

Syllabus

OF THE COURSE OF PROPEDEUTIC PEDIATRICS

(developed on the basis of a provisional indicative curriculum for the training of specialists of the second (master's) level of higher education in the field of knowledge 22 "Health" at higher educational establishments of the Ministry of Health of Ukraine specialty 228 "Medicine" educational qualifications: Master of Medicine

Term – V-VI

The volume of modules – 70 hours, lectures – 30 hours, practical classes – 7,0 self work – 50 hours, ECTS credits – 5.

The goal of the course. Students master basic methods (clinical, instrumental) of examination of children, be able to investigate internal organs and evaluate the results obtained. Propedeutical pediatrics is a kind of introduction to clinical pediatrics, linking fundamental theoretical disciplines with clinical disciplines, an important discipline in student education and in the physician training system.

The suggested results of the course.

To know – the basic peculiarities of physical and neuro-mental development of children of different age groups; the clinical significance of age-related anatomical and physiological characteristics of the child's organism; principles of rational feeding and nourishment of healthy children; semiotics of syndromes of disorders of different organ systems and the most common pediatric diseases.

To do – to make conclusion about the physical and psychomotor development of children; to conduct clinical examination of various organs and systems of a child; to analyze age features of organism functions; to interpret the condition of the child's organ systems; to count and compile a daily diet for infant; to correct the diet of children over one year.

To demonstrate – basic awareness about the physical development, feeding of child; basic principles of the physical examination; clinical laboratory data interpreting, main signs of syndromes and diseases evaluation, i.e.:

- collect information about the patient's general condition (consciousness, constitution) and appearance
- to evaluate the psychomotor and physical development of the child;
- to make diets of healthy children of all ages.
- to examine the condition of the cardiovascular system (examination and palpation of the area of the heart and superficial vessels, determination of percussion boundaries of the heart and blood vessels, auscultation of the heart and blood vessels);
- to examine the state of the respiratory system (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs);
- to examine the condition of the abdominal organs
- check the condition of the musculoskeletal system (examination and palpation);
- to examine the state of the nervous system;

- to survey the state of the excretory system;
- examine the condition of the endocrine system
- examine the condition of the blood system
- to examine the state of the immune system
- the ability to maintain medical records

To have skills – the ability to solve typical and complex specialized tasks and practical problems in health care professional work or in a training process using propedeutic pediatrics theoretical and practical skills.

To be solve by themselves – situations dealing with physical examination of child, laboratory data assessment, physical and neuro-biological assessment, feeding of children of different age groups, i.e.:

1. Collect data on patient complaints, medical history, medical history, conduct and evaluate physical examination results.
2. Highlight a leading clinical symptom or syndrome. Establish the most probable or syndromic diagnosis of the disease.
3. Perform medical manipulation.
4. To be aware and guided in the activity by civil rights, freedoms and obligations, to raise general educational level.
5. Observe the requirements of ethics, bioethics and deontology in their professional activity.
6. To organize the necessary level of individual security (own and the persons who are cared for) in case of typical dangerous situations in the individual field of activity.

Summarized table of the required competencies learned throughout the course

№	Competencies	To know	To do	Communications	Independence and responsibility
1.	GC1	Know the methods of analysis, synthesis and further modern learning	Be able to carry out the analysis of information, to make informed decisions, to be able to acquire actual knowledge	Make appropriate connections for achievement of goals.	Be responsible for the timely acquisition of actual knowledge.
2.	GC2	Have specialized conceptual knowledge acquired through training	Be able to solve complex problems and problems that arise in a professional activities	Clear and unambiguous communication of their own conclusions, knowledge and explanations, which substantiate them, to specialists and non-specialists	To be responsible for decision making in difficult conditions
3.	GC3	Have deep knowledge of the structure of professional activity.	Be able to engage in professional activities that require upgrading and integrative knowledge	Ability to effectively shape communication strategy in professional activities	Be responsible for professional development, the ability to further vocational training at a high level autonomy.
4.	GC4	Have advanced knowledge of the state	Be able to apply knowledge of the state language, both orally	Use in professional and business communication and	Use a foreign language in a professional

		language and basic knowledge of a foreign language	and in writing communicate in a foreign language	preparation of documents in the state language	activity. Carry out responsibility for fluency in the state language, for development professional knowledge професійних знань.
5.	GC5, 6,7	Have an extensive knowledge of information and communication technology, used in professional activities	Be able to use information and communication technologies in the professional field that requires updating and integration of knowledge	Use informational and communication technologies in professional activity	Be responsible For the development of professional knowledge and skills
6.	GC8,9	Knowledge of types and ways of adaptation, principles of action in a new situation	Be able apply self-regulation tools.	Be able to adapt to new ones situations (circumstances) of life and activity	Make appropriate connections to achieve the result. Be responsible in a timely manner use of self-regulation methods.
7.	GC10	Know the responsibilities and ways of accomplishing the tasks	Be able determine the purpose and objectives of being persistent and honest with fulfillment of responsibilities	Make interpersonal connections for effective performance of tasks and responsibilities	Responsible for quality performance of tasks
8.	GK11	Know the tactics and strategies of communication, the laws and methods of communication behavior	Be able to make an informed decision, choose ways and communication strategies to ensure effective teamwork	Make appropriate connections to achieve the result	Carry responsibility for the choice and tactics of the communication method
9.	GC12	Know your social and public rights and responsibilities	Be able to shape your own civic consciousness, be able to act in accordance with it	The ability to convey their social and social position towards other people	Responsible for your civil position and activity
10.	SC1,2	Know the scheme of interviewing a sick child and his parents, know the algorithm of examination of a child of different ages	Be able to identify a leading clinical symptom or syndrome	Be able to interpret the results of laboratory and instrumental studies in normal and pathological children	Make appropriate connections to achieve the result. Responsible for quality performance of tasks

Requires of the course.

Pre-requisites - knowledge in the basic disciplines: medical biology, medical and biological physics, human anatomy, physiology, bioorganic and biological chemistry, microbiology and biology, microbiology and biology with which the industrial practice program integrates.

Co-requisites – basic knowledge of proreductive surgery, internal medicine, hygiene, microbiology, pathanatomy.

Post-requisites – the practice propedeutic pediatrics forms the basis for further study of clinical disciplines by the student - pediatrics, medical psychology, childhood diseases, infectious diseases, oncology, anesthesiology and intensive care, pharmacology, which involves integration with these disciplines to apply knowledge of caring for ill children in the course of further education and in their professional activities.

The course of nursing care is carried out in the pediatric ward, directly during the V-VI semesters. The childcare practice program is presented in 2 moduls, divided into 25 topics.

Structure of the course

Topic	Lectures	Practical classes	Self work
Module 1: “ Child development. Feeding young children ”			
<i>Content module 1. Periods of childhood.</i>			
1. Periods of childhood.	2	3	-
2. Peculiaritis of neonatal period.	2	3	1
Total	4	6	1
<i>Content module 2. . Physical and psychomotor development of children</i>			
3. Physical development of children. Antropometry.	0,5	3	1
4. Neurobiological development of children.	0,5	3	1
5. Evaluation of physical and neurobiological development	1	3	-
Total	2	9	2
<i>Content module 3. Breast feeding.</i>			
6. Breast feeding.	1	3	1
7. Breast feeding. Weaning introduction.	1	3	1
Total	2	6	2
<i>Content module 4. Artificial feeding.</i>			
8. Artificial feeding.	1	3	1
Total	1	3	1
<i>Content module 5. Mixed feeding.</i>			
8. Mixed feeding.	1	3	1
Total	1	3	1
<i>Content module 6. Feeding children over one year old.</i>			
9. Feeding of children elder than 1 year.	1	3	-
10. Basic metabolism. Protein metabolism in children.	1	-	1

11. Carbohydrates metabolism in children. Lipids metabolism in children.	2	-	1
12. Water and electrolytes metabolism.	1	-	1
13. Vitamins and their role for children.	1	-	1
Total	6	3	5
14. Control class	-	23	3
Total hours – 75	20	45	10
ECTS – 2.5			
MODULE 2. Anatomical and physiological features, examination methods and semiotics of diseases in children.			
<i>Content module 1. Nervous system in children.</i>			
1. Anatomic and physiologic peculiarities of nervous system in children. Methodic of clinical neurological investigation.	1	2.5	4
2. Semiotics of NS main disorders. Cerebrospinal fluid peculiarities in childhood and its changes in different pathologies (purulent and serous meningitis, hydrocephaly).	1	2.5	2
Total	2	5	6
<i>Content module 2. Skin and subcutaneous fat in children.</i>			
3. Morphological and functional peculiarities of skin and its derivatives in children. Skin and subcutaneous fat tissue inspection methodic. Semiotics of skin and SFT damages	1	2,5	2
Total	1	2,5	2
<i>Content module 3. Muscular-skeletal system in children.</i>			
4. Anatomic and physiological features, methods of examination of the musculoskeletal system in children. Semiotics of musculoskeletal disorders in children	1	2,5	2
Total	1	2,5	2
<i>Content module 4. Respiratory system in children.</i>			
5. Anatomic and physiological features, methods of examination of respiratory organs in children.	0,5	2,5	2
6. Percussion of the lungs in children. Semiotics of lesions (cough, shortness of breath, etc.) of major respiratory diseases in children. Auscultation of the lungs in children. Semiotics of respiratory diseases. Respiratory disorders and respiratory failure syndromes, the main clinical manifestations.	0,5	2,5	2
Total	1	2,5	4
<i>Content module 5. Cardiovascular system in children.</i>			
7. Anatomical and physiological features, technique of examination of cardiovascular system in children. Heart percussion in children. Auscultation of the heart in children. The main signs of damage to the cardiovascular system in children (cyanosis, bradycardia, tachycardia, etc.).	0.5	2,5	2
8. Semiotics of diseases of the cardiovascular system (endocarditis, myocarditis, pericarditis, differential	0,5	2,5	2

diagnosis of congenital and acquired heart defects). Electrocardiography, echocardiography.			
Total	1	5	4
<i>Content module 6. Blood in children.</i>			
9. Features of the blood system in children of different age groups. Methods of clinical and laboratory examination of children with lesions of the blood system. Clinical-hematological semiotics of major syndromes (anemic, hemolytic, hemorrhagic, etc.) and diseases of the blood system in children.	1	2,5	6
Total	1	2,5	6
<i>Content module 7. Digestive system in children.</i>			
10. Anatomic and physiological features, methods of examination of the digestive system in children. Semiotics of lesions of digestive organs in children. Abdominal syndrome. Semiotics of digestive tract lesions. Pilonospasm, pilorostenosis. Violation of defecation in children	1	2,5	6
Total	1	2,5	6
<i>Content module 8. Urinary system in children.</i>			
11. Anatomical and physiological features, methods of examination of organs of the excretory system in children. Semiotics of microscopic changes of urinary sediment (protein-, erythrocyte-, leukocyte- and cylinders, etc.). Syndrome of acute and chronic renal failure. Children's curation.	1	2,5	5
Total	1	2,5	5
<i>Content module 9. Endocrine system in children. Case history writing</i>			
12. Anatomical and physiological features, examination technique, semiotics of endocrine system diseases in children. Defense of the child's case history.	1		5
Total	1	2,5	5
Total hours	10	25	40
ECTS – 2,5			
Total	30	70	50

Type of work – practical classes, lectures, self work.

Type of study – daily base studying.

Studying method – verbal, ppt demonstration, simulation, research, interactive discussion.

Control methods – tests, practical cases, oral answers.

Control class – final control class.

Methods for studying results evaluation – individual tasks, dairy, tests, practical cases.

Languge of the course – English.

According to the working program, no seminars and laboratory work are planned.

Study results evaluation

Module 1: “ Child development. Feeding young children ”

№	Module 1 (current studying activity)	Max number of poitns	Min number of poitns
	<i>Content module 1</i>		
1.	Topic 1	2,5	1,5
2.	Topic 2	2,5	1,5
	<i>Content module 2</i>		
3.	Topic 3	2,5	1,5
4.	Topic 4	2,5	1,5
5.	Topic 5	2,5	1,5
	<i>Content module 3</i>		
6.	Topic 6	2,5	1,5
7.	Topic 7	2,5	1,5
	<i>Content module 4</i>		
8.	Topic 8	2,5	1,5
	<i>Content module 5</i>		
9.	Topic 9	2,5	1,5
	<i>Content module 6</i>		
10.	Topic 10	2,5	1,5
	<i>Self work</i>	5	2
	<i>Content modules + self work</i>	30	17
<i>Control class I</i>		15	10
Total		45	27

Ongoing control (physical development of children, feeding of children) is carried out at each practical training according to the specific goals of each topic.

Student readiness for the class (initial stage) is checked on the basis of the answer to 10 test tasks. At the first practical session these questions are included in the final control. For the correct answer to 9-10 tests the student receives 1 point; 8-7 correct answers – 1 point, 6 – 0,5 points, 5-0 tests 0 points. The main stage of the practical training involves the development of practical skills. The poll is rated: 1-0,5-0. To evaluate a student's assimilation of a topic, he is asked to answer a situational task. If the problem is solved correctly - the student receives 1 point. Solved with disadvantages – 0,5 points. Not Solved - 0 points. The points obtained during the class are added (points received for tests + points received for polls + points received for tasks). The recalculation of scores from the multi-scale scale is as follows: “5” (excellent) – 2,5 points, “4” (good) – 2 points, “3” (satisfactory) – 1,5points, “2” (unsatisfactory)) – 1,4-0.

Assessment of students' self work in preparation for the classroom practical exercises is carried out during the ongoing control of the topic at the appropriate classroom lesson. Assessment of

mastering topics that are presented only for independent work and not included in the topics of classroom training, is carried out during the final module control.

Individual work of the student is estimated at 5, 3, 2 points (once for the whole credit module).

The maximum number of points that a student can earn for his / her current educational activity is 45 points. It is calculated by adding up the number of points that correspond to the grade of "excellent" in each practical session (25 points for practical classes) with the maximum score for individual work (5 points) and maximum for the control class I – 15 points..

The minimum number of points that a student can earn when studying the module is calculated by adding up the number of points corresponding to the grade "satisfactory" in each class (15 points for practical classes) with the minimal score for individual work (2 points) and minimum for the control class I – 10 points and is 27 points.

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

№	Module 2 (current studying activity)	Max number of points	Max number of points
	<i>Content module 1</i>		
1.	Topic 1	2,5	1,5
2.	Topic 2	2,5	1,5
	<i>Content module 2</i>		
3.	Topic 3	2,5	1,5
	<i>Content module 3</i>		
4.	Topic 4	2,5	1,5
	<i>Content module 4</i>		
5.	Topic 5	2,5	1,5
6.	Topic 6	2,5	1,5
	<i>Змістовий модуль 5</i>		
7.	Topic 7	2,5	1,5
8.	Topic 8	2,5	1,5
	<i>Content module 6</i>		
9.	Topic 9	2,5	1,5
	<i>Content module 7</i>		
10.	Topic 10	2,5	1,5
	<i>Content module 8</i>		
11.	Topic 11	2,5	1,5
	<i>Content module 9</i>		
12.	Topic 12	2,5	1,5
	<i>Self work</i>	5	2

	<i>Content modules+self work</i>	35	20
	<i>Case history defence</i>	15	10
	Total	55	40

Ongoing control (physical development of children, feeding of children) is carried out at each practical training according to the specific goals of each topic.

Student readiness for the class (initial stage) is checked on the basis of the answer to 10 test tasks. At the first practical session these questions are included in the final control. For the correct answer to 9-10 tests the student receives 1 point; 8-7 correct answers – 1 point, 6 – 0,5 points, 5-0 tests 0 points. The main stage of the practical training involves the development of practical skills. The poll is rated: 1-0,5-0. To evaluate a student's assimilation of a topic, he is asked to answer a situational task. If the problem is solved correctly - the student receives 1 point. Solved with disadvantages – 0,5 points. Not Solved - 0 points. The points obtained during the class are added (points received for tests + points received for polls + points received for tasks). The recalculation of scores from the multi-scale scale is as follows: “5” (excellent) – 2,5 points, “4” (good) – 2 points, “3” (satisfactory) – 1,5points, “2” (unsatisfactory) – 1,4-0.

Assessment of students' self work in preparation for the classroom practical exercises is carried out during the ongoing control of the topic at the appropriate classroom lesson. Assessment of mastering topics that are presented only for independent work and not included in the topics of classroom training, is carried out during the final module control.

Individual work of the student is estimated at 5, 3, 2 points (once for the whole credit module).

The maximum number of points that a student can earn for his / her current educational activity is calculated by adding up the number of points that correspond to the grade of "excellent" in each practical session (25 points for practical classes) with the maximum score for individual work (5 points) and maximum for the case history defence I – 15 points.

The minimum number of points that a student can earn when studying the module is calculated by adding up the number of points corresponding to the grade "satisfactory" in each class (18 points for practical classes) with the minimal score for individual work (2 points) and minimum for the case history defence I – 10 points and is 30 points. Case history defence rating: (15-14, 13-12, 11-10 points respectively for the correct one, with a small error and two minor errors in the problem),

Is the final control, which is carried out upon completion of the study of discipline in the last lesson. Final control of the course is allowed for students, provided that they attend at least 75% of classrooms (lectures, seminars, labs, practical classes) with all points accumulated during the study of the discipline.

If the student has attended less than 75% (missed more than 25% of the classes) of the classroom, then he / she is considered to have failed the curriculum and the curriculum in the discipline and therefore has to re-study the discipline . Educational classes, which were missed by the student for any reason, including the illness, are acquired by him/her independently during non-classroom time according to the regulations of the department (by writing a synopsis of the academic topic, medical history, distance learning, consultations, demonstration of practical skills etc). Missing the class student demonstrates notes for the topic to the group teacher during the next academic session or after the beginning of study visits, and the group teacher upon the presence of a syllabus marks a letter "K" in the visit log and students' success in the missed topic column, without scoring. The presence of the missed lesson synopsis is a confirmation of the student's fulfillment of the curriculum.

Studying the discipline of the Department of Pediatrics №4 involves the carrying out of control class as a stage control of knowledge: control class №1 "Physical and psychomotor development of the child. Feeding young children ", case history defence.

The final control class is allowed to students who have completed the program and to not have more than 25% of absence (practical classes, lectures).

The form of the final control is standardized and includes control of theoretical and practical training. Score distribution:

20 test tasks (1 test = 1 point), 2 theoretical questions (20-17, 16-13, 12-10 points respectively for the correct one, with a small error and two minor errors in the problem), writing blood/urine analysis (20-17, 16-13, 12-10 points for correct, with a small error and two minor errors in the problem). Practical tasks demonstration (20-17, 16-13, 12-10 points (correct, with a minor error and two minor errors in the problem, respectively).

The maximum number of points that a student can receive during the preparation of the final module control is 140 points.

The total sum of points obtained after the academic year, control class I, final control class resulted in academic success of student.

The number of points from the discipline, which is accrued to students, is converted into a 4-point scale as follows:

ECTS marks	National marks
A	“5”
B, C	“4”
D, E	“3”
FX, F	“2”

Assessment of knowledge in the discipline is carried out on the appropriate scale:

Points	National marks scale	Marks	ECTS scale marks
170-200	Excellent	A	Excellent (excellent performance with only a small number errors)
155-169	Good	B	Very good (above average with a few errors)
140-154		C	Good (overall correct execution with a number of significant errors)
125-139	Satisfactory	D	Satisfactory (not bad, but with many drawbacks)
111-124		E	Enough (performance meets minimum criteria)
60-110	Unsatisfactory	FX	Unsatisfactory (recyclable)
1-59		F	Unsatisfactory (with compulsory re-study of discipline)

Politics of the course. Academic debt solving procedure.

If the student does not score a minimum score during the current control, which corresponds to a satisfactory ECTS grade of “E” and scores 111 points, then he / she automatically receives a poor grade and the discipline is not credited and credits are not accrued accordingly.

Upon receiving an unsatisfactory grade from a discipline within 60-110 points (FX), the student has the right to resubmit it twice: one - to the departmental commission with the participation of the head of the department, and last time - the commission with the participation of the head of the department and the dean. The student is offered test assignments that contain questions on all topics that include the discipline program. In case of positive passing of tests, the student receives a grade of E with a minimum number of points, namely 120 points. If you receive an unsatisfactory grade from a discipline within 1-59 points (F), the student is obliged to re-study it at extra time on a paid basis.

Reassembly of disciplines with unsatisfactory grades is carried out according to the schedule of the department, which is agreed with the Dean (interval between attempts or disciplines not less than 3 days). The courses taught in the relevant course must be completed by the beginning of the new academic year. The availability of academic debt by the start of the new academic year is the basis for

the expulsion of a student from the university for failure to comply with the requirements of the curriculum (or for the completion of an academic leave and a second course of study for health reasons).

References

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- V.G. Maidannyk. Propedeutic Pediatrics - Vinnytsia: New Book, 2012. -880 p.
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- T. Kyle. Maternity and Pediatric Nursing, 3rd edition. Lippincott Williams & Wilkins. – 2017.
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- Nelson Textbook of Pediatrics. 20th edition. – V(1,2). – 2016. – P.5315.

Internet links

- <http://zakon1.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=3611-17>
- <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>
- <http://meded.ucsd.edu/clinicalmed/>
- http://archive.nbu.gov.ua/portal/soc_gum/vzhdu/2011_57/vip_57_13.pdf
- http://archive.nbu.gov.ua/portal/chem_biol/Mosv/2012_4/data/article22.pdf
- http://archive.nbu.gov.ua/portal/Soc_Gum/Npd/2012_1/2neranov.pdf.

List of theoretical questions for the control class 1

- Definition of pediatrics as a science.
- The main periods of formation and development of pediatrics in Ukraine.
- Structure of medical-preventive establishments of Ukraine.
- Organization of work of children's somatic stationary department.
- Organization of medical and preventive care for children in pre-school institutions and boarding schools.
- Basic statistical indicators of activity of medical-preventive establishments
- Characteristics of periods of childhood.
- Characteristics of the main types of growth of the child's body.
- Concept: diagnosis, symptom, syndrome.
- Features of the neonatal period.
- Signs of fullness and prematurity.
- Physiological conditions of newborns.
- Border states of newborns.
- Definitions of concepts "physical development of the child", "acceleration of development of children", "harmony of physical development".
- The main hypotheses and mechanisms of acceleration.
- Manifestations of delay and disharmonious physical development.
- The basic anthropometric indicators necessary for an estimation of a condition of physical development of the child.
- Formulas for determining age-appropriate physical development parameters.
- Definition of psychomotor development of the child.
- Indicators of psychomotor development in children of all ages.
- Reflexes, with which help determine the psychomotor status of a child in the first year of life.
- Stages of formation of language function of the child.
- The stages of development of the visual and auditory analyzers of the child in the first year of life.
- Types of higher nervous activity of the person, the main stages of its formation.
- Factors that influence the psychomotor development of a child:
- Semiotics of disorders of neuro-mental development of children.
- The definition and benefits of natural feeding.
- The concept of "free feeding", its forms and indications for appointment.
- The value of breastfeeding for the health of the baby and mother.
- Quantitative and qualitative composition of breast milk.
- Immunobiological role of breast milk.
- The mode and nutrition of the nursing woman. Breastfeeding difficulties.
- Methods for calculating daily food intake and diet for children of all ages
- Feeding (feeding) and correction of nutrition of children who are on
- natural feeding.
- The baby's need for protein, fats, carbohydrates and calories for the natural
- feeding.
- Features of feeding preterm infants.
- The concept of artificial feeding of infants.
- Classification and characterization of milk mixtures for artificial
- breastfeeding infants.
- Guaranteed cow's milk.
- Feeding technique and criteria for evaluating its effectiveness.
- The baby's need for protein, fats, carbohydrates and calories for artificial consumption

- feeding.
- Forms and degrees of hypogalactia (primary, secondary, early and late).
- Prevention of hypogalactia and mastitis.
- Mixed feeding. Feeding techniques and rules.
- The scheme of mixed feeding of children of the first year of life.
- The baby's need for protein, fat, carbohydrates and calories when mixed feeding.
- The need for children over one year of age in proteins, fats, carbohydrates and
- Anatomic and physiological features of the gastrointestinal tract in children older than 1 year
- Features of the diet of children from 1 to 3 years
- Nutrition regimes for children from 1 to 3 years
- Daily food intake for children from 1 to 3 years
- Daily quota of products (milk, meat, bread, eggs, soft cheese, fruits, juices) in the menu of children from 1 to 3 years
- The concept of "perspective" menu

List of practical tasks and works for the control class 1.

- History of the child and his parents
- Assessment of the general condition of the sick child
- Examination of a newborn baby.
- Assessment of the physical development of the child using the methods of formulas, standard-sigma and centile tables.
- Assessment of psychomotor development of the child
- Preparing a diet for a healthy baby in the first year of life.
- Carrying out control feeding of the child of the first year of life.
- Preparation of a diet for a healthy child aged 1-3 years.

List of theoretical questions to the final control class.

- Anatomical and physiological features of the brain and spinal cord in children.
- Brain blood supply in children.
- Features of cerebrospinal fluid in children.
- Terms of myelination of cerebrospinal and cranial nerves in children.
- Unconditional reflexes of newborns, terms of their reduction.
- Characteristics of meningeal, encephalitic and convulsive syndromes.
- Changes in cerebrospinal fluid in purulent and serous meningitis.
- Semiotics of cerebral palsy.
- Semiotics of hydrocephalus, features of cerebrospinal fluid in hydrocephalus.
- Anatomical and physiological features of the epidermis, basement membrane, dermis in children.
- Features of skin in newborns.
- Features of structure and function of subcutaneous tissue in children.
- Features of sweat and sebaceous glands, hair and nails in children.
- Characteristics of different elements of the rash. List the primary inflammatory elements of the rash.
- What are the elements of the primary non-inflammatory?
- Secondary morphological elements of the rash.
- How does the skin color change in various diseases (respiratory, cardiovascular, infectious hepatitis, anemia)?
- Manifestations of various infectious diseases on the skin and mucous membranes (measles, scarlet fever, chicken pox, pseudofurunculosis, neonatal vesicle, vesiculopustulosis).
- Manifestations of exudative catarrhal diathesis on the skin.
- Manifestations of subcutaneous fat disorders (degrees of obesity, degree of hypotrophy, scleremia, scleredema, adiponecrosis).
- Characteristic signs of edema of cardiac and renal origin.
- Anatomical and physiological features of the structure of the muscular system in children.
- Muscle tone in children in the first months of life.
- Semiotics of muscle tone disorders.
- Signs of lesions of the muscular system in children (hypotension, hypertension, cerebral palsy, spasmophilia, hyperkinesis, elegy)
- Anatomical and physiological features of the bone system in children.
- Signs of damage of the bone system in rickets, scoliosis, congenital dislocation of the hip joint
- Features of blood supply to bones. The role of these features in normal and pathological. Features of the structure of periosteum, their value in normal and pathology.
- Timing of closing the thistle. Terms of formation of physiological back bends.
- Timing and sequence of teething. The formula for the number of milk teeth.
- Deformation of skull bones, chest, spine, pelvis, lower extremities in rickets.
- Embryogenesis and anomalies of respiratory system development.
- Anatomical and physiological features of the respiratory system in children depending on age.
- Respiratory rate, respiratory volume, vital capacity of the lungs in children, depending on age.
- Kinds of cough, variants of change of respiration at diseases of respiratory system.
- Types of wheezing, their mechanism of emergence
- Changes in percussion tone, mechanism of their occurrence.
- Projection of lung particles on the chest.
- Symptoms of bronchoadenitis (Arkavin, Philosopher, Roots).
- Semiotics of exudative pleurisy.
- Types of breathing in the child is normal and with pathology

- Types of rales, mechanisms of their occurrence. Crepe and noise of pleural friction.
- Bronchophone, variants of its change, voice trembling
- Semiotics of bronchopneumonia.
- Semiotics of lobar pneumonia depending on the stage of development of the inflammatory process.
- Semiotics of simple and obstructive bronchitis.
- Spirography, the main indicators of this method of study.
- Embryogenesis of the cardiovascular system and congenital anomalies of the heart and blood vessels.
- Features of blood circulation in the prenatal period.
- Anatomical and physiological features of the heart and blood vessels in children, depending on age.
- Major complaints of children with cardiovascular diseases.
- Characteristics of the heart rate in children, depending on age is normal. Possible causes of impulse disturbance, pulse deficiency
- Characteristics of cardiac, apical impulse and feline murmur
- The relative limits of the heart in children, depending on the age of normal and pathology.
- Indicators of systolic and diastolic pressure in children depending on age.
- Rules of auscultation of heart at children. Projection points of cardiac valves on the thorax and their listening points.
- Auscultation algorithm of the heart.
- Heart tones, their characteristics are normal.
- The main causes of strengthening and weakening of heart tones.
- Heart noises, their types.
- Differential diagnostics of functional and organic cardiac noise.
- Differential diagnosis of pericardial friction noise and cardiac noise.
- Main signs of myocarditis.
- The main signs of pericarditis.
- Main signs of endocarditis.
- The main differences between congenital and acquired heart defects in children.
- Features of ECG in healthy children of all ages.
- Echocardiography, method possibilities, indications.
- Anatomical and physiological features of the oral cavity, salivary glands in children.
- Phases of the act of sucking, anatomical features that facilitate this act for the infant.
- Anatomical and physiological features of the esophagus in children, determination of the length of the gastric lavage probe (gastroscopy).
- Anatomical and physiological features of the stomach in children, incl. physiological volume (newborn, 3 months, 1 year), composition of gastric juice, major enzymes, types of gastric motility.
- Anatomical and physiological features of the small and large intestine in children, incl. bowel motility.
- Anatomical and physiological features of the liver and biliary tract, pancreas in children.
- Frequency and nature of faeces of healthy children, depending on age and type of feeding according to Bristol scale
- Semiotics of gastritis.
- Semiotics of peptic ulcer.
- Semiotics of chronic cholecystitis
- Dyspepsia syndrome.
- Malabsorption syndrome
- Pylorostenosis and pylorospasm, semiotics, differential diagnosis.

- Dysentery and intussusception, semiotics, differential diagnosis.
- Anatomical and physiological features of kidneys in childhood and anomalies of development (hypospadias, epispadias, cryptorchidism, phimosis, hydrocele)
- Histological features of kidneys in children.
- Features of basic kidney function in children.
- Anatomical and physiological features of the structure of the bladder in children. Amount of urination depending on age (1 month, 1 year, preschool age).
- Anatomical and physiological features of the structure of the urinary canal in children.
- Features of general urine analysis depending on age, study by Nechiporenko, Zymnitsky, evaluation criteria.
- Semiotics of dysuric and urinary syndrome in children.
- The concept of urinary incontinence and incontinence, hematuria, leukocyturia, erythrocyturia, proteinuria, oliguria, anuria, polyuria, dysuria, hypostenuria, hyperstenuria, isostenuria, pollakuria, nocturia, stranguria, bacteriuria.
- Semiotics of cystitis.
- Semiotics of pyelonephritis.
- Semiotics of glomerulonephritis.
- Features of hematopoiesis in children.
- Anatomical and physiological features of bone marrow in childhood.
- Physico-chemical and biochemical properties of blood in children (total protein, fractions)
- Features of erythrocyte unit of blood system in children.
- Features of leukocyte blood system in children.
- Criteria for the evaluation (analysis) of peripheral blood of a healthy child, depending on age.
- The concept of leukocytosis, leukopenia, erythroblastosis, lymphocytosis, lymphopenia, neutrophilosis, neutropenia, eosinophilia, eosinopenia, monocytosis, anisocytosis, polychromatophilia, poikilocytosis.
- Clinical-hematological semiotics of anemic syndrome.
- Clinical-hematological semiotics of hemolytic syndrome.
- Clinical-hematological semiotics of hemorrhagic syndrome.
- Clinico-hematological characteristics of acute leukemia.
- Clinical-hematological characteristics of chronic leukemia.
- Features of functioning of endocrine glands in childhood.
- Anatomical and physiological features of the thyroid gland. Signs of hyper- and hypofunction of the thyroid gland.
- Anatomical and physiological features of the parathyroid gland
- Anatomic and physiological features of the pituitary gland. Semiotics of pituitary lesion.
- Anatomic and physiological features of the endocrine part of the pancreas.
- Semiotics of diabetes in children.
- Anatomic and physiological features of the adrenal glands.
- Signs of acute and chronic adrenal insufficiency.
- Anatomical and physiological features of thymus in children
- Features of the state of cellular and humoral units of immunity
- Basic indicators of an immunogram in pediatric
- Features of energy metabolism in children, semiotics of disorders.
- Features of protein metabolism in children, semiotics of disorders.
- Features of carbohydrate metabolism in children, semiotics of disorders.
- Features of lipid metabolism in children, semiotics of disorders.
- Features of water-electrolyte exchange in children, semiotics of disorders.
- Vitamins, their importance for the development of the baby.
- Semiotics of hypo- and hypervitaminosis in children.

List of practical tasks and skills before the final control class

- Collection of history of the disease in children and parents.
- General and special examination of the child for evaluation of the nervous system.
- Investigation of the function of I-XII pairs of cranial nerves.
- Checking of surface, deep reflexes and sensitivity (temperature, vibration, pain), musculoskeletal sensation in children
- Assessment of the state of the autonomic nervous system
- Study of coordination of movements.
- Checking for meningeal symptoms
- Examination of pathological reflexes in children.
- Auxiliary methods (instrumental, laboratory) in the study of the nervous system.
- Assessment of cerebrospinal fluid, interpretation of changes.
- Examination of skin and mucous membranes in children.
- Subcutaneous fat examination.
- Palpation of the skin and subcutaneous tissue: determination of humidity, temperature and
- Skin fold thickness, subcutaneous thickness, and the like.
- Assessment of the degree of obesity, hypotrophy.
- Inspection of bones and muscles.
- Oral examination, recording of dental formula.
- Palpation of bones and muscles.
- Assessment of the status of the thymus.
- Assessing the physique of the child.
- Tests for increased muscular excitability.
- Muscle tone assessment, interpretation.
- Studies for the establishment of congenital hip dislocation.
- General and special examination of the child with respiratory diseases.
- Calculation of respiratory rate in a child.
- Palpation of the chest in a child with respiratory diseases.
- Comparative lung percussion.
- Topographic lung percussion.
- Percussion symptoms of bronchodinitis.
- Auscultation of the lungs.
- Evaluation of auscultatory phenomena.
- Interpretation of spirometry data in various diseases of the bronchopulmonary system.
- General and special examination of the cardiovascular system.
- Evaluation of the characteristics of the baby's pulse.
- Palpation of cardiac, apical impulses.
- Palpation of vessels.
- Determination by percussion of relative and absolute boundaries of the heart.
- Measurement and interpretation of blood pressure in children of all ages.
- Auscultation of the heart.
- Recording of an electrocardiogram, calculation of intervals, teeth of an ECG, interpretation.
- Recording and interpretation of phonocardiogram.
- Assessment of circulatory failure of a sick child.
- General and special examination of the child with diseases of the digestive system.
- Superficial and deep palpation of the abdomen in children.
- Palpation of the liver.
- Percussion and auscultation of the abdominal cavity in children.

- Palpatory-percussion symptoms of appendicitis.
- Palpatory-percussion symptoms of cholecystitis.
- Palpatory-percussion symptoms of gastroduodenitis.
- Palpatory-percussion symptoms of pancreatitis.
- Evaluation of defecation in children according to the Bristol scale
- Review of the urinary system in children.
- Palpation of the kidneys and bladder.
- Percussion of the bladder, a symptom of Pasternatsky.
- Evaluation and interpretation of general urine analysis according to age, results
- urine analysis by Nechiporenko, Zymnitsky.
- Review of blood system in children.
- Palpation of the spleen.
- Bone percussion in children with diseases of the blood system
- Interpretation of changes in general blood test.
- Examination, palpation of the thyroid gland, identification of signs of hyper- and hypofunction of the thyroid gland.
- Establishment of signs of hyper- and hypofunction of parathyroid glands
- Determination of diabetes in children.
- Determination of signs of hyper- and hypofunction of the adrenal glands.
- Method of assessment of sexual development of the child (stages by J.M.Tanner).
- Examination and palpation of lymph nodes in children.

02.03.2020 Protocol №15

Recommended

at the methodical meeting of the Department of Pediatrics No. 4

Head of the Department, Academician of the National Academy of Medical Sciences of Ukraine

Professor _____

V.G. Maidannyk

«_____» _____ 2020

Teacher _____

«_____» _____ 2020