial breastfeeding babies.
47. Warranty cow's milk.
48. The technique of artificial feeding and criteria for evaluating its effectiveness.
49. The child's need for proteins, fats, carbohydrates and calories with artificial feeding.
50. Forms and degrees of hypogalactia (primary, secondary, early and late).
51. Prevention of hypogalactia and mastitis.
52. Mixed feeding. Feeding techniques and rules.
53. Scheme of mixed feeding of children of the first year of life.
54. The child's need for protein, fat, carbohydrates and calories when mixed feeding.
55. The need of children older than one year in proteins, fats, carbohydrates and
56. Anatomical and physiological features of the gastrointestinal tract in children older than 1 year
57. Features of the diet of children from 1 to 3 years
58. Diets for children from 1 to 3 years
59. Daily amount of food in children from 1 to 3 years
60. Daily quota of products (milk, meat, bread, eggs, soft cheese, fruit, juices) in the menu of children from 1 to 3 years
61. The concept of "promising" menu
62. Anatomical and physiological features of the brain and spinal cord in children.
63. Blood supply to the brain in children.
64. Features of cerebrospinal fluid in children.
65. Terms of myelination of spinal and cranial nerves in children.
66. Unconditional reflexes of newborns, terms of their reduction.
67. Characteristics of meningeal, encephalitic and convulsive syndromes.
68. Changes in cerebrospinal fluid in purulent and serous meningitis.
69. Semiotics of cerebral palsy.
70. Semiotics of hydrocephalus, features of cerebrospinal fluid in hydrocephalus.

71. Anatomical and physiological features of the epidermis, basement membrane, dermis in children.
72. Features of the skin in newborns.
73. Features of the structure and function of subcutaneous tissue in children.
74. Features of sweat and sebaceous glands, hair and nails in children.
75. Characteristics of different elements of the rash. List the primary inflammatory elements rash.
76. What elements are primary non-inflammatory?
77. Secondary morphological elements of the rash.
78. How does the color of the skin change in various diseases (respiratory, cardiovascular, infectious hepatitis, anemia)?
79. Manifestations of various infectious diseases of the skin and mucous membranes (measles, scarlet fever, chickenpox, pseudofurunculosis, neonatal vesicles, vesiculopustulosis).
80. Manifestations on the skin of exudative-catarrhal diathesis.
81. Manifestations of disorders of subcutaneous fat (degree of obesity, degree malnutrition, scleroma, scleredema, adiponecrosis).
82. Characteristic signs of edema of cardiac and renal origin.
83. Anatomical and physiological features of the structure of the muscular system in children.
84. The state of muscle tone in children in the first months of life.
85. Semiotics of disorders of muscle tone.
86. Signs of damage to the muscular system in children (hypotension, hypertension, cerebral palsy, spasmophilia, hyperkinesis, elegy)
87. Anatomical and physiological features of the skeletal system in children.
88. Signs of damage to the skeletal system in rickets, scoliosis, congenital dislocation of the hip joint
89. Features of bone blood supply. The role of these features in the norm and when pathology. Features of the structure of the periosteum, their importance in normal and in pathology.
90. Terms of closing of temples. Terms of formation of physiological bends of a back.
91. Timing and sequence of teething. The formula for the number of deciduous teeth.
92. Deformities of the bones of the skull, chest, spine, pelvis, lower extremities rickets.
93. Embryogenesis and anomalies of the respiratory system.
94. Anatomical and physiological features of the respiratory system in children depending on age.
95. Respiration rate, tidal volume, vital capacity of the lungs in children, depending on age.
96. Types of cough, options for changes in respiration in diseases of the respiratory system.
97. Types of wheezing, the mechanism of their occurrence, crepitation and noise of friction of the pleura.
98. Changes in percussion tone, the mechanism of their occurrence.
99. Projection of lung lobes on the chest.
100. Symptoms of bronchoadenitis (Arkavina, Filosofova, Korani).
101. Semiotics of exudative pleurisy.
102. Types of breathing in a child are normal and in pathology
103. Types of rales, mechanisms of their occurrence. Crepitation and noise of friction of the pleura.
104. Bronchophonia, variants of its change , vocal tremor
105. Semiotics of bronchopneumonia.
106. Semiotics equity pneumonia depending on the stage of inflammation.

107. Semiotics of simple and obstructive bronchitis.
108. Spirography, the main indicators of this research method.
109. Embryogenesis of the cardiovascular system and congenital anomalies of the heart and blood vessels.
110. Features of blood circulation in utero.
111. Anatomical and physiological features of the heart and blood vessels in children depending on age.
112. The main complaints of children with diseases of the cardiovascular system.
113. Pulse characteristics in children depending on age are normal. Possible causes of heart rate disorders , heart rate deficit
114. Characteristics of heart, apical shock and cat purr
115. Relative limits of the heart in children depending on normal age and pathology.
116. Systolic and diastolic blood pressure in children depending on age.
117. Rules of auscultation of the heart in children. Places of projection of heart valves on the chest
cage and places of their listening.
118. Heart auscultation algorithm.
119. Heart tones, their characteristics are normal.
120. The main reasons for the strengthening and weakening of heart tones.
121. Heart murmurs, their types.
122. Differential diagnosis of functional and organic heart murmur.
123. Differential diagnosis of pericardial friction noise and heart murmur.
124. The main signs of myocarditis.
125. The main signs of pericarditis.
126. The main signs of endocarditis.
127. The main differences between congenital and acquired heart defects in children.
128. Features of the ECG in healthy children of different ages.
129. Echocardiography, possibilities of the method, indications.
130. Anatomical and physiological features of the oral cavity, salivary glands in children .
131. Phases of the act of sucking, anatomical features that facilitate this act for the baby.
132. Anatomical and physiological features of the esophagus in children, determining the length of the probe
    a. for gastric lavage (gastroscopy).
133. Anatomical and physiological features of the stomach in children, including physiological volume
    b. (newborn, 3 months, 1 year), the composition of gastric juice, basic enzymes, species
    c. gastric motility.
134. Anatomical and physiological features of the small and large intestine in children, including
    d. intestinal motility.
135. Anatomical and physiological features of the liver and bile, pancreas
    e. in children.
136. The frequency and nature of faeces of healthy children, depending on age and type in yhodovuvannya according Bristol scale
137. Semiotics of gastritis.
138. Semiotics of peptic ulcer disease.
139. Semiotics of chronic cholecystitis
140. Dyspepsia syndrome .
141. Malabsorption syndrome

142. Pylorostenosis and pylorospasm, semiotics, differential diagnosis.
143. Dysentery and intussusception, semiotics, differential diagnosis.
144. Anatomical o-physiological features of the kidneys in childhood and developmental abnormalities (hypospadias, epispadias, cryptorchidism, phimosis, hydrocele)
145. Histological features of the kidneys in children.
146. Features of the main functions of the kidneys in children.
147. Anatomical and physiological features of the structure of the bladder in children . The number of urination depending on age (1 month, 1 year, preschool age).
148. Anatomical and physiological features of the structure of the urethra in children.
149. Features of the general analysis of urine depending on age, research by Nechiporenko, Zymnytsky, evaluation criteria.
150. Semiotics of dysuric and urinary syndrome in children.
151. The concept of incontinence, hematuria, leukocyturia, erythrocyturia, proteinuria, oliguria, anuria, polyuria, dysuria, hypostenuria, hyperstenuria, isostenuria, pollakiuria, n and cturia, stranguria, bacteriuria.
152. Semiotics of cystitis.
153. Semiotics of pyelonephritis.
154. Semiotics of glomerulonephritis.
155. Features of hematopoiesis in children.
156. Anatomical and physiological features of the bone marrow in childhood.
157. Physicochemical and biochemical properties of blood in children (total protein, fractions)
158. Features of the erythrocyte link of the blood system in children.
159. Features of the leukocyte link of the blood system in children.
160. Criteria for evaluation (analysis) of peripheral blood of a healthy child depending on
age.
161. The concept of leukocytosis, leukopenia, erythroblastosis, lymphocytosis, lymphopenia,
neutrophilia, neutropenia, eosinophilia, eosinopenia, monocytosis, anisocytosis, polychromatophilia, poikilocytosis.
162. Clinical and hematological semiotics of anemic syndrome.
163. Clinical and hematological semiotics of hemolytic syndrome.
164. Clinical and hematological semiotics of hemorrhagic syndrome.
165. Clinical and hematological characteristics of acute leukemia.
166. Clinical and hematological characteristics of chronic leukemia.
167. Features of endocrine glands functioning in childhood.
168. Anatomical and physiological features of the thyroid gland. Signs of hyper- and hypothyroidism.
169. Anatomical and physiological features of the parathyroid glands. Hyper- and hypoparathyroidism.
170. Anatomical and physiological features of the pituitary gland. Semiotics of pituitary lesions.
171. Anatomical and physiological features of the endocrine part of the pancreas.
172. Semiotics of diabetes mellitus in children.
173. Anatomical and physiological features of the adrenal glands.
174. Signs of acute and chronic adrenal insufficiency.
175. Anatomical and physiological features of the thymus in children
176. Features of the state of cellular and humoral parts of immunity
177. The main indicators of the immunogram in children
178. Features of energy metabolism in children, semiotics of disorders.

179. Features of protein metabolism in children, semiotics of disorders.
180. Features of carbohydrate metabolism in children, semiotics of disorders.
181. Features of lipid metabolism in children, semiotics of disorders.
182. Features of water-electrolyte metabolism in children, semiotics of disorders.
183. Vitamins, their importance for child development.
184. Semiotics of hypo- and hypervitaminosis in children.

The list of practical tasks and works to the final control

1. Collection of anamnesis of the disease in children and parents.
2. General and special examination of the child to assess the nervous system.
3. Study of the function of I-XII pairs of cranial nerves.
4. Check of superficial, deep reflexes and sensitivity (temperature, vibration, pain), musculoskeletal sensation in children
5. Assessment of the state of the autonomic nervous system
6. Research of coordination of movements.
7. Check of meningeal symptoms
8. Verification of pathological reflexes in children.
9. Auxiliary methods (instrumental, laboratory) in the study of nervous systems.
10. Assessment of cerebrospinal fluid, interpretation of changes.
11. Examination of the skin and mucous membranes in children.
12. Examination of subcutaneous fat.
13. Palpation of the skin and subcutaneous tissue: determination of humidity, temperature and
the thickness of the skin folds, the thickness of the subcutaneous base, etc.
14. Assessment of obesity, malnutrition.
15. Examination of bones and muscles.
16. Examination of the oral cavity, recording the dental formula.
17. Palpation of bones and muscles.
18. Assessment of the condition of the temples.
19. Assessment of the child's physique.
20. Tests for increased muscle excitability.
21. Assessment of muscle tone, interpretation.
22. Studies to establish congenital hip dislocation.
23. General and special examination of a child with diseases of the respiratory system.
24. Calculating the child's respiratory rate.
25. Palpation of the chest in a child with respiratory diseases.
26. Comparative percussion of the lungs.
27. Topographic percussion of the lungs.
28. Percussion symptoms of bronchodenitis.
29. And as a result, I'm light.
30. Evaluation of auscultatory phenomena.
31. Interpretation of spirography data in various bronchopulmonary diseases systems.
32. General and special examination of the cardiovascular system.
33. Assessment of the characteristics of the child's pulse.
34. Palpation of cardiac, apical shocks.
35. Palpation of blood vessels.
36. Determination by percussion of relative and absolute boundaries of the heart.
37. Measurement and interpretation of blood pressure in children of different ages.
38. Auscultation of the heart.

39. Electrocardiogram recording, counting of intervals, ECG teeth, interpretation.
40. Recording and interpretation of the phonocardiogram.
41. Assessment of circulatory failure of a sick child.
42. General and special examination of a child with diseases of the digestive system.
43. Superficial and deep palpation of the abdomen in children.
44. Palpation of the liver.
45. Percussion and auscultation of the abdominal cavity in children.
46. Palpation and percussion symptoms of appendicitis.
47. Palpation and percussion symptoms of cholecystitis.
48. Palpation and percussion symptoms of gastroduodenitis.
49. Palpation and percussion symptoms of pancreatitis.
50. Assessment of bowel movements in children according to the Bristol scale
51. Examination of the urinary system in children.
52. Palpation of the kidneys and bladder.
53. Bladder percussion, Pasternatsky's symptom.
54. Evaluation and interpretation of the general analysis of urine depending on age, results
urine analysis by Nechiporenko, Zymnytsky.
55. Examination of the blood system in children.
56. Palpation of the spleen.
57. Bone percussion in children with diseases of the blood system
58. Interpretation of changes in the general analysis of blood.
59. Examination, palpation of the thyroid gland, determination of signs of hyper- and hypofunction of the thyroid gland.
60. Establishing signs of hyper- and hypofunction of the parathyroid glands
61. Establishing signs of diabetes in children.
62. Establishing signs of hyper- and hypofunction of the adrenal glands.
63. Methods of assessing the sexual development of the child (stages according to JMTanner).
64. Examination of palpation of lymph nodes in children.

"0" version of the credit card

Petro Mohyla Black Sea National University
P Evan higher education - master
Field of knowledge: 22 Health care
C petsialnist Medicine 222

Course - PROPEDEUTICS OF PEDIATRICS

Option № 0

1. The main periods of formation and development of pediatrics in Ukraine. - maximum number of points - 20.
2. Anatomical and physiological features of the esophagus in children, determining the length of the probe for gastric lavage (gastroscopy). - maximum number of points - 20.
3. Features of the general analysis of urine depending on age, research according to Nechiporenko, Zymnytsky, evaluation criteria. - maximum number of points - 20.
4. Features of water-electrolyte metabolism in children, semiotics of disorders. - maximum number of points - 20.

Adopted by the department " therapeutic and surgical disciplines ," Protocol № ___ from "__" _____ 202 1 p.

Head of the department **MD, prof. Zack M.Yu.**

Examiner OV **Associate Professor B.Sc. Chernyshov**

Example of the final control work on block 1

Solving problems Step-2

1. The criteria for health assessment are the following, except:
   A. A. physical and neuropsychological development and their harmony
   B. functional state of the main systems
   C. S. social and living conditions
   D. degree of resistance and reactivity of the organism
   E. E. presence and absence of chronic pathology

2. The functional responsibilities of the doctor of the admission department do not include:
   A. A. registration of patients
   B. examination of incoming patients
   C. S. registration of medical history
   D. emergency care
   E. E. accompaniment of seriously ill patients during their transportation to the department

3. In a child with an inactive phase of rheumatism, mitral heart disease was detected without signs of circulatory failure. To which health group should a child be assigned ?
   A. A. здоров'я health groups
   B. II health groups
   C. S. здоров'я health groups
   D. IV health group
   E. E. V health group

4. Does the early fetal period last (weeks)?
   A. 15
   B. 20
   C. 24
   D. 28
   E. 34

5. Newborn reflexes do not include:
   A. Moreau's reflex
   B. Babkin's reflex
   C. Brudzinski's reflex
   D. Perez's reflex
   E. Crawling reflex

And so 2 0 problems with the subsequent analysis of typical errors.

An example of the final control work on block 2

Solving problems Step-2

1. Which of the following is not typical for antibodies:
   A. These are always protein substances.
   B. Always neutralize the appropriate antigens.
   C. Always belong to immunoglobulins.
   D. Always belong to the γ-fraction in protein electrophoresis.
   E. Characterized by high specificity.

2 . What immunoglobulins pass through the placenta:
   A. Ig A .
   B. I g M .
   C. Then g G .
   E. Ig E .
   A. I g D .

3 . What age interval is the most critical for the level of humoral immunity:
   A. From the birth of a child to 1 month.
   B. From 3 to 6 months of life.
   C. From 6 months to 1 year.
   D. The second year of life.
   E. Puberty.

And so 2 0 problems with the subsequent analysis of typical errors.

6. Evaluation criteria and tools for diagnosing learning outcomes

Control methods

- **Survey (testing of theoretical knowledge and practical skills).**
- **Test control.**
- **Writing a review of scientific literature (abstracts), performing individual tasks, their defense.**

Current control. Testing in practical classes of theoretical knowledge and mastery of practical skills, as well as the results of independent work of students. Supervised by teachers according to the specific purpose of the curriculum. Assessment of the level of students' preparation is carried out by: interviewing students, solving and analyzing situational tasks and test tasks, interpreting the results of clinical-instrumental and clinical-laboratory research, monitoring the acquisition of practical skills.

Intermediate control. Checking the possibility of students using for clinical and diagnostic analysis of theoretical knowledge and practical skills on all topics studied, as well as the results of independent work of students. Carried out in the last lesson by section by passing practical skills, solving situational problems and testing.

Results and control of work 1 "Physical and psychomotor development of the child. Feeding children " COMPLETE is ARE on completion of study subjects vcix block on the top , control , occupation of the block .

D at PKR allowed students who completed the program unit and received for ongoing training activities for at least 7 0 points.

The form of RCC is standardized and includes control of theoretical and practical training.

Distribution of points : 40 test tasks (1 test = 0.5 points a), solution of situational problem 1 (10, 8-9, 7 points, respectively, for the correct one, with a small error and two minor errors in the problem), solution of situational problem 2 (10, 8-9, 7 points, respectively, for the correct, with a minor error and two minor errors in the problem), solving the situational problem 3 (10, 8-9, 7 points, respectively, for the correct, with a minor error and two minor errors in the problem) , solving the situational problem 4 (10, 8-9, 7 points, respectively, for the correct one, with a small error and two minor errors in the problem). Theoretical part: 20, 18, 12 points (respectively for the correct, with a small error and two minor errors in the problem).

The maximum number of points that a student can receive during the RCC is 80 points.

PKR is considered enlisted th if the student scored at least 50 points (at least 10 points for the tests, at least 28 points for solving situational problems, at least 12 points for the theoretical task).

Final and control a robot 2 " anatomical and physiological characteristics, methods of research and semiotics of diseases in children" COMPLETE is ARE on completion of study in cix topics block on the top , control , occupation of the block .

D at PKR allowed students who completed the program unit and received at least 40 points.

The form of RCC is standardized and includes control of theoretical and practical training.

Distribution of points: 20 test tasks (1 test = 0, 2 5 points), practical skill: review (4 - 5 - 6 points, respectively, for the correct, with a minor error and two minor errors in the examination and diagnosis), palpation (4 - 5 - 6 points, respectively, for the correct, with a minor error and two minor errors in the problem), percussion and auscultation (4 - 5 - 6 points, respectively, for the correct, with a minor error and two minor errors in the problem). Theoretical part: AFO systems (4 - 5 - 6 points, respectively, for the correct, with a small error and two minor errors in the problem), semiotics of diseases (4 - 5 - 6 points, respectively, for the correct, with a minor error and two minor errors in the problem) , analyzes (3 - 4 - 5 points, respectively, for the correct one, with a small error and two minor errors in the problem).

The maximum number of points that a student can receive at the time of PKR , with tanovyt 4 0 points.

PKR is considered enlisted th if the student scored at least 3 0 points (at least three points for the tests, at least 4 points on the examination, 4 points for conducting palpation, 4 points for holding percussion and auscultation, at least 5 points for each theoretical question).

Distribution of points received by students

BLOCK №1: Physical and psychomotor development of the child. Breastfeeding

№	**Block 1** (current educational activity)	**Maximum number of points**
	Section 1	
1.	Topic 1	1 8
	Section 2	
2.	Topic 2	18
	Section 3	
3 .	Topic 3	18
4 .	Topic 4	18

	Section 4.5	
5 .	Topic 5	18
	Section 6	
6.	Topic 6	18
	Individual work	**1 2**
	Together sections + individual work	**120**
The final ground control, including:		**80**
practical training		**40**
theoretical training		**40**
TOTAL sum of points		**200**

Current control (physical development of children, breastfeeding) is carried out at each practical lesson in accordance with the specific objectives of each topic.

The student's readiness for the lesson (initial stage) is checked on the basis of the answer to 10 test tasks. In the first practical lesson, these questions are included in the final control. For the correct answer to the test the student receives 9-10 6 point s ; for 8-7 correct answers - 4 points, 6 - 2 score and , 5-0 testing - 0 points. The main stage of practical training involves the development of practical skills. The survey is evaluated: 7 points - "5", 5 - "4", 3 - "3". To assess the student's mastery of the topic, he is asked to answer a situational problem. If it solved the problem - the student receives 5 point s . Solved with shortcomings - 3 points. Not solved - 0 points. The scores obtained during the lesson are added up (scores obtained for tests + scores obtained for the survey + scores obtained for the tasks). Recalculation of grades from the multi-point scale is as follows: "5" (excellent) - 1 6 -1 8 points, "4" (good) - 1 3 - 15 points, "3" (satisfactory) - 10 - 1 2 points, " 2 "(unsatisfactory) - 0 - 9 .

Evaluation of independent work of students with trained ing to audience practical training is carried out under the current control of theme on the proper auditorium classes. Evaluation mastering topics submitted only on independent work i did not include topics of practical lessons, Take etsya during the final year Control th .

Individual student work is estimated at 1 2 , 11 , 10 point s (once for the entire scoring unit).

The maximum number of points that a student can score for the current educational activity is 120 points. It is calculated by adding the number of points that correspond to the grade "excellent" in each practical lesson (1 8 points for practical lessons 1-6) with the addition of the maximum score for individual work (1 2 points).

The minimum number of points that a student can score when studying the block is calculated by adding the number of points that correspond to the grade "satisfactory" in each class (10 points for practical classes, and 10 for individual work) and is 70 points.

BLOCK №2: Anatomical and physiological features, research methods and semiotics of diseases in children

№	**BLOCK 2** (current educational activity)	**Maximum number of points**
	Section 1	

1	Topic 1	5
2	Topic 2	5
	Section 2	
3	Topic 3	5
	Section 3	
4	Topic 4	5
	Section 4	
5	Topic 5	5
6	Topic 6	5
	Section 5	
7	Topic 7	5
8	Topic 8	5
	Section 6	
9	Topic 9	5
10	Topic 10	5
	Section 7	
11	Topic 11	5
12	Topic 1 2	5
	Section 8	
thirteen	Topic 13	5
14	Topic 1 4	5
	Section 9	
15	Topic 1 5	5
16	Topic 16	5
	Together sections	**80 points,**
Final control, including:		**40**

	b and lions
practical training	**20 points**
theoretical training	**20 points**
Differentiated credit	**80**
TOTAL sum of points	**200**

Current control is carried out at each practical lesson in accordance with the specific objectives of each topic.

The student's readiness for the lesson (initial stage) is checked based on the answer to 10 test tasks. In the first practical lesson, these questions are included in the final control. For the correct answer to 10-6 tests the student receives 1 point; for 5-0 correct answers - 0 points . The main stage of practical training involves the development of practical skills. It is estimated at 4 , 3 , 2 points. The scores obtained during the lesson are added up (scores obtained for tests + scores obtained for the survey + scores obtained for the tasks). Conversion of multimark ratings scale is as follows: "5" (abort) 5 points "4" (good) - 4 score and "3" (satisfactory) - 3 score and "2" (unsatisfactory) -0.

Assessment of independent work of students in preparation for classroom practical classes is carried out during the current control of the topic in the relevant classroom. Assessment of mastering the topics that are submitted only for independent work and are not included in the topics of classroom training, is carried out during the final control.

The maximum number of points that a student can score for the current academic activity is 80 points. It is calculated by adding the number of points that correspond to the grade "excellent" in each practical lesson (5 points for practical lessons 1-16), for writing and defending the history of the child's development (5 points).

The minimum number of points that a student can score when studying the block is calculated by adding the number of points that correspond to the grade "satisfactory" in each class (2 points for practical classes 1 - 8 , and 3 points 9 - 15 + 3 points for defense history of child development) .

Evaluation of discipline

The grade in propaedeutics of pediatrics is given only to students who have enrolled in both RCC in the discipline.

The grade for the discipline is set as the average of the grades for the two blocks on which the discipline is structured.

Incentive points by the decision of the Academic Council may be added to the number of points in the discipline for students who have scientific publications or won prizes for participation in the Olympiad in the discipline among Ukrainian universities and more.

The objectivity of the assessment of students' learning activities should be checked by statistical methods (correlation coefficient between current performance and the results of the final control).

The final assessment of the discipline is made by **differential test.** Only students who are graded in the discipline (ie enrolled in the RCC for both blocks) are admitted to the test. A student can get from 50 to 80 points on the differential. The maximum score for each issue of a differential ticket is 20 points (see the example of a credit card above).

Criteria for assessing knowledge

Assessment 1 6 - 1 8 point s in the fall semester (5 points in the spring semester), 71-80 points on PKR in the fall semester (38-40 points in the spring semester) and 71-80 points in

the standings (A scale ECTS and 5 on a national scale) **the student's answer is evaluated if it demonstrates a deep knowledge of all theoretical principles and the ability to apply theoretical material for practical analysis and has no inaccuracies.**

Assessment 13-15 score along in the fall semester (four score and in the spring semester), 61-70 points on PKR in the fall semester (35-37 points on PKR in the spring semester) and 61-70 points in the standings (B and C for ECTS scale and 4 on the national scale) the **answer is evaluated if it shows knowledge of all theoretical provisions, the ability to apply them in practice, but some fundamental inaccuracies are allowed.**

Assessment 10-12 score along in the fall semester (3 score and in the spring semester), 50-60 points on PKR in the fall semester (30-34 points on PKR in the spring semester) and 50-60 points in the standings (D and E for ECTS scale and 3 on the national scale) **the student's answer is evaluated provided that he knows the main theoretical principles and can use them in practice.**

7 . Recommended Books

Basic literature

1. Propaedeutic pediatrics. Textbook for students of higher education. lock / Edited by Acad. NAMS of Ukraine, prof. V.G. Maidannyka.- Vinnytsia: New book, 2012.-880 p.
2. Propaedeutic pediatrics. Textbook for students of higher medical educational institutions / Edited by Acad. NAMS of Ukraine, prof. V.G. Майданника.- Винница: Нова книга, 2017.-888 с.
3. Nelson Textbook of Pediatrics.-20th ed /. [Edited by] Robert M. Kliegman] [et al.], 2016.- 3147 pp.

Supporting literature

1. Maidannyk VG, Butylina OV Clinical diagnosis in pediatrics.- K., Dorado-Print, 2012.- 286 p.
2. Markevich VE, Maidannik VG, Pavlyuk PO etc. Morphofunctional and biochemical parameters in children and adults.- Kyiv-Sumy: McDen, 2002.- 268 p.
3. Propaedeutics of children's diseases. Textbook / Ed. prof. Gnateiko OZ- Lviv: Liga-Press, 2004.- 320 p.
4. Test tasks in pediatrics / Ed. Corresponding Member NAMS of Ukraine, prof. V.G. Maidannika.- K., 2007.-429 p.
5. Washington Manual of Pediatrics, 2nd ed. by Andrew J. White (Editor) , 2016.- 542 pp.
6. Illustrated Textbook of Paediatrics by Tom Lissauer (Editor); Will Carroll (Editor) , 2018.-533 pp.

Information resources

1. ESG - http://ihed.org.ua/images/pdf/standards-and-guidelines_for_qa_in_the_ehea_2015.pdf.
2. Law "On Higher Education" - http://zakon4.rada.gov.ua/laws/show/1556-18.
3. Law "On Education" - http://zakon5.rada.gov.ua/laws/show/2145-19.
4. National Qualifications Framework - http://zakon4.rada.gov.ua/laws/show/1341-2011-p.
5. List of branches of knowledge and specialties-http: //zakon4.rada.gov.ua/laws/show/266-2015-p.
6. TUNING (for acquaintance with special (professional) competences and examples of standards - http://www.unideusto.org/tuningeu/.
7. Orders of the Ministry of Health http://www.moz.gov.ua/ua/portal/

8. Website of the Department of Pediatrics №4 http://pediatrics.kiev.ua/
9. International Journal of Pediatrics, Obstetrics and Gynecology http://ijpog.org/