NATIONAL BOGOMOLETS MEDICAL UNIVERSITY

DEPARTMENT OF PEDIATRICS №2

Vice-rector for scientific and pedagogical educational work

PhD in Medicine, prof. Vlasenko O.V.

2024

WORKING PROGRAM OF EDUCATIONAL ELECTIVE DISCIPLINE

«Pediatric gastroenterology, pulmonology and nephrology»

Educational level: second (Master's degree)

Field of knowledge: 22 («Health care»)

Specialty: 222 («Medicine»)

Educational and qualification level: second (Master's degree)

Educational program of the second master's level of the Higher education

2024/2025

Discussed and approved on Cyclic methodical meeting on pediatric disciplines of the Bogomolets National Medical University

Protocol № 1 from August «29», 2024

The Head, professor of the pediatric department №1,

PhD T.V.Pochinok

Discussed and approved on the meeting of the pediatric department №2

Protocol №1 from August «26», 2024

The Head of the pediatric department №2,
Corresponding member of NAMS of Ukraine,

PhD, professor O.P.Volosovets

Approved on the meeting of CMC disciplines of Bogomolets National Medical University
Protocol № 1 from29 August 2024

The Head of CMC of pediatric disciplines,

PhD, professor _____ (T.V. Pochinok)
(signature)

Working program of the discipline "Pediatric gastroenterology, pulmonology and nephrology" for students of the 4th year of medical faculties No. 1, No. 2, No. 4, FTAFU, FTFS of the 4th year of education and qualification level "Master", qualification "doctor", field of knowledge 22 "Health care", specialty 222 "Medicine".

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Working program is approved on the meeting of the pediatric department № 2 of the National Bogomolets Medical University
Protocol №1 from August 2024

The Head of the pediatric department №2,
Corresponding member of NAMS of Ukraine,

PhD, professor _____ O.P.Volosovets
(signature)

Reapproved:

For 20___/20___ y.s. _____ _____ "__"___20__ , protocol №
(signature) (full name)

For 20___/20___ y.s. _____ _____ "__"___20__ , protocol №

Description of educational discipline “Pediatric gastroenterology, pulmonology and nephrology”

Studying weeks - 2

Parameters	**Field of knowledge, direction of preparation, educational and qualification level**	**Characteristics of the discipline**
		Day form of study
Credits number - 3	Field of knowledge 22 «Health care» (code and name)	Normative
Number of hours - 90	Specialty: 222 “Medicine”	Lections – 0 hours
		Practical classes - 30 hours
Week hrs for day form of study: ayditory – 20 students independent work – 25	Educational and qualification level: II (master’s)	Laboratory -
		Independent work 60 hrs
		Individual classes: -
		Type of control: Differential exam

Note: Correlation of auditory classes hours to independent and individual work hours makes 44.4%: 55.6%.

The work program of the educational discipline "Pediatrics, including industrial medical practice (professional training) childhood diseases " is compiled in accordance with the standard of higher education in the specialty 222 "Medicine" approved by the Order of the Ministry of Education and

Culture of Ukraine No. 1197 dated 08.11.2021 (222-Medytsyna.mahistr.09.11.pdf (mon.gov.ua)) and EPP "Medicine".

The subject of study of the educational discipline "Pediatric gastroenterology, pulmonology and nephrology" is the most common diseases of digestive, respiratory and urinary systems in childhood.

Interdisciplinary connections: according to the curriculum, the study of the academic discipline "Pediatric gastroenterology, pulmonology and nephrology" is provided in VII-VIII semesters.

Prior to this, the student acquired relevant knowledge of the main basic and clinical disciplines, which are prerequisites of:
• latin language and medical terminology,
• medical biology,
• human anatomy,
• physiology,
• histology, cytology and embryology,
• biological and bioorganic chemistry,
• microbiology, virology and immunology,
• life safety, basics of bioethics and biosafety,
• pathomorphology,
• pathophysiology,
• pharmacology,
• caring for sick children (practice),
• propaedeutics of pediatrics,
• nursing practice,
• radiology.

The requisites of the academic discipline are:
• internal medicine
• phthisiology
• urology
• otorhinolaryngology
• dermatology, venerology
In turn, the discipline "Pediatric gastroenterology, pulmonology and nephrology" forms the basis for the student's further study of the disciplines - post-requisites:
• pediatrics, children's infectious diseases (IX-X semesters),
• pediatrics with children's infectious diseases (XI-XII semester),
which involves integration with these disciplines "vertically" and formation of skills for further training and application in professional activities.

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

Purpose, expected learning outcomes and criteria for evaluating learning outcomes

The basic aim of studying "Pediatric gastroenterology, pulmonology and nephrology" discipline is mastering of the pediatrics basis of main diseases of digestive, urinary and respiratory systems in children. Final aims are 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 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.

According to the requirements of the EPP, the discipline ensures students' acquisition competencies:

• integral:

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

• general:

GC1. Ability to abstract thinking, analysis and synthesis.

GC2. Ability to learn and master modern knowledge.

GC3. Ability to apply knowledge in practical situations.

GC4. Knowledge and understanding of the subject area and understanding of professional activity.

GC5. Ability to adapt and act in a new situation.

GC6. Ability to make informed decisions.

GC7. Ability to work in a team.

GC8. Ability to interpersonal interaction.

GC9. Ability to communicate in a foreign language.

GC10. Ability to use information and communication technologies.

GC11. Ability to search, process and analyze information from various sources.

GC12. Determination and persistence in relation to assigned tasks and assumed responsibilities.

GC13. Awareness of equal opportunities and gender issues.

GC14. The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.

GC15. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society and technology, use different types and forms of motor activities for active recreation and leading a healthy lifestyle.

• special (professional, subject):

PC1. Ability to collect medical information about the patient and analyze clinical data.

PC2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results.

PC3. Ability to establish a preliminary and clinical diagnosis of the disease.

PC4. The ability to determine the necessary regime of work and rest in the treatment and prevention of diseases.

PC5. The ability to determine the nature of nutrition in the treatment and prevention of diseases.

PC6. Ability to determine the principles and nature of treatment and prevention of diseases.

PC7. Ability to diagnose emergency conditions.

PC8. Ability to determine tactics and provide emergency medical care.

PC10. Ability to perform medical manipulations.

PC13. Ability to carry out sanitary and hygienic and preventive measures.

PC 16. Ability to maintain medical documentation.

PC17. Ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family and population.

PC 21. Clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.

PC 24. Compliance with ethical principles when working with patients.

PC 25. Observance of professional and academic integrity.

Learning outcomes:

Integrative final program learning outcomes, the formation of which is facilitated by the educational discipline:

• carry out professional activities in social interaction based on humanistic and ethical principles; to identify future professional activity as socially significant for human health;

• apply knowledge of general and professional disciplines in professional activity;

• comply with the norms of the sanitary and hygienic regime and the requirements of safety equipment when performing professional activities;

• use the results of independent search, analysis and synthesis of information from various sources to solve typical tasks of professional activity;

• argue information for decision-making, bear responsibility for them in standard and non-standard professional situations; adhere to the principles of deontology and ethics in professional activity;

• carry out professional communication in the modern Ukrainian language, use oral communication skills in a foreign language, analyzing specialized texts and translating foreign language information sources;

• observe the norms of communication in professional interaction with colleagues, management, work effectively in a team;

• analyze information obtained as a result of scientific research, generalize, systematize and use it in professional activities.

Program learning outcomes for the discipline

PLO 1. Collect complaints, history of life and illness, assess the psychomotor and physical development of the patient, the state of the organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information about the diagnosis, taking into account the age of the patient.

PLO 2. Identify the leading clinical symptoms and syndromes according to standard methods, using preliminary patient history data, patient examination data, knowledge about a person, his organs and systems, establish a preliminary clinical diagnosis of the disease.

PLO 3. Prescribe and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) of patients with diseases of organs and body systems

PLO 4. Determine the necessary mode of work, rest and nutrition based on the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO5. Determine the nature and principles of treatment (conservative, operative) of patients with diseases, taking into account the age of the patient, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in the field, on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO 6. Determine tactics and provide emergency medical care in emergency situations in limited time in accordance with existing clinical protocols and standards of treatment.

PLO 7. To perform medical manipulations in the conditions of a medical institution, at home based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLO 8. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.

PLO 9. To organize the required level of individual safety (own and the persons they care about) in case of typical dangerous situations in the individual field of activity.

PLO 10. Make effective decisions on health care issues, assess the necessary resources, take into account social, economic and ethical consequences.

PLO 11. It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.

PLO 12. Communicate freely in the state language and in English, both orally and in writing to discuss professional activities, research and projects.

The main tasks of studying the discipline "Pediatrics, including medical practice (professional training) on the pediatric diseases" are:

• Acquisition of basic theoretical knowledge on etiology, pathogenesis, clinical manifestations, laboratory-instrumental data of additive methods of examination, treatment, prevention and prognosis of the most common somatic diseases of childhood

• Mastering the basic practical skills and abilities of diagnosis, differential diagnosis, treatment and emergency care for the most common somatic diseases of childhood.

• Formation of students' moral-ethical and deontological qualities during professional communication with a sick child and persons caring for the child, as well as formation of the principles of professional subordination in pediatrics.

PROGRAM OF EDUCATIONAL ELECTIVE DISCIPLINE "PEDIATRIC GASTROENTEROLOGY, PULMONOLOGY AND NEPHROLOGY"

Basic course – 90 hrs
ECTS credits – 3
Practical classes – 30 hrs
Student's independent work (SIW) – 60 hrs.

Program of the elective course "Pediatric gastroenterology, pulmonology and nephrology"

Component 1. Pediatric gastroenterology

Topic 1. The most common diseases of the esophagus, stomach and duodenum in children (GERD, cyclic vomiting syndrome, chronic gastritis, chronic duodenitis). Definition, classification, etiology, pathogenesis, clinical presentation, diagnosis, treatment, prevention of functional and organic diseases of the esophagus, stomach and gastrointestinal tract in children: GERD, functional nausea

and vomiting disorder (cyclic vomiting syndrome); gastroesophageal reflux, GERD, chronic gastritis and duodenitis). Laboratory and instrumental diagnostics in gastroenterology.
Topic 2. Diseases of the gallbladder and pancreas in children (gallstone disease, absolute and relative exocrine insufficiency of the pancreas in children). Cholelithiasis in children: main characteristics of the course, diagnosis and treatment. Absolute and relative exocrine insufficiency of the pancreas. Definition, classification, etiology, pathogenesis, clinical presentation, diagnosis, treatment and prevention
Topic 3. Intestinal diseases in children (functional constipation in children, celiac disease). Definition, classification, etiology, pathogenesis, clinical presentation, diagnosis, treatment, prevention of functional constipation in children. Definition, classification, etiology, laboratory and instrumental diagnosis of celiac disease.
Topic 4. The most common hereditary liver diseases in children (Wilson's disease (WD), glycogenosis, etc.). Definition, classification, etiology, pathogenesis, diagnosis, treatment, prevention of the most common hereditary liver diseases in children. Typical clinical manifestations of the hepatic form of WD, glycogenosis, etc. Medical treatment of WD. Liver transplantation (LT). Prognosis.
Component 2. Pediatric pulmonology
Topic 5. Upper respiratory tract infections in children. Acute infections of the nose, sinuses, throat and larynx. Etiology, epidemiology, pathogenesis, clinical signs, prognosis, diagnosis, treatment, prevention and emergency care for complications.
Topic 6. Wheezing syndrome in children. Foreign bodies of the respiratory tract in children. Etiology, pathogenesis, clinic, diagnosis, treatment, prevention and emergency care for wheezing syndrome in children: episodic viral wheezing (EVW) and multiple trigger wheezing (MTW). Foreign bodies of the respiratory tract in children, emergency aid when a foreign body enters the respiratory tract. Organization of the emergent aid on pre-hospital stage.
Topic 7. Complications of pneumonia in children. Definition, classification, etiology of pathogenesis, clinical presentation, diagnosis and prevention of the respiratory failure (RF) in children. Definition, classification, etiology of infectious and non-infectious (aseptic) pleurisy, pathogenesis, clinical signs, diagnosis and prevention of various types of pleurisy. Diagnostic criteria of various types of pleurisy (clinical, laboratory, radiological). Treatment of various types of pleurisy. Indications for pleural puncture with fluid evacuation and for surgical treatment.
Topic 8. Cystic fibrosis. Undernutrition in children. Definition, classification, etiology, pathogenesis, clinical signs, diagnosis and prevention of absolute insufficiency of the exocrine function of the pancreas. The main syndromes of pancreatic deisorders. Treatment of patients with cystic fibrosis. Malnutrition in children: definition, classification, etiology, pathogenesis, clinical signs, diagnosis and prevention of malnutrition. Treatment of patients with malnutrition. Basics of the diet.
Component 3. Pediatric nephrology
Topic 9. Neurogenic bladder in children. Dysmetabolic nephropathy in children. Definition, classification, etiology, pathogenesis, clinical signs, diagnosis, treatment and prevention of neurogenic bladder in children; differential diagnosis of various types (hyporeflex, hyperreflex, arereflex) of its dysfunction. Prevention of possible complications of NB (vesicoureteral reflux of various degrees, peritonitis, hydronephrosis, arterial hypertension, nephrosclerosis, impaired blood flow in the kidneys and their shrinkage, cystitis, psychological problems). Definition, classification, etiology, pathogenesis, classification, clinical manifestations, diagnosis and prognosis in various dysmetabolic nephropathies in children (primary and secondary; oxalate, phosphate, urate, mixed; preclinical (salt diathesis), clinical (dysmetabolic nephropathy).
Topic 10. Chronic kidney disease in children. Definition, classification, etiology, risk factors, stages of the disease, pathogenesis, clinic, diagnosis, treatment, prevention, prognosis in chronic renal failure and chronic kidney disease in children. Examination plan and analyzis of laboratory and instrumental examination data for chronic kidney disease in children.

STRUCTURE OF THE ELECTIVE DISCIPLINE
«Pediatric gastroenterology, pulmonology and nephrology»

	Topics	Number of hours			
		Total	Lections	Practical classes	SIW
Component 1. Pediatric gastroenterology					
1	The most common diseases of the esophagus, stomach and duodenum in children (GERD, cyclic vomiting syndrome, chronic gastritis, chronic duodenitis).	9		3	6
2	Diseases of gall bladder and pancreas in children	9		3	6
3	Intestinal diseases in children (functional constipation and celiac disease)	9		3	6
4	The most common congenital diseases of liver in children	9		3	6
Component 2. Pediatric pulmonology					
5	Upper respiratory tarct infections in children	9		3	6
6	Wheezing syndrome in children. Foreign bodies of the respiratory tract in children	9		3	6
7	Complications of pneumonia in children	9		3	6
8	Cystic fibrosis and undernutrition	9		3	6
Component 3. Pediatric nephrology					
9	Neurogenic urinary bladder in children. Dysmetabolic nephropathy in children	9		3	6
10	Chronic kidney disease in children	9		3	6
Total number of hours		90		30	60

Note: practical class = 3 години. Form of control – differential exam

TOPICAL PLAN OF CLASSES
Elective course «Pediatric gastroenterology, pulmonology and nephrology»

	Topics	Hours
1.	The most common diseases of the esophagus, stomach and duodenum in children	3
2.	Diseases of gall bladder and pancreas in children	3
3.	Intestinal diseases in children (functional constipation and celiac disease)	3
4.	The most common congenital diseases of liver in children	3
5.	Upper respiratory tarct infections in children	3
6.	Wheezing syndrome in children. Foreign bodies of the respiratory tract in children	3
7.	Complications of pneumonia in children	3
8.	Cystic fibrosis and undernutrition	3

9.	Neurogenic urinary bladder in children. Dysmetabolic nephropathy in children	3
10.	Chronic kidney disease in children	3
Totally for the discipline		30

Students individual work

№	Content of work	Hours
	Preparation for practical classes	60
Totally for the discipline		60

Methods of study

When studying the discipline "Pediatric gastroenterology, pulmonology and nephrology", various teaching methods recommended for higher education are used, for example:

- by sources of knowledge: verbal (explanation, lecture, conversation, discussion); visual (demonstration); practical (practical work, mastering practical skills);
- according to the logic of the educational process: analytical (determining the general condition of the patient and the main signs of the disease), synthetic (clarifying the relationship between the main signs of diseases, determining the optimal measures for diagnosis, treatment and prevention), their combination - analytical-synthetic, as well as inductive method and deductive methods;
- according to the level of independent mental activity: problematic, partially exploratory, research.

By combining and summarizing the above teaching methods, when studying the discipline it is advisable to implement such methods of organizing educational classes as:

• method of clinical cases,
• problem-oriented method,
• method of individual educational and investigation and practical tasks,
• method of competitive groups,
• method of training technologies,
• "brainstorming" method,
• the method of conducting conferences using interactive, interdisciplinary and information and computer technologies.

Types of educational activities of the student, according to the curriculum, are lectures, practical classes, independent work of students and performance of individual tasks.

Thematic plans of practical classes, SIW and performance of individual tasks ensure the implementation of all topics included in the program in the educational process.

Practical classes according to the methodology of the organization are clinical, aimed at controlling the assimilation of theoretical material and the formation of practical skills and abilities, as well as the ability to analyze and apply the acquired knowledge to solve practical tasks. They provide for:

• collection of anamnesis;
• examination of a sick child;
• planning examination of a sick child;
• interpretation of laboratory and instrumental research data;
• determination of the previous clinical diagnosis;
• determination of therapeutic tactics;

medical nutrition prescription;
providing the emergent aid;
completing situational tasks;
working with practical skills on waxwork and near the patient’s bad
filling the medical documentation in.

Independent work of student

It is carried out by the student independently outside classroom classes and includes preparation for practical classes, searching and studying additional literature.

Methods and forms of control

The methods and forms of control and evaluation of students' success in the discipline are carried out in accordance with the requirements of the program and the Instructions for evaluating the educational activity of students in the conditions of the implementation of the European Credit Transfer and Accumulation System for the organization of the educational process, approved by the Ministry of Health of Ukraine (letter of the Ministry of Health of Ukraine No. 08.01-47/10395 dated 15.04. 2014). Regulations on the procedure for assessing students' knowledge during the current and final control of the discipline at BNMU (Addendum to Order No. 782 dated September 30, 2019).
https://drive.google.com/file/d/19YragFMkKVNoq6d3Xs-nWCmqKWx0MvmW/view

When assessing students' knowledge, preference is given to standardized methods of control: testing (oral, written), structured written works, work with standard medical documentation, standardized control of practical skills.

Control methods

Theoretical knowledge:

• written test,
• individual questioning, interview,
• content-structured written works.

Practical knowledge and skills:

• control of implementation of standardized practical skills provided by the student's practical training plan in the discipline:
• analysis of laboratory and instrumental studies;
• performing medical manipulations in pediatrics;
• provision of assistance in emergency situations in children.

Forms of control

Current control is carried out at each practical lesson in accordance with the specific goals of the topic. In all practical classes, objective control of theoretical training and acquisition of practical skills (standardized according to the implementation method) is used.

The final control is a differential exam. It is carried out on the last class by the teacher of the academic group and is based on the results of all current assessments with conversion into points on a 200-point scale with the corresponding conversion on the traditional scale.

Distribution of points received by students

The current evaluation of students on the relevant topics is carried out at each practical class according to the specific goals of each topic according to the traditional 4-point system (excellent, good, satisfactory, unsatisfactory) with subsequent conversion into a multi-point scale. The value of each topic in points is the same.

Regulations of students' current success assessment

Current control is carried out at each practical class in accordance with specific goals for each topic, involves a 100% survey of students in the group, and evaluation of all components of the class - test control, control of practical skills and solving situational tasks. Written fulfillment of tasks in the process of independent preparation for practical training is also taken into account.

For each stage of the lesson, the student receives a grade of "5-4-3-2", from which the teacher determines the arithmetic average at the end of the class.

Arithmetic average	Traditional grade	Points
< 2,5	2	0
2,6 – 2,9	3	11
3,0 – 3,2	3	12
3,3 – 3,5	3	13
3,6 – 3,9	4	14
4,0 – 4,2	4	15
4,3 – 4,5	4	16
4,6 – 4,7	5	17
4,8	5	18
4,9	5	19
5,0	5	20

The results of monitoring the level of knowledge of each component of the lesson

1). **The student's readiness for class** (initial stage) is checked based on answers to 10 test tasks. In the first practical session, these questions are included in the final control.

For a correct answer to 9 - 10 tests, the student receives a traditional grade of "5"; for 7 - 8 correct answers - score "4", for 5 - 6 correct answers - score "3", less than 5 correct answers - score "2".

2). **The student's oral survey** is evaluated as follows:

The grade "5" is given in the case when the student gives the most accurate and clear answers without any directing helpful questions; teaches the material without errors and inaccuracies;

The grade "4" is assigned in case if the student knows the content of the lesson and understands it well, answers the questions correctly, consistently and systematically, but answers are not complete, although the student answers additional helpful questions without mistakes;

The grade "3" is given to the student based on his knowledge of the main content of the lesson and at a satisfactory level of understanding, he gives answers with the help of directing helpful questions, but he answers the directly asked questions correctly.

Grade "2" is assigned in cases when the student's knowledge does not meet the requirements of the grade "3 points".

3). **Independent work at the patient's bedside.**

The grade "5" is awarded in the case when the student demonstrates fluency in practical skills (on waxworks and/or at the patient's bedside), the ability to analyze and apply the results obtained during the examination of the patient to solve practical tasks: taking an anamnesis, examining a child, examination planning, interpretation of laboratory and instrumental research data; correctly determines the clinical diagnosis in the typical course of the disease; carries out differential diagnosis; prescribes the correct treatment; demonstrates excellent knowledge and skills in providing emergency care.

Grade "4" is awarded in case if the student has good practical skills (on waxworks and/or at the patient's bedside); with certain inaccuracies, analyzes and applies the results obtained during the examination of the patient to solve practical tasks; correctly determines the clinical diagnosis in the typical course of the disease; performs differential diagnosis correctly, but not completely; prescribes the correct treatment in general, but may make some minor mistakes, which he corrects on his own; demonstrates good knowledge and skills in providing emergency care.

Grade "3" is assigned to a student when he is able to perform basic practical tasks (on mannequins and/or at the patient's bedside) only after appropriate comments and help from the teacher; with some mistakes, analyzes and applies the obtained results to solve practical problems; determines the clinical diagnosis in the typical course of the disease; makes some mistakes when performing differential diagnosis; prescribes generally correct, but not complete treatment and/or with minor mistakes; demonstrates satisfactory knowledge and skills in providing emergency care.
Grade "2" is awarded in cases where the student behaves passively during independent work; is unable to make decisions and act in typical clinical situations, has clear difficulties in learning practical skills even after appropriate comments and corrections by the teacher.
4) **To control the student's mastery of the topic, he is asked to answer the questions of the situational problem.**
The grade "5" is given in the case when the student correctly and completely solves a complex situational problem, gives comprehensive answers to all the questions asked.
The grade "4" is awarded in case if the student correctly solves a complex situational problem, but may make some minor mistakes, which he corrects on his own.
Grade "3" is assigned to a student who solves a situational problem with individual mistakes, experiencing difficulties in simple cases; is not able to systematically explain the answer independently.
Grade "2" is assigned if the student has clear difficulties in solving situational tasks, gives incorrect answers to questions.

Assessment of students' independent work in preparation for classroom practical classes is carried out during ongoing control of the topic in the corresponding auditory class (workbook, tests, oral questioning).
Differential exam is carried out after the completion of the study of all topics in the last lesson. Students who have attended all practical classes by the curriculum in the discipline and have scored at least the minimum number of points are allowed to pass differential exam. The sum of points accumulated by the student as a result of current studies is the arithmetic mean of all current grades converted into points on a 200-point scale. Maximum – 200 points, Minimum – 111 points.
The maximum number of points that a student can score for the current educational activity is 200 points.
The sum of points accumulated by the student as a result of the current study is a component of the overall grade in the discipline.
A student can attend 75% of classroom classes in the discipline (lectures, seminars, laboratory practical classes).
The current control consists of all points, which the student accumulated during all classes. Missed material from practical classes is processed by the student independently without crediting points.
If a student is absent on a practical class, he receives “abs”. The student learns the missed material (for any reason, including due to illness) independently outside the classroom (without receiving any points) and prepares the conspectus of the missed lesson topic (C), which is a confirmation of the student's completion of the educational program. This summary is shown by the student to the teacher of the group during the next class or after the beginning of the study sessions. The teacher reviews the notes, if necessary, asks to answer certain questions or demonstrate practical skills, or answers the student's questions (consultation).
After making sure that the student has worked on the topic, the teacher makes a mark in the form of the letter "C" in the column of the missed topic in the "Journal of attendance and student success" (without assigning a grade) and in the "Register of enrolled abstracts in the discipline" (the form is given below), which is supplement to the academic journal and shows the dynamics of students' mastery of missed academic topics. The register is subject to weekly control by the head of the department. The teacher returns the "summary" to the student. The department does not establish a separate schedule indicating the hours for accepting abstracts of missed classes.

DISTRIBUTION OF POINTS

received in current student's activity assessment

№	Topic	Number of points which contribute to traditional grade			
		«5»	«4»	«3»	«2»
1.	The most common diseases of the esophagus, stomach and duodenum in children	17-20	14-16	11-13	0
2.	Diseases of gall bladder and pancreas in children	17-20	14-16	11-13	0
3.	Intestinal diseases in children (functional constipation and celiac disease)	17-20	14-16	11-13	0
4.	The most common congenital diseases of liver in children	17-20	14-16	11-13	0
5.	Upper respiratory tarct infections in children	17-20	14-16	11-13	0
6.	Wheezing syndrome in children. Foreign bodies of the respiratory tract in children	17-20	14-16	11-13	0
7.	Complications of pneumonia in children	17-20	14-16	11-13	0
8.	Cystic fibrosis and undernutrition	17-20	14-16	11-13	0
9.	Neurogenic urinary bladder in children. Dysmetabolic nephropathy in children	17-20	14-16	11-13	0
10	Chronic kidney disease in children	17-20	14-16	11-13	0
Totally for the discipline according to the arithmetic mean		Maximum – 200 Minimum - 111			

Conversion of the number of points from the discipline into ECTS and four-point (traditional) scales marks

Points from the discipline are converted both to the ECTS scale and to the four-point scale.

Ranking into the ECTS scale with the assignment of grades "A", "B", "C", "D", "E" is carried out as follows:

Mark in points	National scale mark	ECTS mark	Explanation
170-200	Excellent	A	Excellent (perfect fulfillment with minor unimportant mistakes)
155-169	Good	B	Very good (above an average level with a few mistakes)
140-154		C	Good (in general correct fulfillment with several unimportant mistakes)
125-139	Satisfactory	D	Satisfactory (not bad but with significant mistakes)
111-124		E	Enough (fulfillment satisfies minimal needed criteria)
60-110	Unsatisfactory	FX	Unsatisfactory (with possibility of the repeated trial)
1-59		F	Unsatisfactory (without possibility of the repeated trial)

Points for discipline are as well converted into four-point scale according to absolute criteria:

Points for discipline	Mark according to the four-point scale
From 170 to 200 points	5
From 140 to 169 points	4

From 139 to 111 points	3
110 points and less	2

Procedure for liquidation of academic debt

When receiving an unsatisfactory grade in a discipline within the range of 60-110 points (FX), the student has the right to retake it 2 times: once - by the commission of the department with the participation of the head of the department and the last time – by the commission with the participation of the head of the department and the dean.

Rework of the discipline in case of unsatisfactory grades is carried out according to a schedule drawn up by the department and coordinated with the dean (the interval between attempts or subjects is at least 3 days). The subject must be completed before the beginning of the new academic year. The presence of academic debt before the beginning of the new academic year is the basis for expelling a student from the university for failure to fulfill the requirements of the curriculum (or registration of an academic leave with repeated course of study due to health problems).

When receiving an unsatisfactory grade in a discipline within the range of 1-59 points (F), the student is obliged to re-study it outside the classroom on a paid basis. Repeated unsatisfactory grade on the result of restudying it, taking into account two rescheduling of a discipline or unsatisfactory grades from 3 disciplines, as well as the presence of missed classroom training classes without valid reasons, the sum of which misses is 120 hours or more, determines his expelling from the university for non-fulfillment of the curriculum.

Methodical supply

Methodical supply of practical classes:

Methodical guidelines for practical classes for teachers
Methodical guidelines for practical classes for students
Tests and tasks for control of the initial level of knowledge
Situational tasks for checking of the mastered material
Methodical supply of ISW:
Methodical guidelines for pre-auditory preparation to practical classes
Working notebook for pre-auditory preparation
Methodical instructions for practical skills performance
Tasks for independent student’s work.

Means of diagnostics of learning success

The following tools are used to diagnose learning success:
1. Test tasks of A format
2. Structured tasks for written works
3. Practical tasks to check mastery of practical skills
4. Situational tasks.

Development of test-control questions, formation of structured tasks for written works, situational tasks for interviews and practical tasks used to diagnose the success of training is based on a list of questions and practical skills that a student must master when studying the discipline "Pediatric gastroenterology, pulmonology and nephrology."

The sets of practical tasks are formed from the list of practical skills that the student should master during the study of the discipline, they are practical works standardized according to the method of fulfillment.

THE LIST OF PRACTICAL SKILS AND TASKS FOR THE DISCIPLINE “Pediatric gastroenterology, pulmonology and nephrology”

Communication with the child or the child's parents
• Collecting complaints, medical history, life history

•Collecting information about the general condition of the patient (consciousness, constitution) and assess the appearance (examination of the skin, subcutaneous fat layer, palpation of lymph nodes, thyroid and mammary glands). Examining the condition of the musculoskeletal system (inspection and palpation)
• Examining the cardiovascular system (examination and palpation of the heart and superficial vessels, percussion of the heart borders and auscultation of the heart and vessels)
•Examining the respiratory system (examination of the chest, palpation of the chest, percussion and auscultation of lungs)
Examining the digestive organs (examination of the abdomen, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pancreas)
• Examining the urinary system (examination of the lumbar region, palpation of the kidneys)
• Making preliminary diagnosis of the disease with its substantiation
• Planing laboratory and/or instrumental examination
• Interpreting the results of laboratory and instrumental findings
Carrying out differential diagnosis
• Making a clinical diagnosis. Determining the main disease, complications of the main disease and accompanying diseases
• Determining the necessary regime and diet to a patient
• Determining the principles and direction of management (conservative, operative)
• Diagnosing and providing an emergency care
• Performing medical manipulations
• Determining tactics of secondary prevention for patients needed in outpatient supervision.

The list of practical skills which are examined during final control carrying out
I.Analysis of laboratory and instrumental methods of examination
1. Clinical blood analysis
2. Clinical urineanalysis
3. Biochemical stool test
4. Serological tests in autoimmune diseases
5 Microbiological research of biological fluids and secretions
6. Synovial fluid analysis
7. Urine analysis according to Zimnytskyi
8. Analysis of urine for diastasis
9. Acute phase inflammation indexes, blood protein and its fractions
10. Creatinine, blood urea
11. Blood electrolytes
12. Blood alkaline phosphatase
13. Study of the function of external breathing
14. ECG
15. Endoscopic examination of the digestive tract
16. Echocardiography
17. X-ray inspection of chest, abdominal and urinary tract organs

II. Medical manipulations
1. Provide peripheral venous access
3. Measure blood pressure
4. Perform indirect heart massage
5. Perform artificial respiration

III. Determining the tactics of providing emergency medical care in emergency situations in children
1. acute respiratory failure
2. acute heart failure

3. acute anaphylactic reactions

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