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**COMPETENCE CATALOGUE
for a university graduate in the specialty 560002 “PEDIATRICS”
PRE-GRADUATE LEVEL**

Bishkek 2018

The catalog of competencies of a graduate of the university in the specialty 560002 “Pediatrics” (undergraduate level) was developed by a working group consisting of: Candidate of Medical Sciences, Prof. Alymbaeva E. Sh., Candidate of Medical Sciences, Associate Professor Musurkulova, Candidate of Medical Sciences, Associate Professor Bektursunova T. M., Candidate of Medical Sciences, Associate Professor Dzholbunova Z. K., Candidate of Medical Sciences, Associate Professor Sultanalieva A. S., Candidate of Medical Sciences, Associate Professor Akhmedova H. R., Candidate of Medical Sciences, Associate Professor Naritsyna L. M., Candidate of Medical Sciences, Associate Professor Mustapaeva Zh. Sh., Candidate of Medical Sciences, Associate Professor Boryakina Y. V., Candidate of Medical Sciences, Associate Professor Moldogazieva A. S., Candidate of Medical Sciences, Associate Professor Bolotbekova A. Zh., Candidate of Medical Sciences, Associate Professor Abdylbaeva Z. E., Candidate of Medical Sciences, Associate Professor Kakeeva A. A., Candidate of Medical Sciences, Associate Professor Ishaeva E. Sh., Candidate of Medical Sciences, Associate Professor Chechetova S. V., Candidate of Medical Sciences, Associate Professor Chynyeva D. K.

When developing the competence catalogue, the materials of the state educational standard of higher professional education in the specialty “Pediatrics” and the catalogue of competencies of a graduate of the university in the specialty 560001 “General Medicine” (undergraduate level) were used.

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EXPLANATORY NOTE

Undergraduate training in the specialty “Pediatrics” provides professional training of a specialist who has basic theoretical and practical knowledge in the diagnosis and treatment of diseases of childhood and is ready for subsequent mandatory postgraduate education. The uniqueness of training in the specialty “Pediatrics” lies in the fact that, along with general medical skills, the graduate masters the skills of providing therapeutic and preventive care to healthy and sick children of various age groups at all levels of the health organization, taking into account the characteristics of the body, and must also be oriented in related fields of activity, have the ability to work in modern socio-economic conditions.

The competence catalog for a graduate of a medical university in the specialty of Pediatrics is compiled taking into account the structure of diseases and conditions that are most common in childhood and meets the requirements of the State Educational Standard of Higher Professional Education. Taking into account the modern requirements of medical science and practice, the requests of employers and in accordance with the requirements of the State Educational Standard of Higher Professional Education, the graduate must master general and special competencies for the implementation of preventive, diagnostic, therapeutic, rehabilitation, psychological and pedagogical, organizational and managerial, research activities. Important, along with professional competencies, are such competencies as: the ability to effectively search for and use the information received, the ability to solve problems and make decisions, analytical and critical thinking, communication skills.

According to the State Educational Standard of Higher Professional Education, a graduate must master the following activities:

- preventive,
- diagnostic,
- medical,
- rehabilitation,
- psychological and pedagogical,
- organizational and managerial support,
- research and development.

Based on this catalog of tasks, the following are determined:

- the purpose and content of undergraduate training of a pediatrician,
- level of competencies, knowledge and skills;

developed by:

- pediatrician training programs,
- criteria for assessing the quality of students ' training at various stages of training;

organized by:

- learning process,
- professional orientation of applicants entering medical universities;

held:

- final state certification of graduates

For practical convenience, the tasks in the catalog are distributed in the following way:

Chapter 1. General tasks

Chapter 2. Symptoms / problems

Chapter 3. Disciplinary tasks

Chapter 4. Medical manipulations.

Chapter 1 “General tasks” lists the general and special competencies that a graduate must master (in accordance with the State Educational Standard of Higher Professional Education in the specialty 560002 "Pediatrics").

Chapter 2, “Symptoms/Problems”, lists the various symptoms, complaints, or patient conditions that a doctor may encounter in his or her practice. The graduate should be able to assess the condition of the patient with this symptom/problem in a structured way and make a differential diagnosis. The graduate must offer appropriate diagnostic, therapeutic, social and preventive measures and provide emergency care in the case of life-threatening conditions.

Symptoms/problems were selected based on their frequency of occurrence. Rare symptoms/problems were selected according to the principle that providing emergency care can save the patient's life, or failure to provide care can harm the patient.

Chapter 3, "Disciplinary Tasks", presents the tasks for the disciplines. In each discipline, there is a block "Clinical conditions", which includes a list of diseases/pathological conditions that the graduate should be able to diagnose and/or treat, and a block "Theoretical Foundations", which lists the knowledge that the graduate should have. The following gradation is used to indicate the level of knowledge:

	Level 1	Level 2
Clinical conditions	<ul style="list-style-type: none"> - The graduate should be guided in this clinical situation: - make a preliminary diagnosis, - give a definition in general terms, without going into details, - send for a consultation with a specialist. 	<ul style="list-style-type: none"> - The graduate must solve the clinical situation: - can structurally collect anamnesis, - conduct a physical examination , - conduct an active search for typical complaints and symptoms, - can make a diagnosis for this condition, - can continue the appropriate diagnostic and therapeutic measures, taking into account epidemiological data, the results of laboratory research methods, - properly explain to the patient the essence of the necessary diagnostic, therapeutic and rehabilitation measures.
Theoretical foundations	<p>The level of general knowledge of the graduate:</p> <ul style="list-style-type: none"> - can describe the concept or procedure in general terms, including indications and contraindications, - knows the relevance and significance of this phenomenon/procedure in a specific clinical situation, - choose the correct execution of the procedure (in a clinical setting, on a simulator, on video, or by other technical means) 	<p>The level of practical application of the graduate:</p> <ul style="list-style-type: none"> - can use their knowledge in interpreting the results of examinations, advising patients on treatment, prevention and rehabilitation

To refer to the competencies that must possess a graduate of the conduct of the disease/pathological condition, use the following letter designations:

A: The diagnosis of disease exhibited by a doctor on the basis of physical examination, simple clinical-laboratory and instrumental methods of examination are assigned and interpreted by the doctor.

B: The treatment is performed personally by the physician, including ordinary regimens for uncomplicated cases.

C: The doctor is able to assess the patient's condition and begin to provide emergency care. The doctor is not obliged to make a clinical diagnosis; the emergency measures carried out by him can be based on a reasonable preliminary diagnosis.

D: The doctor knows and is able to carry out preventive measures.

Diseases / pathological conditions are presented in groups, by discipline:

- Children's diseases
- Children's infectious diseases
- Pediatric surgery
- Internal diseases
- Infectious diseases
- Obstetrics and Gynecology
- Surgical diseases
- Nervous diseases
- Diseases of the ear, throat, nose
- Skin and venereal diseases
- Mental illness in children
- Tuberculosis
- Eye diseases
- Oncology
- Pediatric Dentistry
- Pediatric anesthesiology and resuscitation
- Clinical Pharmacology
- Forensic Medicine
- Medical rehabilitation
- Public health

Chapter 4. "Medical Skills and Manipulations" lists the manipulations that a graduate should be familiar with and/ or have some degree of proficiency in.

To describe the degree of proficiency that a graduate should possess, the following gradation of levels is used:

	Level 1	Level 2
Medical manipulations	The graduate must have some practical experience: - can explain the principle of manipulation, - knows the indications and contraindications to manipulation, - saw the manipulation performed (on a patient, on a dummy, on a video, or others.)	The graduate should apply the skill regularly (the manipulation should be processed on patients of all age categories, newborns): - can explain the principle of manipulation, - has the correct technique of performing manipulation, has sufficient experience to perform it independently , - can interpret the data obtained as a result of manipulation.

All medical manipulations are conditionally grouped into the following groups

- collection of the patient's anamnesis,
- information management,
- physical examination,
- general skills,
- skills in neonatology,
- manipulations for emergency care,
- manipulations used in surgery, including in pediatric surgery,
- otorhinolaryngological manipulations,
- ophthalmic manipulations,
- skills and manipulations used in children's infection,
- skills and manipulations used in dermatovenerology,
- skills and manipulations used in psychiatry,
- manipulations used in obstetrics and gynecology

CHAPTER 1. GENERAL TASKS

General tasks can be formulated in the form of general (universal) and special (professional) competencies. Special competencies are distributed according to the types of professional activity of the doctor.

Universal Competencies	
General scientific competencies	
GSC-1	To be able to analyze socially significant problems and processes, to use in practice the methods of the humanities, natural sciences, biomedical and clinical sciences in various types of professional and social activities
GSC -2	To be able to analyze worldview, socially and personally significant philosophical problems, basic philosophical categories, and self- improvement
GSC -3	To be able to analyze significant political events and trends, to master the basic concepts and laws of the world historical process, to respect and respect the historical heritage and traditions, to evaluate the policy of the state; has knowledge of historical and medical terminology
GSC -4	To be able to analyze economic problems and social processes, use the methodology for calculating economic efficiency indicators.
GSC -5	To be capable of logical and reasoned analysis, public speaking, conducting discussions and polemics, editing texts of professional content, cooperation and conflict resolution, tolerance
GSC -6	To be ready to carry out activities in accordance with the moral and legal norms accepted in the society; to comply with the rules of medical ethics, laws and regulations on working with confidential information, to keep medical secrets
Instrumental competencies	
IC-1	Ability to work independently on the computer (basic skills)
IC -2	To be ready for a written and verbal communication in the national language and official languages is able to master a foreign language at the level of everyday communication
IC -3	To be able to use methods of control; to organize the work of artists; find and make responsible management decisions in conditions different opinions and under his professional competence
IC -4	willingness to work with information from a variety of sources
Socio-personal and general cultural competencies	
SPC-1	To be able to implement the ethical and deontological aspects of medical activity in communication with colleagues, nurses and junior staff, children, and their parents
SPC -2	To be able to identify the natural-scientific essence of the problems that arise in the course of a doctor's professional activity
SPC -3	Ability of analyzing medical information based on the principles of evidence-based medicine
SPC -4	To be able to apply modern social and hygienic methods of collecting and medical and statistical analysis of information on the health indicators of the child population

SPC -5	To be able to use methods of assessing natural (including climatogeographic) and medico-social environmental factors in the development of diseases in children and adolescents, to carry out their correction

Professional competencies	
PC-1	To be able to analyze the results of their activities to prevent medical errors, while acknowledging this responsibility disciplinary, administrative, civil, criminal
PC -2	To be able to conduct and interpret a survey, physical examination, clinical examination, the results of modern laboratory and instrumental studies, morphological analysis of biopsy, surgical and autopsy material of patients, obtain medical map of outpatient and inpatient sick child
PC -3	To be able to conduct pathophysiological analysis of clinical syndromes, use reasonable methods of diagnosis, treatment, rehabilitation and prevention among children, taking into account their age
PC -4	To be able to apply methods of asepsis and antiseptics, use medical instruments, carry out sanitary treatment of medical and diagnostic rooms, children's health organizations, master the technique of caring for sick children and adolescents
PC -5	To be able to conduct a forensic medical examination of living persons; interpret the results of laboratory studies of objects of forensic medical examination as a specialist
PC -6	To be able to work with medical and technical equipment used in working with patients, computer equipment, receive information from various sources, and use the capabilities of modern information technologies to solve professional problems
PC -7	In preventive activities: To carry out preventive measures to prevent infectious, parasitic and non-communicable diseases, to organize and carry out immunization of children and adolescents according to the national calendar of preventive vaccinations, sanitary and educational work on hygienic issues
PC -8	To be able to carry out preventive measures with the population to prevent the occurrence of the most common diseases; to carry out general health measures to form a healthy lifestyle, taking into account risk factors, to make recommendations on healthy nutrition, to evaluate the effectiveness of dispensary monitoring of healthy and chronically ill children and adolescents
PC -9	To be able to organize tuberculin diagnostics and x-ray examination of children and adolescents for the purpose of early detection of tuberculosis, to evaluate their results; to select individuals for observation, taking into account the results of mass tuberculin diagnostics
PC -10	To be able to carry out anti-epidemic measures, protect the population in hotbeds of particularly dangerous infections, in case of deterioration of the radiation situation and natural disasters
PC -11	in diagnostic activities:

	To be capable of making a diagnosis based on the results of laboratory and diagnostic studies of biological material, taking into account the peculiarities of the course of the disease with the defeat of various organs and systems of the body
PC -12	To be able to analyze the results of the main clinical and laboratory research methods and assess the functional state of the child's body for the purpose of diagnosing diseases on time
PC -13	To be able to identify the main symptoms and syndromes of diseases in patients, use the algorithm for making a diagnosis (main, concomitant, complications) taking into account the ICD-10, perform basic diagnostic measures to identify urgent life-threatening syndromes
PC -14	To be able to analyze and interpret the results of modern diagnostic technologies in children and adolescents for successful therapeutic and preventive activities
PC -15	In medical activity: To be able to perform therapeutic measures for the most common diseases and conditions in children and adolescents that can cause severe complications and / or death
PC -16	To be able to prescribe adequate treatment to sick children and adolescents in accordance with the diagnosis
PC -17	To be able to provide children and adolescents with first aid in the event of urgent and life-threatening conditions, send patients to hospital on a planned and emergency basis
PC -18	To be able to prescribe and use the basic principles of the organization of medical nutrition in sick children suffering from various pathologies
PC -19	In rehabilitation activities: To be able to apply rehabilitation measures among children with the most common diseases, to determine the indications for the transfer of children and adolescents to specialized groups for physical education, depending on the pathology
PC -20	To be able to give recommendations on the choice of the mode of motor activity, to determine indications and contraindications to the appointment of physical therapy, physiotherapy, non-drug therapy, the use of the main resort factors in the treatment of children and adolescents
PC -21	In educational activities: To be capable of teaching secondary and junior medical personnel the rules of sanitary and hygienic regime, ethical and deontological principles
PC -22	To be able to teach children and adolescents the rules of medical behavior; to conduct hygiene procedures, the formation of healthy lifestyle skills
PC -23	In organizational and managerial activities: To be able to use the regulatory documentation adopted in the health care of the Kyrgyz Republic
PC -24	To be able to use the knowledge of the organizational structure of health care to provide medical care to the children's population, analyze the performance of medical and preventive institutions, and evaluate the effectiveness of the provision of medical services
PC -25	To be able to ensure the rational organization of the work of secondary and junior medical personnel of medical and preventive institutions and their training in healthcare organizations

PC -26	To be able to draw up appropriate documentation for the referral of a sick child for medical and social expertise in the presence of disability from childhood, to carry out the prevention of disability among children and adolescents
PC -27	In research activities: To be ready to study scientific and medical information, domestic and foreign experience on the subject of research

CHAPTER 2: SYMPTOMS AND SYNDROMES

Common symptoms
Fatigue
Loss of appetite
Weight loss
Exhaustion
Cachexia
Increased weight
Thirst
Nausea, vomiting
Hyperthermia
Hypothermia
Increased sweating
Lymphadenopathy
Abdominal pain
Chest swelling
Wheezing (asthmoid) breathing
Shortness of breath
Stridor
Headache
Vertigo
Increased drowsiness
Dehydration (dehydration)
Blood loss
Diarrhea
Flatulence
Meningeal symptoms
Polyneuropathy
Myalgia
Lag in psychomotor development
Enuresis
Asthenia
Fears
Underdevelopment/cognitive decline
Hallucinations/delusions
Aggression/arousal
Behavior disorder/hyperactivity
Speech development disorder/stuttering
Sudden death
Metabolic disorders

Hyperglycemia
Hypoglycemia
Hypocalcemia
Hypercalcemia
Hyperphosphatemia
Hypophosphatemia
Changes in the level of magnesium, potassium, and sodium
Changes in liver test scores
Changes in kidney test scores
Hypoxia, hypoxemia
Hypercapnia, hypocapnia
Changes in blood, urine, and fecal tests
Changes in the number of white blood cells and the white blood cell formula
Changes in the number and size of red blood cells
Changes in the number of platelets
Changes in hematocrit
Changes in the level of hemoglobin
Changes in platelet function
Proteinuria
Cylindrical structure
Hematuria
Bacteriuria
Steatorrhea
Creatorrhea
Dysbacteriosis
Symptoms from the skin
Pallor
Cyanosis
Jaundice
Puffiness
Itchy skin
Rashes (allergic, hemorrhagic, infectious diseases, acne)
Rashes with DBST (lupus erythema, purple erythema, Gottron's symptom, livedo, capillaritis on the palms)
Hyperpigmentation, depigmentation
Birthmarks
Diaper rash
Hirsutism
Alopecia (hair loss)
Changes on the part of the nails
Dry skin
Hyperhidrosis
Reduction of tissue turgor
Inflammatory skin changes
Boil
Ear, throat, nose, mouth, voice, tongue
Sore throat
Ear pain
Toothache

Changes in the color of teeth
Swelling of the gums
Bleeding gums
Gum hypertrophy
Gum atrophy
Hearing loss
Discharge from the ear
Tinnitus
Nosebleed
Nasal congestion
Nasal discharge
Snoring
Increased salivation (hypersalivation)
Reduced salivation (hyposalivation)
Dry mouth (xerostomia)
Cracks at the corners of the mouth
Ulceration of the oral mucosa
"Raspberry tongue"
"Geographical tongue"
Atrophy of the papillae of the tongue
Violation of taste sensitivity
Cheilit
Bad breath
Voice change (hoarseness/aphonia/dysphonia)
Cleft upper lip
Cleft hard palate
Cleft soft palate
Nasal voice
Eyes
Redness of the eyes ("red eye»)
Mucopurulent discharge
Lacrimation
Photophobia
Blepharospasm
Exophthalmos
Acute eye pain/burning sensation
Strabismus
Double vision (diplopia)
Chicken blindness (nyctalopia)
Itchy eyes
Puffiness of the eyelids
Foreign body/feeling of sand in the eyes
Grefe's symptom ("The setting sun»)
Kocher's symptom
Blepharoptosis
Pathological movements of the eyeballs
Rare blinking
Convergence violation
Loss of vision
Pupil pathology

Thorax
Chest pain
Retraction of the compliant places of the chest
Changes in the chest in rickets (keel-shaped chest, shoemaker's chest)
Chest deformity (heart hump)
Chest injury
Gynecomastia
Pleural effusion
Cough
Hemoptysis
Shortness of breath
Abdominal cavity, stomach, intestines
Epigastric pain
Lower abdominal pain
Groin pain
Pain in the right hypochondrium
Ascites
Burp
Heartburn
Dysphagia
Bloody vomit
Food intolerance
Ingestion of a foreign body
Changes in the color and consistency of the stool, the presence of pus, mucus, blood
Encopresis (incontinence of the stool)
Painful act of defecation
Rectal bleeding
Itching, pain in the anus
Constipation
Pelvis, urinary system
Dysuria
Painful urination
Lower back pain
Swelling of the scrotum
Discharge from the urethra
Menstrual cycle disorder
Dysmenorrhea
Pelvic pain
Anomalies in the development of the external genitalia
Bones, joints, back, limbs
Swelling and joint pain
Joint deformity
Joint defiguration
Morning stiffness
Impaired joint function
Gait disorder
Intermittent claudication
Bone pain (ossalgia)
Changes in the bones of the lower and upper extremities in rickets
Changes in the bones of the skull in rickets

Typical bone fractures
Back pain
Violation of posture (pathological lordosis, kyphosis, scoliosis)
Violation of consciousness, orientation, balance, gait, involuntary movements
Fainting
Coma
Involuntary movements (hyperkinesia, tics, convulsions, dyskinesia)
Acute paralysis, hemiplegia
Paresthesia (feeling of "goosebumps"), hypesthesia
Syndrome of increased neuro-reflex excitability
Hypotonic newborn
Depression syndrome
Changing the sense of touch
Mental, behavioral, and psychological problems
Acute behavior/personality change
Obsessive-compulsive symptoms
Aggressive behavior towards others
Self-aggression/suicide risk
Changing emotions and mood
Nervousness/anxiety/tension/acute stress
Excitement/anxiety
Forgetfulness, memory disorder
Attention and concentration disorder
Insomnia / sleep disorder
Drug abuse and drug addiction
Drug abuse
Newborns
Regurgitation and vomiting
Cranial suture divergence
Bulging, sinking of the large fontanelle
"Brain cry"
Hypo-and areflexia
Vertical, horizontal, rotator nystagmus
Strabismus
No reaction of the pupil to light
Torticollis, shortened or elongated neck
Psychosocial and interpersonal problems
Psychological problems at school
Agravation
Absenteeism (systematic absenteeism in school)
Problems with relationships with parents, classmates

CHAPTER 3: DISCIPLINARY TASKS

Name of the nosology	Level	A	B	C	D
3.1. Children's diseases					
Neonatology					
Organization of services for newborns in the maternity hospital and at the 2nd stage of nursing	2	A		C	D

Borderline conditions of the neonatal period (physiological jaundice, physiological weight loss, sexual crisis, transient intestinal catarrh, transient polycythemia)	1	A		C	D
Care and feeding of full-term and premature newborns	1	A	B	C	D
Premature newborns	1	A			D
Intrauterine development delay	1	A			D
Intrauterine hypoxia asphyxia of newborns	1	A		C	D
Birth injuries of newborns (lesions of the brain and spinal cord)	1	A			D
Hemolytic disease of newborn children	2	A		C	D
Intrauterine infections	1	A			D
Embryos and fetopathies	1	A			D
Pneumopathies of newborns	1	A		C	D
Pneumonia of newborns	2	A		C	D
Diseases of the skin, subcutaneous fat, umbilical cord and umbilical wound	1	A	B	C	D
Genodermatoses	1	A			D
Sepsis of newborn children	1	A			D
Endocrinopathy of newborns	1	A			D
Anaemic conditions of newborns	1	A			D
Pocket reference Book					
Stages of management of sick children: sorting, examination, determination of emergency conditions according to the recommendations of the pocket guide	2	A		C	D
Emergency conditions in childhood in conditions of limited resources according to the recommendations of the pocket guide		A		C	D
Diseases of young children					
Rickets	1	A			D
Spasmophilia	1	A			D
Hypervitaminosis D	1	A			D
Anomalies of the constitution (exudative-catarrhal, lymphatic-hypoplastic, neuro-arthritis diathesis)	1	A			D
Acute and chronic eating disorders	1	A	B	C	D
Respiratory diseases, allergic diseases					
Acute simple bronchitis, obstructive bronchitis and bronchiolitis, recurrent and chronic bronchitis	2	A	B		D
Pneumonia	2	A	B		D
Atypical pneumonia	1	A			D
Chronic non-specific lung diseases (bronchiectatic disease), hereditary lung diseases	1	A			D
Bronchial asthma	1	A	B	C	D
Pleurisy (dry and exudative)	1	A	B		D
Bronchopulmonary dysplasia	1	A			D
Food allergy	1	A	B		D
Allergic skin diseases	2	A	B		D

Primary and secondary immunodeficiency states	1	A			D
Polynoses, respiratory allergoses	1	A	B		D
Respiratory failure (acute, chronic).	1	A		C	D
Diseases of the circulatory system					
Acute rheumatic fever	2	A	B		D
Chronic rheumatic heart disease, acquired heart defects	1	A	B		D
Arterial hypertension in children	1	A	B		D
Arterial hypotension in children	1	A	B		D
Congenital heart defects	1	A		C	D
Myocarditis in children	1	A	B		D
Cardiomyopathy in children	1	A	B		D
Infectious endocarditis in children	2	A	B		D
Pericarditis in children	1	A		C	D
Heart rhythm and conduction disorders	1	A	B	C	D
Acute heart failure	1	A		C	D
Chronic heart failure	1	A	B	C	D
Diseases of the digestive system					
Gastritis, gastroduodenitis	1	A	B		D
Peptic ulcer of the stomach and duodenum	1	A	B		D
Biliary dyskinesia	1	A	B		D
Acute and chronic cholecystitis	1	A	B		D
Acute and chronic pancreatitis	1	A	B		D
Cholelithiasis	1	A			D
Malabsorption syndrome (celiac disease, disaccharidase deficiency)	1	A			D
Functional disorders of the gastrointestinal tract	1	A	B		D
Non-specific ulcerative colitis	1	A			D
Chronic hepatitis	1	A			D
Cirrhosis of the liver	1	A			D
Chronic enteritis, colitis	1	A	B		D
Diseases of the urinary system					
Lower urinary tract infection	1	A	B		D
Pyelonephritis acute, chronic	1	A	B		D
Glomerulonephritis acute and chronic	1	A	B		D
Nephrotic syndrome	1	A	B		D
Acute kidney injury	1	A			D
Chronic kidney disease	1	A			D
Congenital diseases of the kidneys and urinary tract (tubulopathy)	1	A			D
Hemolyticouremic syndrome	1	A			D
Diseases of the hematopoietic system					
Deficient anemia (iron-deficient, protein -, B12-and folic-deficient)	1	A	B		D
Hemolytic anemia	1	A			D
Aplastic anemia	1	A			D
Post-hemorrhagic anemia	1	A			D
Hemorrhagic vasculitis	1	A			D
Idiopathic thrombocytopenic purpura	1	A			D
Thrombocytopathy	1	A			D

Hemophilia	1	A			D
Disseminated intravascular coagulation	1	A			D
Diseases of the joints and connective tissue					
Juvenile rheumatoid arthritis	1	A	B		D
Reactive arthritis in children	1	A	B		D
Juvenile ankylosing spondylitis	1	A			D
Osteochondropathy	1	A			D
Systemic lupus erythematosus in children	1	A	B		D
Juvenile dermatomyositis	1	A	B		D
Scleroderma in children	1	A	B		D
Systemic vasculitis in children (nonspecific aortoarteritis, Wegener's syndrome, polyarteritis nodosa, Kawasaki syndrome)	1	A			D
Diseases of the endocrine system					
Diabetes mellitus	1	A			D
Thyroid diseases: endemic goiter (iodine deficiency), diffuse toxic goiter, hypothyroidism, autoimmune thyroiditis)	1	A			D
Parathyroid diseases (hypo – and hyperparathyroidism)	1	A			D
Metabolic syndrome	1	A	B		D
Congenital dysfunction of the adrenal cortex (adrenogenital syndrome)	1	A			D
Adrenal insufficiency (acute, chronic)	1	A		C	D
Growth pathology	1	A			D
Diseases of the genital glands (hypergonadism in boys and girls, hypogonadism in boys and girls)	1	A			D
Polyclinic pediatrics					
Organization of monitoring of a healthy child up to 1 year and older	2	A	B		D
Monitoring and evaluation of infant and young child feeding	2	A	B		D
Consulting services	1	A			D
Immunoprophylaxis. Calendar of preventive vaccinations (indications, contraindications, complications)	1	A	B		D
Preparing children for PI and school IMCD	1	A	B		D
Observation of children with delayed psychomotor development	1	A	B		D
Organization of monitoring of children with rickets, anemia, constitutional abnormalities, eating disorders in outpatient settings	2	A	B		D
Organization of monitoring of sick children with chronic lung diseases	1	A	B		D
Organization of monitoring of sick children with cardiovascular diseases	1	A	B		D
Organization of monitoring of sick children with kidney diseases	1	A	B		D
Organization of monitoring of sick children with diseases of the gastrointestinal tract	1	A	B		D
Organization of monitoring of sick children with endocrine diseases	1	A	B		D
Ethical and deontological aspects of the doctor's work in outpatient settings	2	A	B		D

3.2. Children's infectious diseases	Level	A	B	C	D
Acute intestinal infections					
Dysentery	2	A	B		D
Salmonellosis	2	A		C	D
Escherichia coli	1	A		C	D
Staphylococcal disease of the gastrointestinal tract	2	A		C	D
Acute intestinal infections caused by opportunistic enterobacteria (proteosis, klebsiellosis, Pseudomonas aeruginosa, yersiniosis)	2	A	B	C	D
Viral diarrhea (rotovirus infection)	2	A	B	C	
Dehydration syndrome	1	A	B	C	D
Pseudotuberculosis in children	1			C	
Acute respiratory infections in children					
Flu, hyperthermic, convulsive syndromes	2	A	B	C	D
Parainfluenza, croup syndrome	2	A	B	C	D
Adenovirus, MS infection, rhinovirus infection, obstructive syndrome	2	A	B	C	D
Enterovirus infection	1	A	B	C	
Acute viral hepatitis in children					
Viral hepatitis with fecal-oral transmission (HAV)	2	A	B		D
Hepatodystrophy in children	2	A	B	C	
Drip infections					
Measles	2	A	B	C	D
Rubella	2	A	B	C	D
Scarlet fever	2	A	B		D
Chickenpox	2	A	B		D
Herpes infections (herpes simplex, herpes zoster, cytomegalovirus infection)	2	A	B		D
Whooping cough	2	A	B	C	D
Mumps infection	2	A	B	C	D
Infectious mononucleosis	2	A	B	C	
Diphtheria	1	A		C	D
Meningococcal infection	1	A		C	D
Encephalitis primary, secondary	1	A		C	
Other infections					
Polio	1	A		C	D
HIV infection in children	1	A		C	D
Opportunistic infections in children	1	A		C	
Helminthiasis (ascariasis, enterobiosis, giardiasis)	2	A	B	C	D
Postvaccinal complications in children	1	A		C	D

3.3. Pediatric surgical diseases	Level	A	B	C	D
Acute abdomen					
Acute appendicitis	1	A			
Perforated stomach ulcer	1	A			D
Acute cholecystitis	1	A			D
Cholelithiasis	1	A			D
Acute pancreatitis	1	A			D
Peritonitis in newborns and older children	1	A			
Congenital intestinal obstruction	1	A			
Acquired intestinal obstruction	1	A			D
Nonspecific ulcerative necrotic colitis in children of the first months of life	1	A			
Hernia infringement	1	A			
Purulent diseases, wound infection					
Purulent-inflammatory diseases of soft tissues and bones in children: furuncle, carbuncle, abscess, panaritium	2	A	B		
Sepsis, acute bacterial lung destruction, bronchiectasis, staphyloiderma and streptoderma of newborns, necrotic phlegmon of newborns, phlegmon, lymphadenitis, osteomyelitis	1	A			D
Injuries					
Damage to the tubular bones in children	1	A		C	
Traumatic brain injury in children	1	A		C	
Foreign bodies of the gastrointestinal tract in children	2	A		C	
Foreign bodies of the respiratory tract in children	1	A		C	
Diseases of the rectum					
Hemorrhoids	2	A	B		
Anal fissures	2	A	B		
Fecal incontinence	1	A			
Rectal prolapse	1	A			
Paraproctites	1	A			
Congenital malformations					
Cysts and fistulas of the neck	1	A			
Umbilical hernia	1	A			
Hernia of the white line of the abdomen	1	A			
Hirschsprung's disease	1	A			
Dolichosigma	1	A			
Doubling of the colon		A			
Rectal prolapse	1	A			
Phimosis, paraphimosis	1	A			
Cryptorchidism	1	A			
Osteochondropathy	1	A			
Congenital clubfoot	1	A			D
Congenital hip dislocation	1	A			D
Flat Feet	2	A			D
Muscular torticollis	2	A			D
Scoliosis, kyphosis of the spine	2	A			D
Diseases of the central nervous system					
Cranioerebral hernias	1	A			

Hydrocephalus	1	A			
Spinal hernias and teratomas	1	A			
Dysphagia					
Atresia and esophageal stenosis	1	A			
Chalasia and achalasia of the esophagus	1	A			
Burns and damage to the esophagus	1	A			D
Diseases of the urinary system					
Urolithiasis	2	A	B	C	D
Congenital abnormalities of the kidneys and urinary system	1			C	D
Hypertrophy of the foreskin, phimosis, paraphimosis	1	A			D
Cryptorchidism	1	A			D
Urinary fistula	1	A			D
Urinary incontinence, enuresis	1	A			D

3.4. Internal diseases	Level	A	B	C	D
Respiratory diseases					
Pneumonia	1	A	B	C	D
Bronchial asthma	1	A	B	C	D
Chronic obstructive pulmonary disease	1	A	B		D
Bronchiectatic disease	1	A			D
Pleurisy	1	A			
Emphysema of the lungs. Pneumosclerosis	1	A		C	D
Pulmonary insufficiency	1	A		C	D
pulmonary arterial hypertension(PAH), chronic pulmonary heart disease (CPD), primary high altitude pulmonary arterial hypertension (PHAPAH)	1	A		C	D
Diseases of the circulatory system					
Atherosclerosis and hyperlipidemia	1	A			D
Hypertension	1	A		C	D
Angina pectoris	1	A	B	C	D
Myocardial infarction	1	A		C	D
Infectious myocarditis	1			C	D
Infectious endocarditis	1			C	D
Mitral and aortic heart defects	1	A	B	C	D
Chronic heart failure	1	A	B	C	D
Rhythm and conduction disorders (arrhythmias and blockages)	1	A		C	D
Cardiomyopathy	1			C	D
Pericarditis	1			C	D
Connective tissue diseases					
Systemic lupus erythematosus	1	A			D
Rheumatoid arthritis	1	A			D
Systemic progressive sclerosis	1	A			D
Inflammatory myopathies	1	A			D
Osteoarthritis	1	A		C	D
Polyarteritis nodosa	1	A			D
Seronegative spondyloarthritis. Ankylosing spondylitis (Ankylosing spondylitis)	1	A		C	D
Reiter's disease and syndrome	1	A		C	D

Reactive arthritis	1	A	C	D
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Gout	1	A		C	D
Diseases of the gastrointestinal tract					
Gastro-esophageal reflux disease	1	A	B	C	D
Chronic gastritis	1	A	B	C	D
Peptic ulcer of the stomach and duodenum	1	A	B	C	D
Chronic enterocolitis	1	A			D
Dyskinesia of the biliary tract and gallbladder	1	A	B	C	D
Cholecystitis. Cholangitis	1	A	B	C	D
Chronic hepatitis	1	A		C	D
Cirrhosis of the liver	1	A		C	D
Ulcerative colitis	1			C	D
Crohn's disease	1			C	D
Functional bowel diseases	1	A		C	D
Diseases of the urinary system					
Acute glomerulonephritis	1	A		C	D
Chronic glomerulonephritis	1	A		C	D
Kidney amyloidosis	1			C	D
Chronic kidney disease	1			C	D
Diseases of the blood system					
Iron deficiency anemia	1	A		C	D
Post-hemorrhagic anemia	1	A		C	D
B12-and folic acid deficiency anemia	1	A		C	D
Hemolytic anemia	1	A			D
Hypo - and aplastic anemia	1	A			D
Hemorrhagic diathesis	1	A			D
Agranulocytosis	1	A			D
Leukemias	1	A			D
Erythremia and erythrocytosis	1	A			D
Myeloma disease	1	A			D
Lymphogranulomatosis	1	A			D

3.5. Infectious diseases	Level	A	B	C	D
1. Intestinal infections					
Typhoid-paratyphoid diseases	1	A		C	D
Food toxicoinfections	1	A	B	C	D
Botulism	1	A		C	D
Dysentery and protozoal colitis (amoebiasis, balantidiasis)	1	A		C	D
Cholera	1	A		C	D
2. Viral hepatitis					
Viral hepatitis with fecal-oral transmission in adults	1	A	B	C	D
Viral hepatitis with parenteral transmission in adults	1	A		C	D
3. Helminthiasis (nematodoses, trematodoses, cestodoses)	1	A	B		D
4. Airborne infections					
Flu, etc. ARVI	1	A	B	C	D
Meningococcal infection	1	A		C	D
Herpetic infections	1	A	B		D

5. Blood-borne vector-borne infections					
Epidemic typhus (Brill-Zinsser disease)	1	A			D
Hemorrhagic fevers	1	A			D
Tick -borne encephalitis	1	A			D
Malaria	1	A		C	D
Leishmaniasis	1	A			D
6. Zoonotic infections					
Brucellosis	1	A	B		D
Yersiniosis infections (pseudotuberculosis, intestinal yersiniosis)	1	A			D
Leptospirosis	1	A			D
7. Other infectious diseases					
Anthrax	1	A			D
The plague	1	A			D
Rabies	1	A		C	D
Tetanus	1	A		C	D
Erysipelas	1	A	B		D
HIV infection	1	A			D

3.6. Obstetrics and gynecology	Level	A	B	C	D
Childbirth is physiological	2	A	B	C	
Postpartum period	1	A	B	C	
Pelvic presentation	1	A			
Multiple pregnancy	1	A			
Polyhydramnios,polyhydramnios	1	A			
Spontaneous abortion (miscarriage)	1	A	B	C	
Preterm birth	1	A	B	C	
Ectopic pregnancy	1	A			
Diseases of internal organs that complicate the course of pregnancy					
Vomiting of pregnant women	1	A	B	C	
Pre-eclamsia and eclamsia	1	A		C	D
Rh-isoimmunization	1	A		C	D
Fetal hypoxia	1	A		C	D
Gestational trophoblastic disease	1	A		C	
Placenta previa	1	A			
Premature detachment of the normally located placenta	1	A			
Bleeding in the subsequent and early postpartum period	1	A			
Clinical narrow pelvis	1	A	B	C	
Ruptures of the vulva, vagina and perineum	1	A			
Cervical rupture	1	A			
Uterine rupture	1	A			
Postpartum endomeritis	1	A	B	C	D
Nipple infection	2	A	B	C	D
Breast abscess	1	A			
Non-purulent mastitis	2	A	B	C	

Stagnation in the mammary glands	2	A	B	C	D
Endometritis, salpingoophoritis	1	A	B	C	D
Infected abortion, community-acquired abortion	1	A			D
Ovarian apoplexy	1	A			
Dysfunctional uterine bleeding	1	A			
Amenorrhea	1	A			
Premenstrual syndrome	1	A	B	C	
Hirsutism	1	A			
Infertility	1	A			D
Menopausal Syndrome	1	A	B	C	D
Menopause	1	A	B	C	
Endometriosis	1	A			D
Uterine fibroids	1	A			D
Cervical erosion, polyp, dysplasia	1	A			D
Mastodynia	1	A			D
Hypogalactia	1	A			D
Pediatric and adolescent gynecology	1	A			
Family planning, contraception	2	A	B	C	D

3.7. Surgical diseases	Level	A	B	C	D
Acute appendicitis	1	A			
Hernias	1	A			D
Acute cholecystitis	1	A			D
Acute pancreatitis	1	A			D
Stomach ulcer (complications)	1	A			D
Acute intestinal obstruction	1	A			
Peritonitis	1	A			
Diseases of the rectum (hemorrhoids, paraproctitis, rectal prolapse, anal fissure, rectal polyp)	1	A			D
Parasitic diseases of the lungs and liver (echinococcosis, alveococcosis)	1	A			D
Diseases of the esophagus (burns of the esophagus, injuries and foreign bodies of the esophagus)	1	A			D
Suppurative lung diseases (abscesses and gangrene)	1	A			D
Acute purulent mastitis	1	A		C	D
Diseases of the arteries of the lower extremities (endoarteritis)	1	A			D
Diseases of the veins of the lower extremities (varicose veins of the lower extremities, thrombophlebitis)	1	A			D

3.8. Nervous diseases	Level	A	B	C	D
Major brain injuries in children under 1 year of age					
Hypoxic encephalopathy	1	A		C	D
Traumatic encephalopathy	1	A		C	D
Toxic-metabolic encephalopathy	1	A		C	D

Infectious encephalopathy		A		C	D
Outcomes of encephalopathies					
Psychomotor development delay	1	A		C	D
Cerebral palsy	1	A		C	D
PATHOLOGIES OF NS DEVELOPMENT					
Hydrocephalus	1	A		C	
Epilepsy, convulsive states	1	A		C	
Craniovertebral abnormalities	1	A		C	
Craniocerebral and spinal hernias	1	A		C	
Inflammatory diseases of the nervous system					
Secondary viral meningitis	1	A		C	D
Postvaccinal encephalitis	1	A		C	D
Leukoencephalitis	1	A		C	
Rheumatic encephalitis	1	A		C	D
NS injuries					
Traumatic brain injury	1	A		C	D
Spinal cord injury	1	A		C	D
Volumetric processes of the central nervous system					
Brain and spinal cord tumors	1	A		C	
Cysts of the brain (parasitic, traumatic, congenital)	1	A		C	D
Diseases of the peripheral nervous system					
Poly - / neuropathies	1	A		C	
Guillain-Barre polyneuropathy	1	A		C	
Natal plexopathies	1	A		C	
Myasthenia gravis and myasthenic syndromes	1	A		C	
Pathologies of the autonomic nervous system					
Autonomic dysfunctions and crises	1	A		C	D
Hereditary diseases					
Down Syndrome	1	A		C	
Phenylketonuria	1	A		C	
Myodystrophy	1	A		C	
Spinal amyotrophy	1	A		C	

3.9. Diseases of the ear, throat and nose diseases	Level	A	B	C	D
Rhinitis	1	A	B		D
Adenoids	1	A	B		D
Sinusitis	1	A	B		D
Pharyngitis, laryngitis, tracheitis	1	A	B		D
Angina, chronic tonsillitis	1	A	B		D
Upper respiratory tract polyposis	1	A			
External, middle otitis media	1	A	B		D
Foreign body of the external auditory canal, nasal cavity	1	A	B		
Sulfur Plug	1	A	B		D
Hearing loss	1	A			

3.10. Skin and venereal diseases	Level	A	B	C	D
Dermatitis	1	A			
Toxicoderma	1	A			
Eczema	1	A			
Pruritus	1	A			
Neurodermatoses	1	A			
Psoriasis	1	A			
Seborrhea	1	A			
Vulgar acne	1	A			
Scleroderma (skin manifestations)	1	A			
Warts, Molluscum contagiosum	1	A			
Pyoderma	1	A			D
Scabies	1	A			D
Pediculosis	1	A			D
Skin mycoses	1	A			D
Syphilis	1	A			
Gonorrhoea	1	A			
Trichomoniasis	1	A			
Urogenital chlamydia	1	A			

3.11. Mental illness in children	Level	A	B	C	D
Emotional disorders in children	I	A		C	D
Stress-related disorders	I	A		C	D
Organic asthenic disorder	I	A		C	D
Acute psychotic disorders	I	A		C	D
Mental retardation	I	A		C	D
Disorders of psychological development in children	I	A		C	D
Behavioral disorders in children and adolescents	I	A		C	D

3.12. Tuberculosis	Level	A	B	C	D
Respiratory diseases					
Pulmonary tuberculosis (bacteriologically confirmed and clinically confirmed case of TB)	1	A	B	C	D
Pleurisy, dry and exudative.	1			C	
Tuberculosis of the intra-thoracic lymph nodes	1	A			
DISEASES OF THE DIGESTIVE SYSTEM					
Intestinal tuberculosis	1	A			
Tuberculosis peritonitis (peritoneal TB)					
DISEASES OF THE URINARY SYSTEM					
Tuberculosis of the urinary system	1	A		C	D
Tuberculosis of the genital tract in men	1	A		C	D
Tuberculosis of the genital tract in women	1	A		C	
DISEASES OF THE HEMATOPOIETIC SYSTEM					
Lymphadenopathy	1	A			D
Tuberculosis of the peripheral lymph nodes					

DISEASES OF THE JOINTS AND CONNECTIVE TISSUE					
Tuberculous spondylitis	1	A		C	
Tuberculosis coxitis	1	A		C	D
Tuberculosis drives					
DISEASES OF THE CIRCULATORY SYSTEM					
Tuberculous pericarditis	1	A		C	

3.13. Eye diseases	Level	A	B	C	D
Conjunctivitis	1	A	B	C	D
Dacryodenite, dacryocystitis	1	A			
Barley	1	A	B		
Congenital glaucoma	1	A			D
Myopia	1	A			D
Cataract	1	A			D

3.14. Oncology	Level	A	B	C	D
Acute and chronic leukemias	1	A			D
Hodgkin's disease	1	A			D
Non-Hodgkin's lymphomas	1	A			D
Histiocytoses	1	A			D
Nephroblastoma	1	A			D
Neuroblastoma	1	A			D
Soft tissue hepatoblastoma	1	A			D
Teratoblastoma	1	A			D
Malignant tumors of bones and soft tissues	1	A			D
Thyroid cancer	1	A			D
Retinoblastoma	1	A			D

3.15. Pediatric Dentistry	Level	A	B	C	D
Dental caries	1	A			D
Periodontal diseases	1	A			D
Diseases of the oral mucosa in children	1	A			D
Injuries of the oral mucosa in children	1	A			D
Inflammatory diseases of the maxillofacial region in children	1	A	B	C	D
Congenital malformations of MFR in children	1	A			
Traumatic injuries of the maxillofacial region in children	1	A			D

3.16. Pediatric anesthesiology and resuscitation	Level	A	B	C	D
Shock (anaphylactic, infectious-toxic, traumatic, hemorrhagic, cardiogenic)	2	A		C	D
Hypovolemic (dehydration) shock					
Fainting	2	A		C	D
Collapse	2	A		C	D
Coma	2	A		C	D
Acute respiratory failure	2	A		C	D
Laryngeal edema	2	A		C	D
Quincke's edema	2	A		C	D
Pyopneumothorax	2	A		C	D
Acute heart failure	2	A		C	D
Hypertensive crisis	2	A		C	D
Bleeding(arterial,venous, gastrointestinal,pulmonary, post-traumatic)	2	A		C	D
Acute kidney injury	2	A		C	D
Acute liver failure	2	A		C	D
Head compression, bruise	2	A		C	D
Pulmonary edema	2	A		C	D
Cerebral edema	2	A		C	D
Convulsive states	2	A	B	C	D
Drowning, strangulation	2	A		C	D
Clinical death	2	A	B	C	D
Sudden death syndrome	2	A	B	C	D
Brain hemorrhage in newborns	2	A		C	D
Hyperthermia	2	A	B	C	D
Severe anemia	2	A		C	D

3.17. Clinical Pharmacology	Level
Variability of drug action and individualized treatment	
Basic pharmacological concepts: drug efficacy, drug safety, therapeutic index	1
Pharmacokinetic parameters in children, saturation dose and maintenance dose under normal conditions	2
Methods and ways of administration of medicines and forms of medicines for children	2
Prescribing medicines during pregnancy and lactation (safety categories of medicines, for the treatment of common diseases, the risk associated with taking medicines)	2
Administration of medicines to newborns (features of pharmacokinetics and pharmacodynamics of medicines)	2
Principles of prescribing medicines to children, calculation of doses of medicines based on the weight and surface area of the body	2
Drug interactions (fundamentals of pharmacokinetics and pharmacodynamics of drug interactions)	2
Influence of internal and external factors on drug metabolism	1

Mechanisms of influence of the genetic factor on pharmacokinetics and pharmacodynamics and its relation to individual variability of efficacy and toxicity	1
Prescribing drugs for kidney pathology (changes in pharmacokinetics and pharmacodynamics, contraindicated drugs, nephrotoxic drugs, dosage regimen, features of prescribing drugs depending on creatinine clearance)	2
Prescribing drugs for liver pathology (changes in pharmacokinetics and pharmacodynamics, contraindicated drugs, hepatotoxic drugs, features of prescribing drugs depending on hepatic clearance)	2
Prescribing medicines for heart failure (changes in pharmacokinetics and pharmacodynamics, optimal routes of administration of medicines, medicines contraindicated in cardiovascular diseases, cardiotoxic drugs, calculation of the initial and maintenance dose for heart failure)	2
Safety of drugs, prevention and diagnosis of adverse reactions	
Side effects (frequency, classification, detection and prevention, risk factors, drug allergy, drug toxicity, role of toxic drug metabolites, patient education-children and parents)	2
Pharmacovigilance-assessment of cases of adverse reactions, reporting.	1
Drug poisoning, the main antidotes for drug poisoning	2
Measures for drug poisoning and measures aimed at enhancing the elimination of the drug substance	2
Common drug poisoning (sedatives, opioid drugs, paracetamol, acetylsalicylic acid)	2
Drug registration, the role of the regulatory agency	1
Prescription of medicines, legal principles	2
Principles of pharmacotherapy	
Principles of drug selection	1
Placebo effect (mechanism, role in clinical trials)	1
Development of new medicines (preclinical stage, clinical trial phases)	1
Pharmacoeconomics, pharmacoepidemiology	1
Pharmaceutical market (production, economic, legal and political factors)	1
Reimbursement of the cost of medicines (List of vital medicines, State guarantee Program, Additional package)	2
Sources of information on drug therapy (clinical protocols)	1

3.18. Medical rehabilitation	Level
Fundamentals of physical methods of treatment used in the rehabilitation of patients	
Basic terms and concepts in medical rehabilitation: general physiotherapy, medical supervision, sports medicine, physical therapy, spa treatment, massage, acupuncture, hardening	1

General physical therapy	
Physiotherapy as a medical specialty and the science of using natural and preformed physical factors in the treatment and rehabilitation of children	1
Spa therapy	
Types of resorts. Climatotherapy. Medical characteristics of the climate of the main natural zones. Aerotherapy, heliotherapy, thalassotherapy, balneotherapy, therapeutic mud. Resorts of Kyrgyzstan, indications and contraindications	1
Medical supervision and physical therapy in the rehabilitation of children	
Medical supervision in physical education and sports, basic concepts, forms, goals, tasks, anthropometry, functional tests, medical report, medical groups	1
Medical and pedagogical observations, goals, tasks, forms. Medical support of training camps and competitions	1
Fundamentals of physical therapy, general characteristics of the method of physical therapy, the mechanism of the therapeutic effect of physical exercises	1
Means, forms and methods of physical therapy as the basis of medical rehabilitation	1
Rehabilitation of children with diseases of the cardiovascular system	2
Rehabilitation of children with respiratory diseases	2
Rehabilitation of children with diseases of the digestive system	2
Rehabilitation of children with diseases of the endocrine system	2
Rehabilitation of children with diseases and injuries of the central and peripheral nervous system	2
Rehabilitation of children with pathology of the musculoskeletal system	2
Rehabilitation of children after surgical operations. Indications and contraindications	2
Massage and acupuncture techniques	
Features of massage and acupuncture methods in children of the first year of life, preschool age, with congenital diseases, with developmental delay, with cerebral palsy, with neuroses and neurotic conditions	1
Tempering	
General and special principles and rules of tempering, seasonal rhythms of tempering. Air baths, hardening by sun rays, hardening by ultraviolet rays from artificial sources. Hardening and adaptation to the aquatic environment	2

3.19. Forensic medicine	Level
Dead body	
Death, possibilities of simulating death\clinical death (judicial aspects)	2
Signs of death (cadaveric spots, rigor mortis, putrefaction, time of death)	2
Death, an estimate of the time of death (by postmortem changes)	2
Autopsy, court testimony, provision for notifying law enforcement/judicial authorities of death	2

Legal aspects of damages	
Legal classification of damages (minor/severe damage/ intentional damage/negligent damage)	2
Ill-treatment (judicial aspects)	2
Forensic Traumatology	
Physical and biochemical principles of damage	1
Damage, self-inflicted injury, self-inflicted accidental injury(judicial aspects)	1
Trauma, blunt trauma of the skin\bones\head (judicial aspects)	2
"Rocked baby" syndrome, SB-syndrome (shaken-baby syndrome)	2
Injuries caused by a sharp object (judicial aspects)	1
Bitten wounds (judicial aspects)	1
Gunshot wounds (judicial aspects)	1
Asphyxia (judicial aspects)	1
Strangulation, types (judicial aspects)	1
Aspiration and drowning (judicial aspects)	1
Suffocation, death caused by suffocation (judicial aspects)	1
Heat damage (judicial aspects)	1
Electrical damage (judicial aspects)	1
Pedestrian damage	1
Transport injury	
Damage to passengers inside transport (judicial aspects)	1
Death of a child	
Sudden death syndrome	2
Live birth (judicial aspects)	2
Stillbirth (judicial aspects)	2
Infanticide. Causes of death	2
A child with mental and physical injuries as a result of systematic violence	2
Sexual assault	
Sexual abuse of a child	1
Sexual violence against an adult	1
Definition of paternity/maternity	
Referral for examination of the definition of paternity/motherhood (judicial aspects)	1
Damage caused by chemical agents	
Gas intoxication: CO,CO2, CN, H2S (judicial aspects)	1
Intoxication with psychotropic and prohibited chemicals (including heroin, cocaine, amphetamine, spice)	1
Cyanide intoxication	1
Intoxication with plant poisons (including fungi) and animal bites	1
Alcohol intoxication	2
Ethanol metabolism/blood ethanol level	1
Venom metabolism	1
The principle of intoxication	1
Professional rights and obligations	
Abortion (judicial aspects)	1

Formal and legal prerequisites for a medical report	1
Compulsory treatment, compulsory hospitalization, examination	1
Legal aspects of personality, health status	1
Medical duties in urgent cases	2
Medical check up	
Determination of the cause and nature of death at the place of death	2
Examination of the eyes of the corpse	1
Sexual examination of a living person and a corpse for forensic purposes	1
Assessment of the time of occurrence of damage in a living person and a corpse for forensic purposes	1
Identification of a dead person in a mass disaster	1
Identification of the corpse	1
Legal external examination of a corpse, examination of a corpse	1
External examination of the corpse	1
Diagnosis of brain death	1
Examination and documentation of wounds and injuries in a living person and a corpse	1
Survey of children exposed to systematic violence	2
Assessment of blood alcohol concentration	1
Assessment of the ability to take purposeful independent actions	1
Procedures	
Collection of blood and urine for toxicological analysis	1
Collecting samples from a corpse and protecting biological evidence	1
Collection of swabs and swabs from the vagina, anal opening and skin for forensic biological examination and DNA analysis	1
Blood and cheek swab collection for DNA analysis	1

3.20. Public health and health	Level
Basic terms and concepts in public health	
Basic terms and concepts in public health: health and disease, pathogenesis, etiology, individual and public health, public health, health promotion, lifestyle.	1
The concept of primary, secondary and tertiary prevention.	2
Medical statistics	
Theoretical foundations of medical statistics.	1
Organization of statistical research. Statistical methods of research processing. Methods for calculating relative values (the concept of relative values, types of relative values- extensive, intensive, ratios, visibility, their definition, methods of calculation, scope and their characteristics).	1
Methods for calculating average values. Variation series, types of variation series: values of the variation series (mode, median, arithmetic mean, mean square deviation, coefficient of variation, limit, amplitude). The use of averages to assess the health status of children.	1
Methods for assessing reliability in statistics. General provisions on parametric and nonparametric methods for evaluating the reliability of results.	1

Correlation coefficient, its estimate. The method of calculating the correlation coefficient, their significance and practical application. Standardization methods.	1
Dynamic series. Dynamic series indicators, their calculation and practical application.	1
Graphical representation in statistics, their use for the analysis of phenomena.	1
Demographic indicators, data sources	
Population statistics. The population census as a source of information on population statistics. Types of age-sex structure of the population. Population dynamics, its types.	1
Fertility and fertility (fertility).	1
Population mortality. Infant and perinatal mortality, their main causes.	1
Life expectancy at birth and average life expectancy at birth.	2
Natural population growth. Factors affecting morbidity.	2
Disability	2
The healthcare system of the Kyrgyz Republic.	
Organization of medical and preventive care for the population of the republic.	2
Main activities of PH	1
Primary health care.	
Organization of inpatient care.	1
Prevention and health promotion.	
Health promotion. Global policy in WO "Health for All in the 21 st century".	1
Protection and promotion of the health of children, adolescents and young people.	2
Protection and promotion of women's health.	2
The role of the Health Promotion Service in the formation of healthy lifestyle of children, adolescents and young people.	1
Health insurance	
Legal framework for health insurance.	1
Types and principles of health insurance.	1
Organization of medical insurance: Subjects of medical insurance, their rights, obligations, interaction on the basis of contractual relations.	2
Health economics	
Healthcare as a branch of the economy. Healthcare in the system market relations.	1
Health as an economic category. Health care financing.	1
Features of entrepreneurial activity in healthcare.	1

CHAPTER 4. MEDICAL SKILLS AND MANIPULATIONS

Types of manipulations	Level
4.1. Collecting anamnesis	

Collection of main and additional complaints	2
Purposeful collection of anamnesis of the disease from parents, accompanying people (asking about the history of this disease): the beginning of the disease, the time of appearance and dynamics of symptoms; the ability to build the history of the disease in chronological order from the first symptoms to the moment of treatment to the doctor; the reason for treatment to the doctor, treatment before treatment.	2
Collection of life history (including the course of pregnancy with this child, childbirth, development in the first year of life, feeding, preventive vaccinations, past illnesses), family history (compilation of a family tree)	2
Collection of an allergological history	2
Collection of epidemiological history	1
Understanding and responding to nonverbal signs	1
Collecting a psychiatric history	1
Collecting a drug history	1
Identification of risk factors (anomalies of the constitution, inactivity, errors in nutrition, hygiene habits, etc.)	2
4.2. Information management	
Setting a clinical question and finding its solution in the literature	2
Informing parents, relatives of the patient, colleagues and other health workers about the results of the examination	2
Reporting negative information to the patient's parents and relatives	2
Informing parents to obtain informed consent	2
Documenting the results of the examination in the patient's medical history/outpatient card	2
Writing a written and translated epicrisis	2
Advising the parents of the patient and the patient on issues related to lifestyle (nutrition, physical activity, smoking, alcohol consumption alcohol, narcotic substances)	2
Filling out a drug prescription	2
Filling out a death certificate (posthumous epicrisis)	2
Designation of the disease with a cipher in accordance with the current international classification of diseases	2
Work in accordance with applicable national protocols/guidelines	1
4.3. Physical examination	
Assessment of the general condition of the patient (appearance, activity, position, nutrition, consciousness, mental state)	2
Assessment of vital functions of the body (body temperature, frequency and type of breathing, pulse rate, arterial and venous pressure)	2
Assessment of patients with emergency conditions	2
Documenting anthropometric data (height, weight, head circumference, waist, hip)	2
Examination of the skin and mucous membranes (signs of anemia, cyanosis, jaundice, edema, dehydration, rashes)	2
Assessment of attention, thinking (form and content), perception, emotional and psychomotor development	2
Examination of peripheral and central arterial pulsation, detection of arterial noise	2

Examination of the lymph nodes	2
Detailed description of the skin lesion	2
Description of nails, scalp, visible mucous membranes	2
Definition of dermatography	2
Description of eye lids and lashes	2
Description of the upper eyelid with eversion of the eyelid	2
Description of the width of the eye slit	2
Description of the conjunctiva, including the arch	2
Description of the sclera and cornea	1
Determination of corneal sensitivity to touch	1
Description of the pupil, reaction to light, and convergence	2
Description of the iris	1
Definition and description of nystagmus	1
Description of the position and movement of the eyes (corneal reflex)	1
Description of the optical disc and retinal vessels	1
Examination and palpation of the auricle and surrounding area (mastoid area)	2
Examination and palpation of the nose and face	2
Assessment of nasal obstruction and anterior rhinoscopy	2
Examination of the lips, oral area, oropharynx, as well as teeth, tongue, tongue root, pharyngeal arch, tonsils, examination of the excretory ducts of the parotid glands and submandibular glands	2
Palpation of the bottom of the mouth, cheeks, tonsils and tongue root	2
Examination and palpation of the parotid and submandibular glands	2
Voice and speech assessment, detection of aphasia	2
External examination and palpation of the larynx	2
Examination, palpation and auscultation of the structures of the neck, thyroid, carotid arteries and lymph nodes	2
Palpation of the head and cervical spine, examination mobility, soreness and stiffness of the cervical spine	2
Examination of the shape and mobility of the chest, examination of pain under pressure and / or percussion	2
Examination of the bones, joints, and muscles of the shoulder girdle	2
Determination of the size of the chest excursion-examination, palpation, measurement of the chest circumference	2
Palpatory detection of voice tremor	2
Percussion of the lungs, determining the excursion of the lower edge of the lungs	2
Auscultation of the lungs	2
Determination of the apical push (heart)	2
Determining the limits of cardiac dullness	2
Auscultation of the heart	2
Determination of peripheral vascular pulsation, pulse characteristics	2
Examination and palpation of the mammary glands, including regional lymph nodes	2
Abdominal examination	2
Auscultation of the abdominal cavity (intestinal noises)	2
Percussion of the abdomen (determining the size of the liver, spleen)	2
Palpation of the abdomen (abdominal wall, intestines, liver, spleen, abdominal aorta, kidneys, pancreas)	2
Detection of abdominal pain, a symptom of peritoneal irritation, muscle protection	2

Definition of "splash noise»	2
Determination of pain in the kidney area	2
Examination of inguinal hernia by examination and palpation of the hernial gate	2
External examination and palpation of the perianal area	2
Rectal examination in men (anal opening, rectum, prostate, sacral spine)	2
Examination and palpation of the penis and scrotum (testicles, appendages of the testicle, spermatic cord)	2
Examination and palpation of female external genitalia (vulva, perineum)	2
Examination of the spine, spinal mobility, paravertebral muscles, standing and lying on the back (kyphosis, scoliosis, Schober test)	2
Palpation, percussion, determination of spinal pain	2
Examination of the ileosacral joints and pelvis (determination of mobility, soreness, atrophy)	2
Study of the shape, function, mobility and soreness of the upper extremities (wrist and elbow joints, finger joints, etc.)	2
Study of the shape, function, mobility and soreness of the lower extremities (ankle and knee joints, position, function, patellar relief)	2
Examination of the axis of the lower extremities (valgus and varus deformity of the knee joints)	2
Examination of the foot axis (hallux valgus and varus deformity of the feet)	2
Examination of the capillary pulse	2
Study of varicose veins, Trendelenburg test, test Pertesa	2
Assessment of children's neuropsychiatric development	2
Determination of tendon reflexes (triceps, biceps, knee, elbow) and plantar reflex	2
Study of cranial nerve function	1
Study of passive muscle movements, examination of muscle mass, study of muscle tone, muscle strength, involuntary movements, determination of contracture, atrophy	2
Determination of complex reflexes: abdominal, anal, mandibular, proboscis, prehensile	2
Gait examination (normal gait, on the toes, with a limp on one side)	2
Coordination study (finger to nose, heel to shin, heel to toe, diadochokinesis)	2
Romberg, Unterberger test	2
Research of tactile and pain sensitivity	2
Investigation of temperature, vibration and positional sensitivity	1
Discriminative sensitivity (stereognosia)	1
Determination of meningeal symptoms	2
Examination of radicular cervical and lumbar symptoms	1
Assessment of the degree of consciousness disturbance	2
The study of orientation in space and time	2

Memory Research	1
Evaluation of indications and contraindications to surgical intervention	1
Examination (forensic examination) of a patient under the influence of alcohol or a psychotic substance	2
Clinical diagnosis of death	2
Assessment of the time of death (cadaveric spots, rigor mortis, rectal temperature)	2
4.4. General skills	
Bimanual examination: palpation of the vagina, cervix, uterus, ovaries (on a dummy)	2
Rectal examination in women: anal opening, rectum, palpation of the Douglas space, uterus (on a dummy)	2
Examination of the abdomen of a pregnant woman	2
All types of injections, including intravenous drip fluids	2
Interpretation of the results of intradermal diagnostic (Mantoux test) and allergological tests	2
Determination of the suitability of blood for transfusion, blood transfusion (direct transfusion of donor blood, single and repeated replacement blood transfusions), administration of serums	1
Determination of blood group and Rh-factor by express method, determination of individual and biological compatibility of blood	1
Drip and jet transfusion of medicines and blood substitutes	1
Conducting and interpreting an ECG	1
Interpretation of X-ray examination results	2
Conducting and interpreting peak flowmetry	1
Interpretation of spirometry results	1
Interpretation of blood tests for hemoglobin, leukocytosis, ESR (general blood test)	2
Interpretation of urine tests	2
Interpretation of the coprogram	2
Interpretation of the results of biochemical analyses	2
Urine collection technique for laboratory tests in children of all age groups and adults (measurement of diuresis, general urine analysis, samples of Nechiporenko, Addis-Kakovsky, Zimnitsky) and interpretation	2
Taking feces for coprological and bacterial studies in children	2
Obtaining smears, material for cytological, bacteriological examination (from the pharynx, nose, urethra, vagina, umbilical wound);	2
Bladder catheterization, suprapubic puncture	1
Gastric and intestinal lavage	1
Gastric probing, duodenal probing in children	1
Finger examination of the rectum and prostate	1
Therapeutic and hygienic baths	2
Treatment of the oral mucosa in children	2
Measuring temperature in children	2
Anthropometric measurements in children	2
Counting the pulse and respiration in children	2
Cardiovascular tests (the Shalkov test)	2
Measurement of blood pressure in children	2
Massage and gymnastics for newborns and infants	2
Assessment of stool in infants	2

Cleansing enema in children	2
Instilling drugs in the eyes, nose, and ears of children and adults	2
Applying a blindfold	1
Applying eye ointment	2
Ear washing	1
Applying proper hand washing techniques in the workplace	2
Preoperative preparation of the surgical field for small surgical interventions, asepsis and antiseptics	2
Preparation for surgery (washing hands before surgery, putting on sterile operating uniforms, putting on sterile gloves)	2
Surgical suture removal	2
Venopuncture	2
Use and explain to the patient the technique of using a metered-dose inhaler, spacer and nebulizer	2
4.5. Skills in neonatology	
Assessment of the functional and neurological status of a full-term and premature newborn baby	1
Properly apply the baby to the breast	2
Advise on breastfeeding	2
Feeding of heavy and premature newborns through a probe	1
Evaluate the condition of the newborn on the Apgar scale and the Ballard scale	1
Perform a toilet of the skin, eyes, nose, ears in newborns	2
Take care of the umbilical cord residue	2
Prevent neonatal gonoblenorrhea	2
Perform weighing and thermometry of the newborn	2
Be able to use the Downs scale to determine the degree of respiratory distress in a newborn child	1
Performing a replacement blood transfusion operation in case of a hemolytic conflict between a mother and a child	1
Select a catheter and determine the depth of insertion into the umbilical vein	1
ABCD-resuscitation for neonatal asphyxia	1
Cleaning of the upper respiratory tract in newborns	2
4.6. Manipulations for emergency care	
Clamping the umbilical cord/separating the placenta from the baby	2
Evaluation of fetal heartbeat during pregnancy	2
Cardiopulmonary resuscitation (the main algorithm of cardiac resuscitation, on a dummy)	2
Examination and first aid for external injuries (wounds, bleeding, burns, sprains, dislocations, fractures)	2
Transportation of a patient with an injury	2
Stopping bleeding (compression, applying a tight bandage, applying a tourniquet)	2
Artificial respiration "mouth to mouth", "mouth to nose»;	2
Methods of cleaning the upper respiratory tract, aspiration of mucus from the upper respiratory tract	2
Indirect heart massage	2
Defibrillation	1
Tracheo-or conicotomy, tracheostomy	1
Use of the children's oxygen tent	2
Heimlich's Reception	1

4.7. Manipulations used in surgery, including in pediatric surgery	
Biopsy of tumor formations and lymph nodes	1
Performing diagnostic and therapeutic punctures, paracentesis	1
Probing of cavities, fistulas	1
Conducting infiltrative local anesthesia, conduction, regional, and vagosympathetic blockades	1
Primary surgical treatment of wounds, removal of sutures	2
Suturing the skin	2
Treatment of burn surfaces, infected wounds	2
Bandages, soft bandages, splints	2
Reduction of dislocations	1
Transport and medical immobilization for fractures of the bones of the extremities, spine	2
Removal of superficially located foreign bodies	1
Removal of superficially located soft tissue tumors	1
Autopsy of abscesses, pararitia, phlegmon	2
Removing an ingrown toenail	2
Puncture cystostomy	1
Diathermocoagulation	1
Sternal puncture, trepanobiopsy of the iliac wing	1
Lumbar puncture	1
Evaluation of indications and contraindications to surgical intervention	1
Examination of inguinal hernia by examination and palpation of the hernial gate	2
External examination and palpation of the perianal area	2
Examination and palpation of the penis and scrotum (testicles, appendages of the testicle, spermatic cord)	2
Preoperative preparation of the surgical field for small surgical interventions	2
Preparation for the operation (washing hands, putting on the operating form, putting on sterile gloves)	2
4.8. Otorhinolaryngological manipulations	
Anterior and posterior rhinoscopy	2
Pharyngoscopy	2
Laryngoscopy	1
Stopping nasal bleeding: anterior tamponade, nasal posterior tamponade of the nose	1
Maxillary sinus puncture	1
Paracentesis of the tympanic membrane	1
Tympanopuncture	1
Probing and washing of tonsillar lacunae	1
Autopsy of a paratonsillary abscess	1
Administration of drugs into the larynx and bronchi with a laryngeal syringe and through a nasal catheter	1
Audiometry	1
Examination of the external auditory canal and eardrum with an otoscope	2
Determination of auditory tube patency	1
Research of hearing by whispering speech, colloquial speech, tuning fork	1
Nasal cavity care skills	2
4.9. Ophthalmic manipulations	

Applying an eye patch	2
Instilling eye drops	2
Laying eye ointments in the conjunctival cavity	2
Smearing with ointment on the area of the affected skin around the eyes	2
Visometry	1
Perimetry	1
External examination of the eyeball and appendages by side lighting	2
5.0. Skills and manipulations used in children's infection	
Collection of the rr epidemiological history	1
Examination of the pharynx and collection of material from the pharynx and nasopharynx for laboratory tests	2
Collection of vomit for laboratory testing	1
Fecal sampling for carpological and bacteriological analyses and studies on worm eggs	2
Know the indications and techniques of lumbar puncture	1
Cleansing enema	1
Determination of oxygen saturation (pulse oximetry)	2
Know the technique of oxygen therapy	1
Know the technique of feeding through the probe	1
Determination of meningeal symptoms	2
Conducting oral and infusion rehydration in the syndrome dehydration in children	2
First aid for hypovolemic and septic shock	1
Restoration of airway patency	2
Aerosol inhalation technique with spacers, nebulizers for upper and lower airway obstruction	2
Help with hyperthermic syndrome	2
Help with convulsive syndrome	2
5.1. Skills and manipulations used in dermatovenerology	
Conducting phenomena in psoriasis	1
Conducting a Yadasson test for Düring's herpetiform dermatitis	1
Identification of symptoms in scabies (Gorchakova-Ardi, Cesari)	2
Detection of the “honeycomb symptom”	1
Definition of demography	2
Inspection under Wood's lamp	1
Taking of pathological material for the detection of h / mite, pathogenic fungi	1
Performing a diascopy	1
5.2. Skills and manipulations used in psychiatry	
Motor skills research	2
Research on reading ability	2
Research on the ability to write	2
Research on the ability to count	2
Exploring the child's horizons	2
Research of speech skills	2
Research on communication skills	2
Game activity research	2
Determining the level of school knowledge	2
Study of concentration of attention	2
Intelligence Research	1

Thinking Research	1
Emotional Sphere Research	1
Memory Research	1
5.3. Manipulations used in obstetrics and gynecology	
Breast examination and self-examination training for women	1
Examination of the vagina and cervix in mirrors	1
Smear collection for UGI and cytological examination	1
Management of physiological labor	1
Evaluation of the afterbirth	1
Breastfeeding counseling	2
Family planning counseling	1
Performing a gravidogram	1
Package of antenatal services for pregnant women	1