International University of Kyrgyzstan
International School of Medicine
"Department of Pediatrics"

SYLLABUS

in the discipline "Pediatrics"
for students of specialty 560001 "General medicine"

Form of education	full-time
Course	4
Semester	7
Total credits according to the curriculum	5
Total hours according to the curriculum	150
Lectures	36
Practical classes	54
Independent work	60

Reviewed and approved at a meeting of the Department of "Pediatrics"
Protocol No.___from "__" _____2025
Head of the department Naizabekova S.D.

_____
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Title and labor intensity of the discipline.

Course	Semester	Number of weeks	Number of academic hours		Number of hours for independent work		Total hours	Number of modules
			Lectures	Practical classes	SIW	SIWT		
4	7	18	36	54	30	30	150	3

Abstract of the academic discipline:

The discipline "Pediatrics" is a field of clinical medicine, which studies pathology of childhood, diagnosis, prevention and treatment of children's diseases taking into account the age-specific features of the child's organism. The aim of the discipline is to train a doctor who considers the main symptoms of children's diseases, etiology, pathogenesis, classification, clinical manifestations, principles of clinical diagnosis, principles of treatment and prevention of the most important forms of childhood pathology.

Aims and objectives of the discipline:

The purpose of studying the discipline "Pediatrics" is to exercise control over the harmonious development of the child, the study of the main symptoms and syndromes of the most common nosological forms of diseases of childhood in their classical (typical) course, modern methods of their diagnosis, treatment and emergency care for children

Objectives of the discipline:

• to help students to master knowledge based on the ability to study the symptoms and syndromes of the main diseases of childhood; basic principles of treatment; analyzing the main indicators of statistics of

child morbidity and mortality; carrying out measures to prevent child morbidity;
• to give students skills in interpreting the results of examination of the patient in the form of a medical history, with justification of the preliminary diagnosis, registration of the temperature sheet and drawing up a plan for further examination of the sick child;
• to form theoretical bases and practical skills on preservation and strengthening, prevention of childhood diseases;
• familiarizing students with the principles of organization of pediatric LPO, prevention of nosocomial infections, creation of favorable conditions for the stay

of sick children in children's hospitals, as well as the creation of working conditions for medical personnel;
-Formation of students' understanding of the prevalence and significance of diseases of children of early and older age, and the relationship of these diseases with the pathology of other organs and systems;
-Familiarizing students with the peculiarities of etiology, pathogenesis, clinical picture and course of childhood diseases, including the study of factors contributing to the chronic course of the disease and the development of complications;
-Formation of students' practical skills of rendering emergency medical aid to children and directing them, if necessary, to hospitalization in children's hospitals;
• familiarization of students with the principles of organizing work on conducting sanitary-educational work in families on leading a healthy lifestyle;
• imparting skills in working with scientific literature, conducting literature review of scientific articles and studying and using modern achievements in the field of pediatrics;
• familiarization of students with the requirements of infection control, with the rules of storage of medicines;
• imparting skills in observing medical ethics and deontology with colleagues and patients and their parents;
After mastering the discipline "Pediatrics" the student:

will know

-basics of organization of outpatient and inpatient care for children, adolescents, modern organizational forms of work and diagnostic capabilities of the outpatient service;
-indications and contraindications, side effects of medicines; should use:
-methods of general clinical examination of children and adolescents by systems;

-practical skills in performing auscultation, percussion, palpation;
-practical skills to perform neonatal resuscitation in the delivery room;

- anatomo-physiological, age-sex and individual features of the structure and development of a healthy and sick child;
- basics of the organisation of outpatient and inpatient care for children, adolescents and adults, modern organisational forms of work and diagnostic capabilities of the outpatient service;

will be able to use

- methods of general clinical examination of paediatric patients;

-basic research methods to identify risk groups in the paediatric population
-physical examination methods in paediatrics

will be able to analyse

- physical examination data (inspection, palpation, auscultation, BP measurement, pulse rate, respiratory rate, etc.) in making a clinical diagnosis;

will be able to synthesize:

- results of laboratory, instrumental diagnostic methods in patients;
- the patient's condition, the severity of the disease.
- use of medical devices stipulated by the procedures for the provision of medical care to patients;
- peculiarities of medical care for adults and adolescents in emergency conditions;
- methods of medical statistics; mass infectious and non-infectious diseases; methods of health promotion; methods of disease prevention; methods of sanitary and educational work;

will be able to assess:

- clinical picture, specific features of the course and possible complications of the most common diseases that occur in a typical form in the adult population;
- classification and main characteristics of medicines, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of medicines; side effects
- data of objective examination, results of laboratory tests and instrumental examination to substantiate preliminary and clinical diagnoses;
- the severity of the disease in order to prescribe appropriate treatment adequate to the condition;
- data of objective examination, results of laboratory tests and instrumental examination to substantiate preliminary and clinical diagnoses;
- -the severity of the disease in order to prescribe appropriate treatment adequate to the condition

Thematic plan of study of the discipline "Pediatrics"

Name sections and topics discipline practical classes	**Total hours of class work**	**Used educational Technologies, ways and methods of teaching**	**Used simulation technologies**	**Forms of current and end-of-term control progress**
1.Exudative-Catarral Diathesis in children. Etiology, clinical features, diagnosis, management	2	*Problem-based lecture; problem-based learning (PBL); case-based learning (CBL).*	*101306 6 PEDI® Blue with trchnology Smart Skin™*	*Assessment of mastering practical skills (abilities). clinical case analysis.*

2.Hemorragic diathesis in Pediatric practice. Pathogenesis, clinical presentation, treatment.	2	Lecture visualization	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). Control questions*
3.Rickets in children. Etiology, pathophysiology, clinical manifestations, diagnosis, prevention.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with technol ogy Smart Skin™*	Assessm ent of the masterin g of practical skills (abilities).analysis of the clinical record
4.Congenital malformations of the respiratory system in children.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
5.Acute obstructive airway diseases in children (laryngotracheitis, bronchiolitis).	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
6.Pneumonia in children: clinical presentation, diagnosis, complications.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities*

				). *clinical case analysis.*
7. Chronic respiratory diseases in children (bronchial asthma, cystic fibrosis, bronchopulmonary dysplasia).	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6* *PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities).* *clinical case analysis.*
8.Cyanotic Congenital heart defects in children: classification, clinical features, diagnosis.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6* *PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities).* *clinical case analysis.*
9.Acyanotic Congenital heart defects in children: classification, clinical features, diagnosis ***Module 1.***	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6* *PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities).* *clinical case analysis.*
10.Acute rheumatic fever in children. Clinical features, diagnosis, treatment, management, and prevention	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6* *PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities).* *clinical case analysis.*
11.Cardiac rhythm and conduction disorders in pediatrics.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6* *PEDI®*	*Assessme nt of masterin g practical*

			Blue with trchnol ogy Smart Skin™	*skills (abilities). clinical case analysis.*
12.Congenital malformations of the gastrointestinal tract in children	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
13.Gastroesophageal reflux disease and peptic ulcer disease in pediatrics.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
14.Chronic hepatobiliary disorders in children (cholecystopathy, biliary dyskinesia, hepatitis-related conditions).	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
15.Malabsorption syndromes and celiac disease in children.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
16.Congenital endocrine disorders in children	2	Visualizatio n lecture, case-	*101306 6*	*Assessme nt of*

(congenital hypothyroidism, adrenal hyperplasia).		based learning (CBL)	*PEDI® Blue with trchnol ogy Smart Skin™*	*masterin g practical skills (abilities). clinical case analysis.*
17.Thyroid diseases in children (hypothyroidism, hyperthyroidism)	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
18.Type 1 diabetes mellitus in childhood: etiology, pathogenesis, clinical management. ***Module 2.***	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
19.Obesity, metabolic syndrome, and disorders of growth and puberty in pediatrics	2	*Problem-based lecture; problem-based learning (PBL); case-based learning (CBL).*	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
20.Congenital hematologic disorders in children (thalassemia, sickle cell disease, hereditary spherocytosis).	2	*Problem-based lecture; problem-based learning (PBL); case-based learning (CBL).*	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*

21.Anemias in children: iron deficiency, B12- and folate-deficiency anemia.	2	*Problem-based lecture; problem-based learning (PBL); case-based learning (CBL).*	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
22.Hemolytic anemias in pediatrics.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
23.Hemostatic disorders in children (hemophilia, von Willebrand disease, thrombocytopenic purpura).	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
24.Congenital anomalies of the urinary system in children.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
25.Acute and chronic glomerulonephritis in pediatrics.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI®*	*Assessme nt of masterin g practical*

			Blue with trchnol ogy Smart Skin™	*skills (abilities). clinical case analysis.*
26.Urinary tract infections and pyelonephritis in children.	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
27.Nephrotic syndrome and acute renal failure in pediatrics ***Module 3***	2	Visualizatio n lecture, case-based learning (CBL)	*101306 6 PEDI® Blue with trchnol ogy Smart Skin™*	*Assessme nt of masterin g practical skills (abilities). clinical case analysis.*
Total practice classes 7 th semester	***54***			

Name sections and topics discipline Lecture classes	***Total hours of class work***	**Used educational Technologies, ways and methods of teaching**	**Used simulation technologies**	**Forms of current and end-of-term control progress**
1.Exudative-Catarral and Hemorragic diathesis in Pediatric practice.	*2*	lecture with video materials	*800095 1 (P72+li ght) Basic resuscit ation*	Assessm ent of the masterin g of practical

			simulat or BASIC Billy+	skills (abilities).
2.Rickets in children.Etiology,pathophysiology,clinical manifestations,diagnosis,prevention.	*2*	lecture with video materials	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
3.Congenital malformations of the respiratory system in children.	*2*	lecture with the use of video materials, case-based learning (CBL)	101306 6 PEDI® Blue with technol ogy Smart Skin™	Assessm ent of masterin g of practical skills (abilities). Analysis of clinical cases.
4.Acute and chronic respiratory diseases in pediatrics (obstructive airway diseases, pneumonia, bronchial asthma, cystic fibrosis, bronchopulmonary dysplasia).	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
5.Congenital heart defects in children: classification, clinical features, diagnosis.	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
6.Acquired cardiovascular diseases in pediatrics (rheumatic heart disease, myocarditis, hypertension, hypotension).	*2*	lecture with the use of video materials, case-based	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC*	Assessm ent of the masterin g of practical skills (abilities

		learning (CBL)	*Billy+*	).
7.Cardiac rhythm and conduction disorders in children.	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+light) Basic resuscitation simulator BASIC Billy+*	Assessment of the mastering of practical skills (abilities).
8.Congenital malformations of the gastrointestinal tract in children.	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+light) Basic resuscitation simulator BASIC Billy+*	Assessment of the mastering of practical skills (abilities).
9.Functional and organic gastrointestinal diseases in pediatrics (GERD, chronic gastritis, duodenitis, peptic ulcer disease).	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+light) Basic resuscitation simulator BASIC Billy+*	Assessment of the mastering of practical skills (abilities).
10.Hepatobiliary disorders in children (hepatitis-related conditions, cholecystopathy, biliary dyskinesia).	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+light) Basic resuscitation simulator BASIC Billy+*	Assessment of the mastering of practical skills (abilities).
11.Malabsorption syndromes in pediatrics (celiac disease, secondary malabsorption).	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+light) Basic resuscitation simulator BASIC Billy+*	Assessment of the mastering of practical skills (abilities).
12.Congenital endocrine disorders in children (congenital hypothyroidism, adrenal hyperplasia).	*2*	lecture with the use of video	*800095 1 (P72+light) Basic resuscit*	Assessment of the mastering of

		materials, case-based learning (CBL)	*ation simulat or BASIC Billy+*	practical skills (abilities).
13.Thyroid diseases in pediatrics (hypothyroidism, hyperthyroidism).	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
14.Type 1 diabetes mellitus in children: etiology, pathogenesis, clinical management.	*2*	lecture with video materials	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
15.Obesity, metabolic syndrome, and disorders of growth and puberty in pediatrics.	*2*	lecture with video materials	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
16.Congenital and acquired hematologic disorders in children (thalassemia, sickle cell disease, hereditary spherocytosis).	*2*	lecture with video materials	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
17.Anemias, hemolytic conditions, and hemostatic disorders in pediatrics (iron deficiency, B12/folate deficiency, hemophilia, von Willebrand disease, thrombocytopenic purpura).	*2*	lecture with the use of video materials, case-based learning (CBL)	*800095 1 (P72+li ght) Basic resuscit ation simulat or BASIC Billy+*	Assessm ent of the masterin g of practical skills (abilities).
18.Congenital anomalies and acquired diseases of the urinary system in	*2*	lecture with the	*800095 1 (P72+li*	Assessm ent of the

children (glomerulonephritis, pyelonephritis, nephrotic syndrome, acute renal failure).		use of video materials, case-based learning (CBL)	*ght) Basic resuscit ation simulat or BASIC Billy+*	masterin g of practical skills (abilities).
Total lecture classes 7 th semester	*36*			

Methodological recommendations for practical classes:

Practical classes are carried out according to the schedule of the educational process and independent work of students in the disciplines. Practical classes are necessarily held after lectures, and are of clarifying, generalizing and consolidating nature. Practical classes are systematic, regularly following each lecture or two or three lectures. The place of practical training is determined in accordance with the topic of practical training (simulation center, children's hospital, polyclinic).
In preparation for practical training, the teacher should:

• study in advance the methodological recommendations for its conduct;

• pay attention to the purpose and theme of the lesson;
• provide for the possibility of using educational films, role-playing games and other modern methods of teaching students;
• provide students with lecture material on each topic to facilitate preparation for the practical class.
During practical classes, students perceive and comprehend new learning material. Before each practical class, students study the plan of the seminar class with a list of topics and questions, a list of literature and homework.
In parallel with the lecture material, the student should use other literary sources of modern authors.
The student is recommended the following scheme of preparation for the seminar class:

- work through the lecture notes;
- read the main and additional literature recommended for the studied section;
- answer the questions of the plan of the seminar class;
- study the topics and select literature for writing essays, reports, etc.

Plan of organization of student's independent work

№	Topic of student's independent work	Assignment for CDS (essay, report, presentation, outlining, extracts, crossword puzzles, study of medical history, solving of situational tasks, exercises, cases, testing on the topic).	Recommended literature	Deadl ines (week numb er) Total Hours of work
1.	Sleep-Disordered Breathing and Obstructive Sleep Apnea in Pediatrics	Summary	Marcus CL, et al. Diagnosis and Management of Childhood Obstructive Sleep Apnea Syndrome. Pediatrics. 2012.	1 week.
2	Pulmonary Complications of Measles and Pertussis in Children	taking notes, solving situational tasks,	Cherry JD. Pertussis in Young Infants Throughout the World. Clin Infect Dis. 2016. Moss WJ. Measles. Lancet. 2017.	2 week
3	Role of Pulmonary Function Tests in Pediatric Respiratory Diseases	Report, essay, presentation	Stanojevic S, et al. Reference Ranges for Spirometry Across Childhood and Adolescence. Am J Respir Crit Care Med. 2017. Hammer J. Pulmonary Function Testing in Children. Clin Respir J. 2015.	3 week
4	Kawasaki Disease in Children: Diagnostic Challenges and Outcomes	Report, essay, presentation	McCrindle BW, et al. Diagnosis, Treatment, and Long-Term Management of Kawasaki Disease. Circulation. 2017.	4 week

			Rowley AH. Kawasaki Disease: Pathogenesis and Future Directions. Nat Rev Rheumatol. 2020.	
5	Pediatric Hypertension: Etiology and Long-Term Prognosis	Report, essay, presentation	Flynn JT, et al. Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents. Pediatrics. 2017. Lurbe E, et al. Management of High Blood Pressure in Children and Adolescents. Eur Heart J. 2016.	5 week
6	Arrhythmias in Childhood: Modern Diagnostic Approaches	Report, essay, presentation	Walsh EP, Cecchin F. Arrhythmias in Adult Patients with Congenital Heart Disease. Circulation. 2007. Triedman JK. Pediatric Arrhythmias: Advances in Diagnosis and Management. Curr Opin Cardiol. 2018.	6 week
7	Celiac Disease in Pediatric Practice: Diagnostic Difficulties	Report, essay, presentation	Husby S, et al. European Society Paediatric Gastroenterology, Hepatology and Nutrition Guidelines for Diagnosis of Coeliac Disease. J Pediatr Gastroenterol Nutr. 2020.	7 week

			Ludvigsson JF, et al. Diagnosis and Management of Adult Coeliac Disease: Guidelines from the British Society of Gastroenterology. Gut. 2014.	
8	Pediatric Pancreatitis: Causes and Treatment Approaches	essay	Morinville VD, et al. Management of Acute Pancreatitis in Children: A Clinical Report. J Pediatr Gastroenterol Nutr. 2018. • Abu-El-Haija M, et al. Acute Pancreatitis in Children: A Review. JAMA Pediatr. 2017.	8 week
9	Gastroesophageal Reflux Disease (GERD) in Infants and Children	Report, essay, presentation	Rosen R, et al. Pediatric Gastroesophageal Reflux Clinical Practice Guidelines. J Pediatr Gastroenterol Nutr. 2018. • Vandenplas Y. Pediatric GERD: Diagnosis and Treatment. Best Pract Res Clin Gastroenterol. 2013.	9 week
10	Short Stature in Children: Endocrine and Non-Endocrine Causes	Report, essay, presentation	Cohen P, et al. Consensus Statement on the Diagnosis and Treatment of Children with Idiopathic Short Stature. J Clin Endocrinol Metab. 2008.	10 week

			• Rogol AD. Causes of Short Stature in Children and Adolescents. UpToDate.	
11	Disorders of Puberty: Precocious and Delayed Puberty in Pediatrics	Report, essay, presentation	Carel JC, Leger J. Clinical Practice: Precocious Puberty. N Engl J Med. 2008. • Abitbol L, Zborovski S. Delayed Puberty. Pediatr Rev. 2019.	11 week
12	Thalassemia in Childhood: Clinical Manifestations and Treatment	Report, essay, presentation	Cappellini MD, et al. Guidelines for the Management of Transfusion Dependent Thalassaemia (TDT). Thalassaemia International Federation, 2021. • Rund D, Rachmilewitz E. β-Thalassemia. N Engl J Med. 2005.	12 week
13	Disseminated Intravascular Coagulation (DIC) in Children	solving situational tasks,	Levi M, et al. Disseminated Intravascular Coagulation in Critically Ill Patients. N Engl J Med. 2009. • Taylor FB, et al. Towards Definition, Clinical and Laboratory Criteria, and a Scoring System for Disseminated Intravascular Coagulation. Thromb Haemost. 2001.	13 week

14	Vesicoureteral Reflux in Children: Clinical Importance and Management	studying medical history, solving situational tasks	Peters CA, et al. Summary of the AUA Guideline on Management of Primary Vesicoureteral Reflux in Children. J Urol. 2010. • Sinha R, et al. Vesicoureteral Reflux in Children. Indian J Pediatr. 2015.	14 week
15	Renal Tubular Disorders in Children (e.g., Renal Tubular Acidosis)	Report, essay, presentation	Batlle D, Haque SK. Genetic Causes and Mechanisms of Distal Renal Tubular Acidosis. Nephrol Dial Transplant. 2012. • Rodríguez Soriano J. Renal Tubular Acidosis: The Clinical Entity. J Am Soc Nephrol. 2002.	15 week
	Total Hours of work	***60***		

Methodological recommendations for the implementation of independent work.

Extracurricular independent work of students (hereinafter referred to as independent work) is a planned educational, research, scientific research activities of students, carried out in extracurricular time on the assignment and under the methodological guidance of the teacher, but without his direct participation. It includes:
preparation for classroom classes (lectures, practical, seminars, etc.) and fulfillment of relevant assignments;
independent work on individual topics of academic disciplines in accordance with the educational and thematic plans;

• writing essays, reports;

preparation for all types of practical training and fulfillment of tasks provided by them;
• preparation for all types of control tests, including comprehensive exams and credits;
preparation for the final state certification, including the final qualification work; other types of activities organized and carried out by the university, faculty or department.
The fulfillment of any type of independent work involves students passing through the following stages:
determination of the purpose of independent work;

specification of the cognitive (problem or practical) task; - planning of the independent work;
implementation of the program of independent work.

A PowerPoint presentation slide is a separate page or image in the PowerPoint program, which is used to visually present information. Slides are the main element of the presentation and allow you to structure and convey content in a convenient format.

Requirements for presentation design:

-The following structure can be followed when compiling slides: Slide 1: title slide (title of the work, purpose of the work);
Slide 2: relevance of the topic, object and subject of research (you can insert pictures and photos of the subject of research);
Slide 3: purpose, hypothesis and objectives of the study;

Slide 4: theoretical basis, methods and instruments of the study;
Slide 5-8: content of the research (proposed solution to the research problems with justification, main stages of the work);
Slide 9: analysis and practical significance of the results achieved; Slide 10: general conclusion and conclusions.
-The presentation should last no more than 10 minutes

General recommendations:

• the information that is perceived worse without visual support should be put on the slide;

• slides should complement or summarize the content of the presentation or its parts, not duplicate it;
• each slide should have a title;

• the information on the slides should be brief, clear and well-structured;

• the slide should not be overloaded with graphic images and text, the free margin of the slide should be large enough.
Abstract - a summary in writing of the content of scientific work on the provided topic. This is an independent research work, where the student reveals the essence of the researched problem with elements of analysis on the topic of the abstract.
Brings different points of view, as well as their own views on the problems of the topic of the abstract. The content of the abstract should be logical, the presentation of the material is of a problematic and thematic nature.
problem-thematic character.

Requirements for the design of the abstract:

The volume of the abstract may vary within 9-10 printed pages.

The main sections: table of contents (outline), introduction, main content, conclusion, list of references.
The text of the abstract should contain the following sections:

• title page with the following information: name of the university, department, topic of the abstract, name of the author and name of the teacher
-introduction, relevance of the topic.

• main section.

-conclusion (analyzing the results of the literature search); conclusions.

-list of literary sources should have at least 10 bibliographic titles, including network resources.
The text part of the abstract is drawn up on a sheet of the following format:

• top indent - 2 cm; left indent - 3 cm; right indent - 1.5 cm; bottom indent - 2.5 cm;
-text font: Times New Roman, font height - 14, space - 1.5;

• page numbering - from the bottom of the sheet. The number is not put on the first page.

The abstract should be completed competently with observance of the culture of presentation. There must be references to the literature used, including periodical literature for the last 5 years.

Criteria for evaluating the abstract:

- relevance of the research topic;
- compliance of the content with the topic;
- depth of elaboration of the material;
- correctness and completeness of the development of the questions posed;
- significance of conclusions for further practical activity;
- correctness and completeness of the use of literature;
- compliance of the abstract design with the standard;
- quality of the message and answers to questions at the defense of the abstract.

List of basic and additional literature Basic literature

Authors	year of edition
Basic	
Nelson. Textbook of Pediatrics. 21th ed.	2021
Pervez Akbar Khan Basis of Pediatrics 10th ed.	2012
Bates' Guide to Physical Examination and History Taking - 8th ed./ Lynn S. Bickley. Peter G. Szilagyi	2020
Gomella's neonatology 8th ed. Tricia Lacy Gomella, Fabien G.Eyal, Fayez Bany-Mohammed	2020
Practical guide Endocrine Conditions in Pediatrics Takara Stanley, Madhusmita misra	2021
Oxford handbook of neonatology Grenville Fox, Nicolas Hoque, Timothy Watts	2017
Nelson Essentials of pediatrics 8th ed.	2018

Monitoring and evaluation of learning outcomes

Each module is assessed on 100 point system. The maximum score is 100. The student is allowed to pass the final control, if the total score on the discipline of 60 or more points.

Scoring Criteria	Module 1	Module 2	Module 3
Classroom work (activity in discussions, oral questioning, working with a glossary, lectures, completing assignments, etc.)	40 points	40 points	40 points
Independent work: Essay, report, etc.	20 points	20 points	20 points
Total for the module (testing, situational task)	40 points	40 points	40 points
Total for the discipline (exam):	100 points	100 points	100 points

Assessment Criteria:
Criteria for evaluation of practical training:

• grade "excellent" is assigned to the student, if he or she has knowledge of the discipline in the full scope of the program, sufficiently deep understanding of the discipline; independently, in a logical sequence and exhaustively answers all questions, emphasizing the most important, is able to analyze, compare, classify, generalize, concretize and systematize the studied material, highlight the main in it;
• grade "good" the student has knowledge of the discipline almost in full scope of the program (there are gaps of knowledge only in some sections); independently and partly with leading questions gives full answers to the questions of the ticket, does not always emphasize the most important, does not make serious errors in the answers;
• the grade "satisfactory" is given if the student possesses the basic scope of knowledge on the discipline; shows difficulties in independent answers, operates with inaccurate formulations; in the process of answering the questions there are mistakes on the essence of the questions;
• unsatisfactory" grade is given if the student has not mastered the mandatory minimum knowledge of the subject, is unable to answer the

questions of the ticket even with additional guiding questions from the teacher.
Criteria for assessing practical skills:

• The grade "excellent" is given when thorough and systematic performance of all stages of neurological examination. If there is clear and professional communication with the patient during the examination. The student has a thorough understanding of the neurological aspects being examined, including analysis of specific symptoms and their interpretation.
• A grade of "good" is awarded when the basic steps of the neurologic examination are competently performed, with effective interaction with the patient providing understanding and trust. The ability to identify key neurological symptoms and analyze them accordingly.
• The grade "satisfactory" is given when the basic stages of neurological examination are performed, but with some deficiencies, with some misunderstandings or failures in communication with the patient. In the presence of basic knowledge of neurological symptoms and their interpretation.
• The grade "unsatisfactory" is given if the student makes serious errors or omissions in performing the neurological examination, as well as in the presence of problems in communication that may cause difficulties or even dissatisfaction with the patient and insufficient knowledge of neurological aspects and their identification during the examination.
Criteria for evaluation of abstracts:

• grade "excellent" is given to the student if the topic of the abstract is fully disclosed, excellent mastery of the material is demonstrated, appropriate sources are used in the right amount, the structure of the work corresponds to the set tasks, the degree of independence of the work is high;
• a grade of "good" is assigned to a student, if the topic of the abstract is basically disclosed, good mastery of the material is demonstrated, appropriate sources are used, the structure of the work basically corresponds to the set tasks, the degree of independence of the work is average;
• the grade "satisfactory" is given to the student if the topic of the essay is poorly disclosed, satisfactory mastery of the material is demonstrated, the sources used and the structure of the work

partially correspond to the tasks set, the degree of independence of the work is low;
• unsatisfactory" grade is given to a student if the topic of the essay is not disclosed, unsatisfactory mastery of the material is demonstrated, the sources used are insufficient, the structure of the work does not correspond to the tasks set, the work is not independent.

Criteria for evaluating projects:

• A grade of "*excellent"* is awarded to students if the project demonstrates outstanding depth of research into the neurological aspects of the topic, presenting innovative research approaches. Effective public education emphasizes the creativity and originality of the project as well as the active involvement of the

community. The organization and structure of the project is highly organized, logically structured, and ideas are clearly and professionally expressed
• A grade of *"good"* is awarded to students if the project demonstrates a good depth of research into neurological aspects, with support from specific facts and data.
The effectiveness of the education is significant, but there is room for additional improvement. The presence of creative elements adds originality to the project, but some aspects may require additional development. Community involvement is positive, but could be more intensive. The organization and structure of the project is generally good, but some aspects may need improvement.
• A grade of "*satisfactory"* is given to students if the project meets the minimum requirements of research on neurological aspects but needs additional development. The effectiveness of the enlightenment is at a basic level and the project can be improved in this direction. The project contains elements of creativity, but these could be supplemented and deepened. Community involvement could be more active. The organization and structure of the project needs additional attention to improve clarity and logic.
• A grade of "*unsatisfactory"* is given to students, the project does not meet basic standards, does not provide sufficient depth in researching the neurological aspects of TBI. Educational effectiveness is extremely limited, creativity and originality are lacking. Community involvement is insufficient or absent. The organization and structure of the project is highly objectionable, making it difficult to understand and disorganized.

Testing Evaluation Criteria, MSQ:

• A grade of "*excellent"* on the test is awarded to a student who has provided correct, in-depth and clear answers, demonstrating a high level of knowledge and its practical application. An important factor is the student's ability to solve complex problems, be creative, and adhere to the requirements of the test. Criteria may vary, but the general requirement is an outstanding understanding and successful application of the course material (with 90 or more correct answers).
• A grade of *"good"* on the test is given to a student if he or she has demonstrated good knowledge of the subject matter, provided correct answers, presented his or her thoughts clearly and concisely, and successfully completed the main aspects of the test problems. This grade may also reflect the student's ability to apply the acquired knowledge in various situations and effectively utilize the learned skills within the test tasks (with the number of correct answers ranging from 76 to 89).
• a "*satisfactory*" grade on a test is assigned to a student who demonstrates a basic understanding of the subject matter, provides answers that meet the minimum requirements, and successfully completes the major elements of the test. This grade may indicate that the student has mastered the fundamentals of the material, but may not have achieved a high level of depth of knowledge or coped with the more

difficult aspects of the assignments. (with the number of correct answers ranging from 60 to 75)
• an "*unsatisfactory*" grade on the test is given to a student if his/her knowledge of the subject is insufficient, if his/her answers contain significant errors or do not meet the minimum requirements, or if the student failed to cope with the main aspects of the test. This grade indicates an unsatisfactory level of mastery of the material and an inability to apply knowledge within the framework of the test tasks. (if he/she gave up to and including 59 correct answers).

- Scale of correspondence between grades and scores on the final control (exam)	
scores	**assessment**
90-100	«exellent»
76-89	«good»

60-75	«satisfactory »
0-59	«unsatisfactory»

Academic Discipline Policy:

• compulsory attendance at classes;
• active participation of the student in practical classes;
• preliminary preparation and fulfillment of homework;
• qualitative and timely fulfillment of assignments on SIW;
• participation in all types of control (current, final and final);
• one late arrival to class and/or leaving before the end of class for any reason is considered as one missed class, which is not subject to recovery;
• inadmissible: use of cell phones during class, cheating and plagiarism, late submission of assignments, non-compliance with the chain of command and rules of conduct.

Help: For consultations on the implementation of independent works, their submission and defense, as well as for additional information on the passed material and all other arising questions on the course, please contact the teacher during the hours allocated for the SIWT.