

BOGOMOLETS NATIONAL MEDICAL UNIVERSITY
Department of Pediatrics №4

**SYLLABUS OF THE ACADEMIC DISCIPLINE
«FACULTY PEDIATRICS»**

for students of IV year of study at higher medical educational institution of the Ministry of Health 4th accreditation degree according to the Program of second (master's) level of "Medicine" (222) specialty

Field of knowledge: 22 «Health care»

High education level: institution of IV-th level of accreditation
Educational program: second master's level

Annotation of the course:

Semesters: 7, 8.

Module's content: total quantity of hours – 135, lectures – 20 hrs. , seminars/practical classes: – 60 hrs.; individual work –55 hrs.; credits – 4,5.

Educational discipline content

Indexes	Field of knowledge, direction of preparation, educational and qualifying level	Characteristics of educational discipline	
		Full-time study	Distance study
Number of credits – 4,5	Field of knowledge 22 «health care»	Normative	
	Direction of preparation Medicine		
Number of modules – 1. The most common somatic diseases in children	Specialty: 222 Medicine	Year of preparation	
		4th	-
Content modules number – 6		Semester	
		7th, 8th	-
Individual task (case report composition)		Lectures	
Total hours – 135		20 hrs.	
	Practical classes, seminars		
	60 hrs.		
Week hours for full-time study: auditory – 80	Educational and qualifying level: second (master's)	-	
		-	
		-	

individual– 55	Laboratory classes	
	-	-
	Individual work	
	55 hrs.	-
	Individual tasks:	
	Supervision of patients at in-patient's department. Composition and protection of the case report	
	Types of control:	
	Final Module Control	Instruments of control: Tests, situational tasks, standardized list of practical skills, case report, medical records management

Notes. Auditory load – 59,3 %, individual work – 40,7 %.

Aim of the course – achievement/gaining/mastering of competences: pediatrics' basis mastering.

PEDIATRICS — (Greek “*paidos*” — child + “*iatreia*” — treatment) is a part of medicine, studying anatomy and physiology of the child's organism at different age periods. It occupies children's diseases and care of healthy and sick children of different ages, studies reasons and mechanisms of development of childhood pathologies and works out the methods of their correction. At present pediatrics comprises all aspects of life and development of children. Pediatrics is a field in medical science, the basic aim of which is preservation or restoration of the child's health directed into full realization of her inherited vital potential.

«Faculty pediatrics» is a section of pediatrics studying reasons and mechanisms of development of childhood diseases and works out the methods of their correction.

1. Aim and task of «faculty pediatrics» discipline mastering (further - discipline)

The basic aim of studying „Faculty pediatrics” discipline is mastering of the pediatrics basis. Final aims are based on the grounds of studying aims estimated by the educational and professional program (EPP) and formed on the basis of professional preparation of the physician according to the block of its content module which is the ground of studying discipline content. Description of the aims is made through the skills in a form of target tasks (actions). Concrete aims in the form of concrete skills (actions) and target tasks providing achievement of final aim of discipline study are made on the basis of module's or final module control's final aims.

Thus, the aim of discipline study is a system forming element, playing decisive role in organization and fulfillment of the whole process of study. The content of the essential studying discipline “Faculty pediatrics” corresponds to the studying process logic and professional and practical preparation system.

Tasks of mastering discipline: studying of basic symptoms and complexes of symptoms of the most common nosological forms of childhood diseases, modern methods of their diagnostics, treatment and prevention principles, directed into formation of correspondent competences.

Results of discipline study (to know, to be able to, to master):

Student should know:

- Etiology, pathogenesis, typical (classical) clinical signs in children of different age, modern methods of diagnostics, treatment and prevention of the most common nosological forms of childhood illnesses.

Student should be able to:

- Detect basic symptoms and complexes of symptoms of the most common childhood diseases;
- Estimate standard methods of examination directed into verification (confirmation, substantiation) of the diagnosis;
- Carry out differential diagnostics in a group of diseases with similar symptoms;
- Make previous diagnosis, plan the list of necessary additive examinations for specifying the diagnosis;
- Make the diagnosis according to the modern classification;
- Work out the plan of treatment taking into account peculiarities of course of the disease;
- Choose and prescribe medicamentous and non-medicamental treatment taking into account child's age;
- Carry out rehabilitation measures.

Student should master:

- Skills of clinical inspection of children of different age for revealing of pathological symptoms typical for the most common childhood diseases;
- Skills of composition of standard inspection plan (clinical, laboratory and instrumental examinations);
- Interpretation of the results of laboratory and instrumental investigations;
- Algorithm of making primary and final complete clinical diagnosis;
- Calculation of appropriate doses of main drugs used in pediatrics dependently on the child's age;
- Skills of preventive measures carrying out in the most common childhood diseases in children of different age.

Discipline belongs to educational section C3 «Professional cycle»

Discipline study is directed into formation of the following common cultural (CC) and professional (PC) competences in students:

As a result of discipline study the student should be able to demonstrate:

1. Ability and readiness to analyze socially important problems and processes, to implement in practice basic methods of humanitarian, natural-scientific, medical-and-biological and clinical sciences in different types of professional and social activity (situational tasks colloquy, individual tasks);
2. Ability and readiness to create systemic approach to medical information analysis, being based on different principles of evidence based medicine (situational tasks colloquy, individual tasks);
3. Ability and readiness to carry out and interpret the interviewing, physical examination, clinical examination and results of modern methods of additive diagnostics (situational tasks colloquy, individual tasks, control in the simulation class, control of student's work beside the patient's bed);

4. Ability and readiness to carry out preventive measures directed into prophylaxis of the most common childhood diseases, fulfill common measures directed into cultivating of healthy life style taking into account risk factors, recommend adequate feeding to a healthy child (writing or computer ICQ, situational tasks colloquy);

5. Ability and readiness to make diagnosis on the basis of the results of biochemical tests of biological fluids taking into account the laws of pathogenesis of pathology in organs, systems and the whole organism in general (writing or computer ICQ, situational tasks colloquy);

6. Ability and readiness to analyze the regularities of functioning of certain organs and systems, to implement the knowledge of anatomic and physiological peculiarities, basic methods of clinical and paraclinical inspection and child's functional condition evaluation for timely diagnostics of diseases and pathological conditions (writing or computer ICQ, situational tasks colloquy);

7. Ability and readiness to detect basic pathological symptoms and syndromes using the knowledge of medical-and-biological and clinical disciplines basis, taking into account the laws of pathogenesis in organs, systems and the whole organism, to analyze the regularities of functioning of different organs and systems in different diseases and pathological conditions, to implement an algorithm of diagnosis (main, accompanying, complications) diagnosis according to the ISCD (International statistic classification of diseases and related health problems) (writing or computer ICQ, situational tasks colloquy, control in simulation class, control of work with patients and control of case reports composition);

8. Ability and readiness to analyze and interpret the results of modern diagnostic technologies in different age and gender groups of children taking into account their physiological peculiarities (writing or computer ICQ, situational tasks colloquy);

9. Ability and readiness to prescribe adequate therapeutic correction according to the diagnosis, to fulfill an algorithm of drug and non-medicamental treatment choice for children with somatic and noninfectious diseases (writing or computer ICQ, situational tasks colloquy, individual tasks);

10. Ability and readiness to prescribe and implement basic principles of treatment feeding organization to children with different diseases (writing or computer ICQ, situational tasks colloquy, individual tasks).

Forms of controlling instruments which can be used during mastering competences: colloquy, control work, situational tasks colloquy, writing or computer ICQ, typical calculations, individual tasks, essays, presentations.

Essential educational prerequisites

Prerequisites

1. Bioethics

Knowledge: moral and legal norms implemented in the society and deontology principles;

Skills: to realize ethical and deontological aspects of medical activity in communication with colleagues, mid and junior medical staff, children, their parents and other relatives;

2. Jurisprudence

Knowledge: basis of legislation of Ukraine, laws and normative-and-legal acts in the system of health care of the Ukrainians;

Skills: to fulfill activity according to implemented in the society legal norms, to adhere to laws and normative-and-legal acts in the work with confident information, to keep the medical secrecy;

3. Biochemistry

Knowledge: basic biochemical processes in child's organism in norm and pathology;

Skills: to interpret the results of biochemical analyses of different biological sources;

4. Histology, embryology, cytology

Knowledge: basic regularities of tissues, organs and systems development in physiological and pathological conditions, critical periods of their embryogenesis, possible violations of the development;

5. Microbiology, virology

Knowledge: human's essential microflora, basic causative agents of infectious diseases;

Skills: to interpret the results of bacteriological, virological, serological tests of different biological sources of the organism;

6. Immunology

Knowledge: basic regularities of the immunological response in physiological and pathological conditions;

Skills: to interpret the results of examination of the patient's immune status;

7. Pharmacology

Knowledge: drugs of the basic pharmacological groups, their pharmacodynamic and pharmacokinetics in physiological and pathological conditions, adverse medical reactions;

Skills: to prescribe drugs in basic childhood diseases; to calculate the doses of basic drugs in different diseases of children of different age;

8. Pathomorphology, clinical pathomorphology

Knowledge: pathomorphological peculiarities in basic diseases, age peculiarities in children;

Skills: to interpret the results of pathomorphological tests;

9. Pathophysiology, clinical pathophysiology

Knowledge: basis of human's pathology, pathogenesis of basic groups of diseases;

Skills: to analyze regularities of functioning of different organs and systems in different diseases and pathological processes;

10. Hygiene

Knowledge: basic sanitary and hygienic norms;

Skills: to interpret the results of investigations of the environmental factors, their influence on healthy and sick organism; to evaluate environmental factors unfavorable influence on the child's organism and pathological process course, to work out preventive measures and assess adequacy of the feeding ration and its supply with basic nutrients.

Co-requisites:

1. The basis of children's health formation

Knowledge: basic regularities of child's growth and development and basic age peculiarities;

Skills: assessment of physical and neuro-psychical development of children of different age; assessment of a healthy child.

2. Propaedeutics of childhood illnesses

Knowledge: basic symptoms and syndromes in the most common diseases in children;

Abilities: interpretation of child's objective examination results;

Skills: objective examination (palpation, percussion, auscultation) in children;

3. Hospital pediatrics

Knowledge: etiology and pathogenesis of basic group of diseases and certain nosological forms, their clinical manifestations, typical and complicated course in children of different age, modern methods of diagnostics, principles of differential diagnostics, treatment and prophylaxis;

Abilities: to differentiate main symptoms and syndromes of diseases; to prescribe standard examination methods directed into verification of main and accompanying diagnosis; to carry out differential diagnostics in the group of diseases with similar symptoms; to interpret the results of additive examinations; to make the preliminary diagnosis; to prescribe necessary additive

investigations for verifying the diagnosis; to make the final diagnosis according to classification; to prescribe the plan of treatment accounting the course of disease and children's age peculiarities; to prescribe the program of rehabilitation;

Skills: clinical inspection of children of different age with different diseases of basic group of nosologies in physiological and complicated course; composition of the plan of standard (clinical and paraclinical) examination of children of different age; interpretation of the results of modern laboratory and instrumental examinations; creating an algorithm of making preliminary and completed final clinical diagnosis; prescription of modern treatment programs including dietary correction, medicamental and non-medicamental methods of treatment; providing an emergent medical aid in life dangerous conditions; mastering theoretical and practical basis for further studying on the stage of postgraduate education.

4. Infectious diseases in children

Knowledge: epidemiology, etiology, pathogenesis, clinical picture, methods of diagnostic and treatment of basic infectious and parasitic diseases in children;

Abilities: interpretation of the results of objective and laboratory-and-instrumental examination in basic infectious diseases in children;

Skills: composition of plan of inspection, differential diagnostic, treatment, primary and secondary prevention of the most common infectious diseases in children;

5. Pediatric surgery

Knowledge: etiology, pathogenesis, clinical picture, peculiarities of course and possible complications of the most common pediatric surgical pathology in children; modern methods of its diagnostic and treatment; indications for surgical treatment;

Abilities: interpretation of the results of clinical and paraclinical inspection in surgical pathology in children;

Skills: composition of plan of examinations, differential diagnostics and treatment of children with surgical pathology, supervision in pre- and postoperative periods.

6. Outpatient and urgent pediatrics

Knowledge: principles of preventive medicine, organization of medical aid on outpatient stage, outpatient supervision and prevention in basic childhood diseases; etiology pathogenesis, peculiarities of clinical picture and diagnostics of the main life threatening conditions, principles of an emergent medical aid and urgent treatment of children on pre-hospital stage;

Abilities: organization of supervision and carrying out of preventive measures for healthy and sick children, in organized collectives; interpretation of the results of additive laboratory and instrumental investigations in acute and exacerbated chronic pathologies on pre-hospital stage; emergent conditions diagnostics and treatment;

Skills: working with medical documentation in outpatient medical establishments, outpatient supervision of healthy and sick children, carrying out of sanitary and anti-epidemic measures in children's collectives, vaccination, first medical aid in emergent conditions in children, diagnostic plan composition, differential diagnostics and treatment of acute and exacerbated chronic diseases in children on pre-hospital stage.

7. Medical rehabilitation

Knowledge: basis of rehabilitation in different pathological conditions in children;

Abilities: working out of rehabilitation programs in different organs and systems diseases, assessment of their effectiveness;

Skills: rehabilitation programs composition in children with different diseases.

Postrequisites:

1. Health care system organization;

Knowledge: basis of organization of the health care system, basic parameters of medical establishments' effectiveness, demographic indexes and methods of their calculation;

Abilities: to assess the dynamics of demographic indexes and effectiveness of medical establishment functioning;

Skills: working with medical documentation, its correct composition, statistic procession of medical data, expertise of temporary disability.

2. Dermatovenerology

Knowledge: etiology, pathogenesis, peculiarities of clinical picture in skin and its derivatives' diseases in children;

Abilities: to interpret objective and laboratory and instrumental examinations results in skin and its derivatives' diseases in children;

Skills: inspection and treatment of children with skin and its derivatives' diseases in children;

3. Neurology, medical genetics

Knowledge: etiology, pathogenesis and peculiarities of clinical picture in pathology of nervous system and congenital diseases;

Abilities: to interpret the results of clinical and additive examinations in nervous system diseases and genetic pathology;

Skills: inspection of children with pathology of nervous system and congenital diseases; prescription of treatment.

4. Psychiatrics, medical psychology

Knowledge: etiology, pathogenesis, peculiarities of clinical picture of psychical diseases in children of different age groups;

Abilities: to assess the child's cognitive functions, her psychical health; to analyze interpersonal (including parents-and-children) interactions;

Skills: assessment of children with psychical diseases and borderline personality disorders, prescription of treatment and psychological consultation.

5. Otorhinolaryngology

Knowledge: etiology, pathogenesis, peculiarities of clinical picture in different diseases of ENT organs in children;

Abilities: to interpret the results of objective and additive examination in children with ENT organs pathology;

Skills: inspection of children with ENT organs pathology and prescription of appropriate treatment.

6. Ophthalmology

Knowledge: etiology, pathogenesis, peculiarities of clinical picture in different diseases of eyes in children;

Abilities: to interpret the results of objective and additive examination in children with eyes pathology;

Skills: inspection of children with eyes diseases and prescription of an appropriate treatment.

7. Internal diseases propaedeutics, radial diagnostics

Knowledge: main symptoms and syndromes in the most common adulthood diseases, basic methods of radial diagnostics, basic rules of preparation of patients for radial diagnostics carrying out;

Abilities: to interpret the results of objective examination of adult patients and results of radial diagnostics in children;

Skills: objective examination (palpation, percussion, auscultation) of adult patients, prescription of radial diagnostics and preparation to it.

8. Obstetrics and gynecology

Knowledge: diagnostics and supervision of physiological and pathological pregnancy, diagnostics and treatment of its complications, organization of medical aid to parturient woman, indications for cesarean section, peculiarities of physiological and pathological course of postpartum period; etiology, pathogenesis, peculiarities of clinical course and possible complications of the most common gynecological pathology in women;

Abilities: assessment of fetus' and newborn's condition, interpretation of prenatal diagnostics results; interpretation of the results of basic objective and additive diagnostics in main gynecological diseases in girls;

Skills: pre- and intranatal diagnostics of fetal pathology and diseases of a newborn; composition of diagnostic plan, differential diagnostics and treatment in the most common gynecological diseases in girls.

9. Clinical pharmacology

Knowledge: drugs from basic pharmacological groups, their pharmacodynamic and pharmacokinetics in pathological conditions, adverse medical reactions and interactions;

Abilities: to prescribe drugs in main diseases;

Skills: calculation of doses of main drugs used in various diseases of childhood; prescription of complex drug treatment.

10. Phthisiology

Knowledge: epidemiology, pathogenesis, peculiarities of clinical picture, methods of diagnostics and treatment of main forms of tuberculosis of different localization in children and adults;

Abilities: interpretation of the results of objective and additive examination in tuberculosis in children and adults;

Skills: composition of the plan of inspection, differential diagnostics, medicamental and surgical treatment, primary and secondary prophylaxis of tuberculosis in children and adults;

11. Dentistry

Knowledge: etiology, pathogenesis and peculiarities of clinical picture in oral cavity diseases in children;

Abilities: to interpret the results of objective and additive examination in children with oral cavity diseases;

Skills: inspection of children with oral cavity diseases, prescription of therapy.

12. Oncology, radial therapy

Knowledge: epidemiology, pathogenesis, peculiarities of clinical picture, diagnostic methods and modern protocols of treatment of main oncological diseases in children;

Abilities: to interpret the results of objective and additive examination in children with oncologic diseases;

Skills: composition of diagnostic plan, differential diagnostics carrying out, chemotherapy, radial therapy carrying out and surgical treatment in basic oncologic diseases in children.

Content of the discipline

Topic 1. Disorders of neuro-intestinal interactions in children (Functional gastrointestinal disorders in children of early age). Definition, classification, etiology, pathogenesis and clinical picture of functional gastrointestinal disorders in children of early age. Treatment, prevention and prognosis of functional gastrointestinal disorders in children.

Topic 2. Rickets. Hypervitaminosis D. Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment and prevention of rickets. Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment and prevention of hypervitaminosis D; emergency and prognosis. Definition, classification, clinical picture, treatment and prevention of malnutrition in children.

Topic 3. Acute respiratory infections of an upper parts of the respiratory system in children. Definition, etiology, pathogenesis, clinical picture, diagnostics, treatment and prevention of acute nasopharyngitis, acute laryngotracheitis and acute tracheitis in children. Clinical picture and emergency in acute laryngeal stenosis, hyperthermic syndrome and convulsions.

Topic 4. Acute bronchitis and pneumonias in children.

Bronchitis: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment and prevention of different types of bronchitis. Pneumonias: definition, classification, etiology, contributing factors, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment and prevention; indications for hospitalization, methods of rehabilitation. Diagnostics and emergency in the respiratory failure in children.

Topic 5. Bronchial asthma and polynosis in children: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment and prevention; methods of specific immune therapy. Emergent aid in asthmatic status.

Topic 6. Atopic dermatitis, allergic rhinitis, urticaria, food allergy, Quincke's edema: definition, classification, etiology, triggers, pathogenesis, clinical picture, diagnostics, differential diagnostics, treatment and prevention. Atopic marsh. .

Topic 7. The most common congenital heart defects in children.

Factors, leading in CHD formation. Etiology, pathogenesis, classification, hemodynamics, typical clinical manifestations, laboratory and instrumental methods of examination, differential diagnostics, treatment tactics and prognosis of different congenital heart defects in children. Blood circulation incompetence: classification, clinical manifestations, basic methods of treatment, terms and basic indications for surgical correction, prognosis, rehabilitation. Secondary prevention of infectious endocarditis.

Topic 8. Inflammatory and non-inflammatory diseases of heart in children. Acute rheumatic fever in children. Disorders of heart rhythm and conduction in children. Carditis in children: definition, classification, etiology, pathogenesis, clinical picture, diagnostic, treatment, primary and secondary prevention and prognosis. Cardiomyopathies in children: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment and prognosis.

Topic 9. Juvenile idiopathic (rheumatoid) arthritis and reactive arthropathies in children. Definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment, rehabilitation, prognosis.

Topic 10. Functional and organic diseases of esophagus and stomach in children (Functional disorders of nausea and vomiting)

1. Cyclic vomiting syndrome (CVS)
2. Functional nausea and functional vomiting
 - a. Functional nausea
 - б. Functional vomiting
3. Rumination syndrome (regurgitation)
4. Aerophagia

Functional disorders of the abdominal pain

1. Functional dyspepsia
 - a. Postprandial-distress syndrome
 - б. Epigastric pain syndrome

Gastroesophageal reflux, duodenogastral reflux, functional dyspepsia, gastritis, stomach's and duodenal ulcer: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment, prevention in children of different age.

Topic 11. Functional and organic biliary diseases in children. Pancreatic diseases in children.

Biliary dysfunction (gall bladder and sphincter of Oddi dysfunction, cholecystitis, cholecystocholangitis, cholelithiasis. Clinical manifestations, diagnostics, treatment and prevention of gall bladder and sphincter of Oddi dysfunctions and organic diseases of the biliary system. Exocrine pancreatic insufficiency: definition, etiology, pathogenesis, clinical picture, diagnostics and treatment. Acute and chronic pancreatitis: etiology, pathogenesis, clinical manifestations, diagnostics, treatment, prevention and prognosis.

Topic 12. The most wide spread intestinal diseases in childhood.

II. Functional disorders of the abdominal pain

1. Functional dyspepsia
 - a. postprandial distress-syndrome
 - б. epigastric pain syndrome
2. Irritable bowel syndrome (IBS)
3. Abdominal migraine
4. Functional abdominal pain

III. Functional disorders of defecation

1. Functional constipation
2. Encopresis without constipation
3. Irritable bowel syndrome: definition, etiology, pathogenesis, clinical manifestations, diagnostics, treatment, prevention and prognosis.
4. Nonspecific ulcerative colitis and Krohn's disease in children: etiology, pathogenesis, clinical picture, diagnostics, treatment and prognosis.
5. Abdominal migraine
6. Functional abdominal pain

III. Functional disorders of defecation

1. Functional constipation
2. Encopresis without constipation.

Irritable bowel syndrome, nonspecific ulcerative colitis, Krohn's disease): definition, etiology, pathogenesis, clinical manifestations, diagnostics, treatment and prognosis).

Topic 13. Urinary system infections in children.

Definition, classification of the urinary system infections in children, differential diagnostics of infections of upper and lower urinary tracts. Etiology, pathogenesis, clinical picture, diagnostics, treatment, prevention and prognosis of cystitis in children. Pyelonephritis in children:

definition, etiology, pathogenesis, classification, clinical manifestations, diagnostics, treatment, prevention and prognosis. Dysmetabolic nephropathies in children: definition, classification, etiology, pathogenesis, clinical picture, diagnostics, treatment, prevention and prognosis.

Topic 14. Glomerulonephritis in children. Chronic renal failure in children.

Glomerulonephritis: definition, classification, etiology, pathogenesis, clinical manifestations, diagnostics, treatment, prevention and prognosis. Chronic renal failure: risk factors, etiology, pathogenesis, stages, clinical picture, diagnostics, treatment, prevention and prognosis.

STUDYING CLASSES TYPES

1. EDUCATIONAL DISCIPLINE STRUCTURE

Content modules and topics	Lect.	Pract.	SI W	Ind.work
1. Functional gastrointestinal disorders (violation of cerebro-intestinal interaction – Rome criteria IV) in children of early age	–	4	2	Examination of a sick child, composition and protection of the student’s case report
2. Rickets. Hypervitaminosis D.	2	4	2	
3. Malnutrition in children	–	–	3	
4. Acute respiratory infectious diseases of upper respiratory pathways in children. Acute bronchitis in children	2	4	2	
5. Pneumonias in children	2	4	2	
6. Atopic dermatitis and allergic rhinitis in children. Urticaria, gastrointestinal allergy in children.	–	4	2	
7. Bronchial asthma in children	2	4	2	
8. The most wide spread congenital heart defects in children	2	4	2	
9. Inflammatory and non-inflammatory heart diseases in children. Acute rheumatic fever. Disorders of heart rhythm and conduction in children.	–	4	2	
10. Juvenile idiopathic (rheumatoid) arthritis and reactive arthropathies in children	–	4	2	
11. Functional and organic diseases of the esophagus and stomach in elder children	2	4	2	
12. Functional and organic biliary diseases in children	2	4	2	
13. The most wide spread intestinal diseases in children	2	4	2	
14. Chronic liver diseases in children	–	–	3	
15. Absolute exocrine pancreatic insufficiency (cystic fibrosis) in children	–	–	3	
16. Urinary tracts infections in children	2	4	2	
17. Glomerulonephritis, chronic renal failure in children	2	4	2	
18. Dysmetabolic nephropathies in children	–	–	3	
Individual work of students. Supervision of patients in pediatric in-patient department, composition of student’s case report or presentation according to the educational plan			6	

Preparation to final module control		4	9
Total hours – 135	20	60	55

2. TOPICS OF LECTIONS
The most wide spread somatic diseases in children

№	Topic	Hours
1	Rickets. Malnutrition in children	2
2	Acute respiratory infections of upper respiratory ways in children Acute bronchitis in children	2
3	Pneumonias in children	2
4	Bronchial asthma in children	2
5	The most common congenital heart defects in children	2
6	Functional and organic gastroduodenal diseases in children	2
7	Functional and organic biliary diseases in children	2
8	Intestinal diseases in children	
9	Urinary tract infections in children	2
10	Glomerulonephritis, chronic renal failure in children	2
	Total hours	20

Note: lection = 2 hours (with 10 min. interval)

3. TOPICS OF PRACTICAL CLASSES
The most wide spread somatic diseases in children

№	Topic	Hours
1.	Functional gastrointestinal disorders (violation of cerebro-intestinal interaction – Rome criteria IV) in children of early age	4
2.	Rickets. Hypervitaminosis D	4
3.	Acute respiratory viral diseases in children	4
4.	Acute bronchitis. Pneumonias in children	4
5.	Atopic dermatitis and allergic rhinitis in children. Urticaria. Food allergy in children	4
6.	Bronchial asthma in children	4
7.	The most common congenital heart defects in children	4
8.	Inflammatory and inflammatory heart diseases in children. Acute rheumatic fever. Disorders of heart rhythm and conduction in children	4
9.	Juvenile idiopathic (rheumatoid) arthritis and reactive arthropathies in children	4
10.	Functional diseases of esophagus and stomach in children	4
11.	Functional and organic biliary diseases in children	4
12.	The most common intestinal diseases in childhood	
13.	Urinary tract infections in children	4
14.	Glomerulonephritis and chronic renal failure in children	4
15.	Final module control	4
	Total hours	60

Notes: practical class = 4,5 hours (with 30 min. interval)

4. INDIVIDUAL WORK OF STUDENT (IWS)
The most common somatic diseases in children

№ п/п	Topic	Hours	Control forms
1	Chronic liver diseases in children	3	Final control
2	Malnutrition in children	3	
3	Absolute exocrine pancreatic insufficiency (cystic fibrosis)	3	
4	Dysmetabolic nephropathies in children	3	

5. Individual tasks: supervision of patients, composition and protection of student's case report

6. Methods of study: tests, situational tasks, practical skills according to standardized list, case report, medical documentation

7. FORMS OF CONTROL

№	Topic	Hours	Forms of control
1	Preparation for practical classes	28	Current control on practical classes
2	Working on topics which are not included into the plan of auditory classes: – Chronic liver diseases in children – Malnutrition in children – Absolute exocrine pancreatic insufficiency in children (cystic fibrosis) – Dysmetabolic nephropathies in children	3 3 3 3	Final control
3	Individual work of student: a) supervision of patients, composition and protection of student's case report	6	Final control
4	Preparation for module control	9	Final control
	Total hours	55	

8. DISTRIBUTION OF POINTS
The most common somatic diseases in children

Topic	Min/Max points
Topic 1. Functional gastrointestinal disorders (violation of cerebro-intestinal interaction – Rome criteria IV) in children of early age	2/5
Topic 2. Rickets. Hypervitaminosis D in children	2/5
Topic 3. Acute respiratory viral infections of upper respiratory ways in children	2/5
Topic 4. Acute bronchitis in children. Pneumonias in children	2/5
Topic 5. Atopic dermatitis, urticaria and allergic rhinitis in children	2/5
Topic 6. Bronchial asthma in children	2/5

Topic 7. The most common congenital heart defects in children	2/5
Topic 8. Inflammatory and non-inflammatory heart diseases in children. Acute rheumatic fever in children	2/5
Topic 9. Juvenile (idiopathic) rheumatoid arthritis in children	2/5
Topic 10. Functional and organic esophageal and stomach diseases in elder children	2/5
Topic 11. Functional and organic biliary diseases in children	2/5
Topic 12. The most wide spread functional and organic intestinal diseases in children	2/5
Topic 13. Urinary tract infections in children	2/5
Topic 14. Glomerulonephritis and chronic renal failure in children	2/5
Individual work of student – supervision of patients and composition of student’s case report	2/5
Total current studying activity	80
Final control	120
Sum of points for discipline (max)	200

Note: For mastering the discipline a student receives as well scores («5», «4», «3», «2») according to traditional scale.

Maximal quantity of points for current activity makes 80 points. Students are allowed to pass final control with any quantity of points for current activity unless the quantity of missed classes and lectures makes more than 25% of total hours.

Individual work is performed once and includes: supervision of patients in the in-patient pediatric department and composition of either student’s case report or presentation on of the topics from educational plan. For individual work the student receives traditional mark («5», «4», «3» or «2») which are correspondingly converted into 40, 30, 20 or 0 points.

V. DISCIPLINE ASSESSMENT

Forms of control and system of assessment are performed according to the requirements of the discipline’s program and instructions for students studying activity assessment system in credit-and-module system of educational process organization, approved by the Ministry of Health of Ukraine (2005).

Total mark for discipline is estimated as a sum of marks for current activity (in points) and marks for final module control (in points) and represents theoretical knowledge and practical skills, included into the list estimated by the program.

Maximal quantity of points given to student for mastering each module credit makes 200, including marks for current activity (80 points – 40%) and final module control marks (120 points – 60%).

Current control is carried out on each practical class according to concrete aims of each topic. Evaluating studying activity of a student it is preferred to use standardized methods of control such as testing, structured writing works, control of practical skills fulfillment. Each section of practical class is evaluated in traditional marks («5», «4», «3», «2»), out of which the teacher makes an average mark at the end of the class and transforms the average mark in corresponding points according to a scale foreseen by a program approved before the beginning of discipline study. If an average traditional mark at the end of the class makes “2”, it is converted into “0” points.

Evaluation of current studying activity of a student on practical classes is fulfilled according to the following principle. At the beginning of a class a teacher is carrying out assessment of the home task which has been given at the end of a previous class (so called working notebook). Every student should fulfill 10 tests. During basic part of a class discussion of the topic is carried out. Practical section of a class presupposes working in the wards with patients which

include collecting of the anamnesis, examination of a patient, training of practical skills, interpretation of the results of laboratory and instrumental examinations, making the diagnosis and prescription of treatment. At the end of the class the student should complete one situational task.

The student may improve his knowledge and skills which have been assessed for negative marks during the next class or during completing module control without receiving points for it.

During studying the discipline the departments may carry out control works (as a stage control of knowledge; control works can't be reworked; control work is introduced into topical plan of practical classes.

Students may get acquainted with the results of written work and appeal to the head teacher of the department or the head of the department.

Students' individual work assessment is carried out during current controlling of the topic on the appropriate practical class.

Assessment of mastering those topics which are included into individual work only and are absent in the list of practical classes is controlled during final module control.

The following items are also assessed: written studying works, composition of which are supposed by the educational program and educational topics included into extra auditory topics plan.

Departments also give extra points for participation and receiving prize places on Olympic games on pediatrics.

Discipline studied during semester and year is divided into parts after completing of which a teacher summarizes the result as a stage control of student's current activity making an appropriate note in the register of practical classes attendance and current study results.

Sum of points collected by a student in the result of current study is a compound of total mark for discipline.

Maximal sum of points for current activity makes 80.

Current control is made on the basis of all points received by students for all auditory classes. Material of missed classes the student is mastering independently without receiving any points for it. Minimal points for allowing student to pass final control are absent. Individual work is assessed with points according to the resolution of the department.

Final control presupposes assessment of the received knowledge and skills level. It is carried out at the very end of discipline study. It includes control of theoretical and practical preparation. Forms of final control are: examination, final module control, differentiated credit, module credit, attestation etc.

Students who have not less than 75% of completed auditory hours assessed with positive marks are allowed to pass final module control. If the student has missed more than 25% of auditory hours and/or more than 25% of his marks are negative ("2"), it is considered that he did not complete studying program and educational plan on discipline and therefore should repeat it.

Final control is performed as a final module control (FMC). The list of questions included into FMC tasks contain the most important questions on pediatrics but not the whole material recommended by the educational program. Assessment of the final module control results is done according to 120-points scale of knowledge control.

Assessment of knowledge of the discipline is performed according to 200-points scale and national scale; the results are fixed in the appropriate records.

Marks in points	Marks according to National scale	Marks according to ECTS	
		Mark	Explanation

170-200	Excellent	A	Excellent (perfect fulfillment with minimal mistakes)
155-169	Good	B	Very good (Higher than average level; fulfillment with several mistakes)
140-154		C	Good (correct in general fulfillment with some quantity of important mistakes)
125-139	Satisfactory	D	Satisfactory (not bad, but a lot of mistakes)
111-124		E	Enough (fulfillment satisfies minimal requirements)
60-110	Unsatisfactory	FX	Unsatisfactory (with possibility of the repeated fulfillment)
1-59		F	Unsatisfactory (with obligatory repeated study of discipline)

The order of final module control carrying out and the list of tasks included into it are discussed of department meeting, cyclic methodic commission (CMC) and approved by vice-rector of scientific and pedagogic and studying work and announced at the beginning of studying semester (information is placed on site, stand; students are also informed on first lection or first practical class).

In case if student receives unsatisfactory mark for discipline (60 – 110 FX points) he may rework it twice: once – on the department commission with participation of the head of the department and second time – on the department commission with participation of the head of the department and the dean of the faculty.

In case if student receives unsatisfactory mark for discipline ranged 1 – 59 (F) points he should obligatory repeat it again on paid basis.

Final module control (FMC) is a form of summarizing control directed into assessment of knowledge and skills of a student mastered during the whole period of discipline study. It is carried out on the last class of discipline cycle. Composing total mark for discipline sum of points for current activity and final module control marks are accounted.

Form of final module control and type of tasks are estimated by educational program and order of the department. Credit enlistment for mastered discipline is made in case if total sum of points is not less than minimal one estimated by the educational program and corresponds to minimal index of E mark making correspondingly 111 points.

- Student is admitted to pass module in case of completing more than 75% of auditory (practical and lecture) hours with positive marks; there is no any limit of points for module control passing allowance;

- Final module control results on other disciplines have no influence the allowance to pass exams and final controls on pediatrics.

Differentiated exam is a form of final control including assessment of student's level of mastered material on discipline on the basis of the results of current activity, fulfillment of individual and control tasks. Total marks for discipline include all marks accumulated during current study (which makes 200 points maximum). The discipline is considered to be completed if total sum of the received points is not less than minimally required and corresponds to minimal (E) points making 111 points.

Student has a right to rework negative marks no later than 3 days before final module control carrying out in order to have minimal points on discipline. The department is not carried out differentiated exam as a separate class.

Credit is a form of final control supposing evaluation of studying material mastering on the basis of current control without setting marks. It is considered to be completed in case of absence of negative marks for current activity and attendance of more than 75% of studying auditory hours. Calculating the credits for discipline the student receives quantity of points corresponding to 200. Fixing of the results of the credit doesn't require the presence of student.

Student has a right to rework unsatisfactory marks in the term not later than 3 days before final control carrying out in order to receive necessary sum of points to complete the discipline.

VII. THE ORDER OF PAPERWORK OF FINAL CONTROL RESULTS ON DISCIPLINE

Discipline mastering results are fixed in credit-and-examination register (see ad.6), which should be sent to the dean office not later than 1 day after final control had been carried out. The following notes should be done in the register opposite the name of each student:

a). in case of credit and differentiated exam carrying out sum of points according to 200-points scale is inserted into 4-th column "Points for current activity"; "completed" or "not completed" for credit form of control and marks «2», «3», «4», «5» (for differentiated exam) are filled into 7-th column "National mark"; in 8-column "ECTS" mark according to ECTS scale (A, B, C, D, E, FX, F) is inserted.

b). In case of exam and final module control carrying out sum of points for current activity (0 – 80 points) is inserted into 4-th column ("Points for current activity") and sum of points for final control (up to 120) are inserted into 5-th column ("Points for final control"); total sum of points for current activity and final control is inserted into 6-th column ("Current and final controls sum of points"), in 7-th column ("National mark") traditional mark («2», «3», «4», «5») is inserted, 8-th column ("ECTS") is filled in with marks A, B, C, D, E, FX, F.

If student has attended less than 75% of auditory hours the note "not permitted" is made in 5-th column and 7-th column is left empty. If student has been allowed to pass module control but did not come, the note "did not come" is done in 5-th column.

The order of calculation of points for discipline

Evaluating mastering of each topic of the module student receives marks according to 4-points traditional scale; traditional mark is then transformed into points according to fixed scale with the use of approved criteria of assessment for each certain discipline. All types of work,

presupposed by methodic guideline, are taken into account. Student must receive mark for each topic.

Possible types of conversion

1. Conversion into appropriate points on each class

Received according to traditional scale marks are converted into points dependently on quantity of topics. It is demonstrated in the following sample. Number of points which corresponds to mark "5" is calculated by dividing of maximal quantity of points for current activity (80 points) into the quantity of practical classes. In order to calculate mark "3" number of points which make 60% of maximal number of points for current activity (48 – 50 points) are divided into the number of practical classes.

Conversion into points

Traditional scale	Indicative number of topics in module							
	35	30	25	20	15	10	7	5
«5»	2,25	2,5	3	4	5	8	11,43	16
«4»	1,75	2	2,5	3	4	6,5		13
«3»	1,25	1,5	2	2	3	5	6,86	10
«2»	000	0	0	0	0	0	0	0

Value of each topic in module should be the same.

Current studying activity evaluation forms should be standardized and include control of theoretical and practical preparation.

Final points for current activity are estimated as a sum of points for every class.

2. Conversion into points before final module control or on the last class for disciplines with a credit as a form of final control

Before final control carrying out (exam, final module control) on the basis of marks according to traditional scale made as a result of assessment student's knowledge on each practical class arithmetical mean according to traditional scale is made (rounded off 2 signs after coma), divided into maximal traditional mark ("5") and multiplied by maximal point for current activity, which makes 80. For instance:

Scale	200 points
Disciplines which end with exam or final module control	$\frac{CA}{5} \cdot 80$
Disciplines which end with differentiated exam or credit	$\frac{CA}{5} \cdot 200$

It is also possible to calculate sum of points for traditional scale and then divide it into maximal traditional mark, which is "5" multiplied on the quantity of classes and multiplied on maximal points for current activity (80 points for differentiated exam with maximal 200 points).

For example:

Scale	200 points
Disciplines ended with exam or final module control	$\frac{C}{5 * N \text{ of clas.}} \cdot 80$

Disciplines ended with differentiated exam or credit	$\frac{C}{5 * N \text{ of clas.}} \cdot 200$
--	--

Order of completed conspectus on discipline

Discipline _____

№	Student's name and second name	Group, Course, Faculty	Date of absence	Date of completing	Teacher	Control, Head of the Dptm.
1						

LIST OF QUESTIONS FOR FINAL MODULE CONTROL

The most wide spread childhood somatic diseases

1. Clinical picture of acute and subacute rickets.
2. Rickets specific and non-specific prophylaxis and treatment.
3. Hypervitaminosis D: etiological factors, mechanism of development, clinical manifestations, diagnostics and treatment.
4. Malnutrition: etiology, severity degrees, clinical symptoms, diagnostics and treatment dependently on severity degree.
5. Gastroesophageal reflux disease (GERD): etiology, contributing factors, clinical manifestations, diagnostics and treatment, recommendations.
6. Functional dyspepsia: mechanism of development, clinical types, symptoms typical for each clinical type of the disease, diagnostic criteria, methods of treatment.
7. Chronic gastroduodenitis: etiology, classification, clinical manifestations dependently on gastroduodenitis' type (antroduodenitis, fundal gastritis); diagnostics (including methods of *H.pylori* detection), treatment principles of different types of gastroduodenitis (hypo-, normo- or hyperacidic; *H.pylori*-associated or non-associated; primary or secondary).
8. Peptic ulcer: etiology, mechanism of development, classification, clinical picture, diagnostics and treatment.
9. Functional gall bladder and sphincter of Oddi dysfunctions: etiology, mechanism of development, clinical types, clinical manifestations, diagnostics and treatment.
10. Cholelithiasis: etiological and contributing factors, mechanism of development, stages, clinical manifestations, diagnostics and treatment.
11. Portal hypertension: etiology, mechanisms of development, clinical and additive diagnostic criteria, complications and treatment.
12. Celiac disease: etiology, pathogenesis, clinical symptoms, diagnostics and treatment. Peculiarities of diet in celiac disease.
13. Functional constipation and diarrhea in children of first years of life: etiology, mechanisms of development, diagnostic criteria and treatment.
14. Irritable bowel syndrome: etiology, mechanisms of development, clinical manifestations, diagnostic criteria, treatment.
15. Unspecific ulcerative colitis: triggering factors, clinical manifestations, principles of diagnostics, differential diagnostics with Krohn's disease, treatment.
16. Lactose intolerance: types, clinical manifestations, diagnostics, principles of dietetic and drug treatment.

17. Exocrine pancreatic insufficiency: etiology, mechanisms of development, clinical manifestations, diagnostics and treatment.
18. ARVD in children: peculiarities of clinical manifestations of ARVD, caused by different viral agents (influenza, parainfluenza, respiratory syncytial virus, adenovirus, enterovirus, rotavirus), diagnostics, complications, methods of diagnostics and treatment.
19. Bronchitis: etiology, classification, peculiarities of clinical course of different forms of bronchitis in children, objective and additive (laboratory and instrumental methods of diagnostics) of bronchitis, treatment.
20. Pneumonia: etiology, contributing factors, classification, clinical picture, objective data, additive diagnostics, treatment principles, indications for hospitalization.
21. Allergic rhinitis: etiology, clinical signs of intermittent and persistent allergic rhinitis, methods of diagnostics, treatment.
22. Atopic dermatitis: etiology, clinical manifestations typical for different age periods, major and minor diagnostic criteria, principles of treatment.
23. Food allergy: etiology, mechanism of development, diagnostics and differential diagnostics with pseudoallergic reactions and other diseases with similar symptoms, principles of food diary composition and basic directions of treatment.
24. Bronchial asthma: etiology, classification, diagnostic criteria typical for different severity degrees, clinical peculiarities of exacerbation period, peculiarities of diagnostics (asthma predictive index, allergic testing, instrumental methods of BA diagnostics); 5 steps of BA treatment; asthma control criteria; indications for specific immune therapy carrying out.
25. The most common congenital heart defects in children (defects of interventricular and interatrial septums, coarctation of the aorta, patent ductus arteriosus, Fallot tetralogy, magistral vessels transposition) : etiology, pathogenesis (hemodynamic changes in different types of CHD), classification, clinical manifestations, principles of diagnostics and treatment.
26. Rheumatic fever in children: etiology, pathogenesis, classification, basic clinical syndromes, peculiarities of heart and joints affection in rheumatic fever in children, principles of diagnostics, treatment, primary and secondary prophylaxis.
27. Non-rheumatic cardites in children: etiology, peculiarities of clinical course, diagnostics and differential diagnostics, treatment.
28. Cardiac failure: mechanisms of development, clinical manifestations dependently on severity degree, basic principles of treatment.
29. Juvenile idiopathic arthritis: triggers, pathogenesis of joints affection, classification, clinical manifestations of different forms of JIA, principles of diagnostics and treatment.
30. Differential diagnostics of articular syndrome in rheumatic fever, juvenile idiopathic arthritis and reactive arthropathies.
31. Urinary tract infections in children (urethritis, cystitis): etiology, contributing factors, basic clinical syndromes, laboratory and instrumental diagnostics, treatment.
32. Pyelonephritis: etiology, classification, basic clinical syndromes, diagnostics and treatment.
33. Glomerulonephritis in children: etiology, pathogenesis, classification, basic clinical syndromes, laboratory diagnostics of different types of GN, treatment.
34. Differential diagnostics of pyelonephritis and glomerulonephritis.
35. Chronic renal failure in children: etiology, mechanisms of development, clinical manifestations, diagnostics and principles of treatment.
36. Dysmetabolic nephropathies in children: etiological factors, mechanisms of development, clinical types, principles of diagnostics, treatment and diet in different types of DN.

EDUCATIONAL AND METHODIC LITERATURE RECOMMENDED FOR SUCCESFUL MASTERING OF THE MATERIAL ON PEDIATRICS

1. Nelson textbook 19th Edition by Robert M. Kliegman, MD, Richard E. Behrman, MD, Hal B. Jenson, MD and Bonita F. Stanton, MD, 2017.
2. Global Consensus Recommendations on Prevention and Management of nutritional rickets. Craig F. Munns, Nick Shaw, Wolfgang Högl et al. The Journal of Clinical Endocrinology and Metabolism, 2016. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4880117/#_ffn_sectitle.
3. Rickets treatment and management: internet resource <https://emedicine.medscape.com/article/985510-treatment>.
4. Respiratory tract infections: management guideline: internet resource <https://www.aafp.org/afp/topicModules/viewTopicModule.htm?topicModuleId=29>
5. Pediatric pneumonia: treatment and management: internet resource <https://emedicine.medscape.com/article/967822-treatment>.
6. Acute respiratory distress in children: emergency evaluation and initial stabilization. Debra L.W., Gary R.F. et al. Uptodate platform. Internet resource <https://www.uptodate.com/contents/acute-respiratory-distress-in-children-emergency-evaluation-and-initial-stabilization>.
7. The new Rome IV criteria for functional gastrointestinal disorders in infants and toddlers. Zeevenhooven J., Koppen I.J., Benninga M.A. Pediatric gastroenterology, hepatology and nutrition, 2017. Internet resource of the article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5385301/>.
8. Guidelines for the management of *H.pyori* infection in children and adolescents (ESPGHAN/NASPGHAN recommendations), 2017. Internet resource: http://www.espghan.org/fileadmin/user_upload/Society_Papers/Joint_ESPGHAN_NASPGHAN_HP_Guidelines_002.pdf.
9. Pediatric cholecystitis. Medscape platform: internet resource: <https://emedicine.medscape.com/article/927340-overview>.
10. Management of portal hypertension in children. Roberto Gugig, Rosenthal Ph. World journal of gastroenterology, 2012. Internet resource of the article: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3309906/>.
11. Pediatric celiac disease (Medscape platform, upd. in 2019): internet resource: <https://emedicine.medscape.com/article/932104-overview>.
12. Inflammatory bowel disease (Medscape platform, upd. in 2017): internet resource: <https://emedicine.medscape.com/article/179037-overview>.
13. Lactose intolerance in infants, children and adolescents. Melvin B. Heyman et al. Pediatrics (Official Journal of the American Academy of Pediatrics). Internet source of the article is presented according to the following link: <https://pediatrics.aappublications.org/content/118/3/1279.full>.
14. Bronchiolitis guidelines. Medscape platform, last upd. 2018. Internet resource link: <https://emedicine.medscape.com/article/961963-guidelines>.
15. Pediatric atopic dermatitis. Medscape platform, last upd. 2019. Internet resource link: <https://emedicine.medscape.com/article/911574-overview>.
16. Pocket guide for asthma management and prevention. Internet resource for updated in 2019 guidelines is presented in the link: <https://ginasthma.org/wp-content/uploads/2019/04/GINA-2019-main-Pocket-Guide-wms.pdf>.
17. Anaphylaxis: emergency treatment: UpToDate platform (last upd. 2020): internet link: <https://www.uptodate.com/contents/anaphylaxis-emergency-treatment>.
18. Food allergy in children and young people. NICE guidelines: short version: <https://www.nice.org.uk/guidance/cg116>; full version: <https://www.nice.org.uk/guidance/cg116/evidence/full-guideline-136470061>.

19. AHA guidelines on prevention of rheumatic fever and diagnosis and treatment of acute streptococcal pharyngitis. Practice guidelines, 2009. Internet resource link: <https://www.aafp.org/afp/2010/0201/p346.html>.
20. Current state of knowledge on etiology, diagnosis, management and therapy of myocarditis: a position statement of European Society of cardiology working group on myocardial and pericardial diseases. Internet resource link: https://www.escardio.org/static_file/Escardio/Press-media/press-releases/2014/Current-state-of-knowledgeonaetiology-ppaer-Sep-2013-WG-CMP.pdf.
21. Pediatric Heart Failure: A Practical Guide to Diagnosis and Management. Internet resource link: [https://www.pediatr-neonatal.com/article/S1875-9572\(17\)30050-5/fulltext](https://www.pediatr-neonatal.com/article/S1875-9572(17)30050-5/fulltext).
22. Urinary Tract Infections in Children: EAU/ESPU Guidelines (2014). Internet resource link: <https://uroweb.org/wp-content/uploads/Stein-R-et-al.-Paediatric-Infections-EUR-UROL-67-2015-546-558.pdf>.
23. Acute glomerulonephritis. Medscape platform (last update in 2018). Internet source link: <https://emedicine.medscape.com/article/239278-overview>.
24. Chronic kidney disease in children. An official journal of American Academy of Pediatrics. Internet source link: <https://pedsinreview.aappublications.org/content/29/10/335>.

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