APPROVED

**EMD** decision

Protocol No

Chairman of the LMC, Vice-Rector, candidate of pedagogical

associate professor Apero

# **SYLLABUS** by discipline

# **B.3.4.4. PEDIATRIC SURGERY**

For students of the educational program, higher professional education in the specialty 560001

"General Medicine" (5-year education) in the specialty "Doctor"

Type of study work	Total hours			
course	3			
Semester	6			
Number of weeks	18			
Credits	5			
The total complexity of the discipline	150			
Classroom/practical studies (PS)	90			
Student Independent Work (SIW)	60			
Forms of control				
current control	Testing, oral questioning, written test			
Frontier control	Testing			
Midterm	Testing			
Final control	exam			
Semester rating by discipline:	Point-rating system			

Information about the teacher of the discipline

Full Name	Jumagulova Jyldyz Osmonalievna		
Job title	teacher		
Academic degree	Candidate of medical sciences		
Academic title	docent		
Email address			
Location of the department (address)	KR, Bishkek, st. Shabdan Baatyr 128, floor 2, room 6		
Telephone	0550030xxx		
Consultation hours	11.00-13.30		

#### Characteristics of the academic discipline

The purpose of studying the discipline is to provide students with the necessary information, the basics of knowledge and the formation of clinical thinking on semiotics, clinic, diagnosis, differential diagnosis, treatment tactics and emergency care for surgical malformations, surgical and urological diseases, traumatic injuries, tumors, critical conditions in children of various age groups and mastering practical skills in independent curation patients. This course allows the development of theoretical knowledge about the nature of surgical diseases in children and the formation of practical skills necessary in the practice of a pediatric surgeon to solve diagnostic, therapeutic, preventive, educational and educational tasks provided for by the qualification requirements for a pediatric surgeon, in-depth study of the anatomical and

physiological characteristics of the child's body; the study of etiology, pathogenesis, clinical picture, methods of diagnosis of surgical pathology in children; mastering the methods of surgical treatment of surgical pathology in children; studying the principles of pre- and postoperative management and intensive care in children with surgical pathology; studying the principles of rehabilitation in surgical pathology in children; studying professional sources of information; studying the organizational and legal aspects of the work of a pediatric surgeon. Students study the principles of surgical treatment and its rational timing, the principles of drug treatment, pharmacokinetics and pharmacodynamics of the main groups of drugs. Etiology and pathogenesis of surgical diseases, malformations, traumatic injuries, oncological diseases and critical conditions in children of various age groups. Clinical symptoms of pediatric surgical diseases, their diagnosis (clinical, laboratory, instrumental), methods of examination of various organs and systems. At the end of the course, students apply methods of emergency medical care, including methods of resuscitation.

### **Prerequisites of the discipline:**

- Normal anatomy
- Basic pharmacology
- Clinical pharmacology
- General surgery
- Internal diseases
- Infectious diseases

# Postrequisites of the discipline:

- Normal anatomy
- Basic pharmacology
- Clinical pharmacology
- General surgery
- Internal diseases
- Infectious diseases

# Learning outcomes of the discipline according to the RO GPP

The study of the discipline of pediatric surgery will contribute to the achievement of learning outcomes (**RE**) **GEP**:

**RE-8:** evaluate and analyze achievements and discoveries in biomedical science and apply new knowledge in practice.

The degree of influence of the discipline on the formation of this **RE-8** is estimated.

The achievement of **RE-8** is realized by the acquisition of competencies by the graduate, i.e. his ability to apply knowledge, skills and personal qualities in accordance with the tasks of professional activity - PC-6, PC-16, PC-17

**PC-6** - is capable and ready to apply methods of asepsis and antiseptics, to use medical instruments, to master the technique of patient care;

**PC-16** - is capable and ready to use the algorithm of diagnosis (main, concomitant, complications) taking into account the ICD, perform basic diagnostic measures to identify urgent and life-threatening conditions. **PC-17** - is capable and ready to perform basic therapeutic measures for the most common diseases and conditions in adults and children in outpatient and hospital settings;

#### Content of the discipline

NºNº	Name of topics					
1.	Section 1. Features of childhood surgery					
2.	Features of childhood surgery					
3.	Surgery of malformations. Terms of surgical treatment.					
4.	Surgery of malformations. Terms of surgical treatment					
5.	Section 2. Elective surgery					
6.	Pathology of the vaginal process of the peritoneum (inguinal hernia, dropsy of the testicular membranes, cyst of the spermatic cord). Hernias: umbilical, white line of the abdomen, Etiopathogenesis, clinic, complications, diagnosis, treatment.					
7.	Pathology of the vaginal process of the peritoneum (inguinal hernia, dropsy of the testicular membranes, cyst of the spermatic cord). Hernias: umbilical, white line of the abdomen, Etiopathogenesis, clinic, complications, diagnosis, treatment.					

0	M 16 C.1 . 1 . M 16 C.1 . 1 1 C.1 1 1 1
8.	Malformations of the chest. Malformations of blood vessels. Classification, clinic, diagnosis,
0	principles of treatment
9.	Malformations of the chest. Malformations of blood vessels. Classification, clinic, diagnosis, principles of treatment
10	Section 3. Acute surgical diseases of abdominal organs in children
10.	Acute appendicitis and peritonitis in children
12.	Acute appendicitis and peritonitis in children.
13.	Acute appendicitis and peritoritis in children.  Acute appendicitis and peritoritis in children.
	Acquired intestinal obstruction
14. 15.	Acquired intestinal obstruction  Acquired intestinal obstruction
	*
16.	Acquired intestinal obstruction
17.	Section 4. Gastrointestinal malformations
18.	Congenital intestinal obstruction
19.	Congenital intestinal obstruction
20.	Congenital intestinal obstruction
21.	Congenital pylorostenosis. Malformations of the anterior abdominal wall (gastroschisis,
22	embryonic umbilical hernia). Pathology of the yolk and urinary duct.
22.	Congenital pylorostenosis. Malformations of the anterior abdominal wall (gastroschisis, embryonic umbilical hernia). Pathology of the yolk and urinary duct.
23.	Anomalies of the anorectal region, Hirschsprung's disease
24.	Section 5. Diseases and malformations of the esophagus
25.	Malformations of the esophagus
26.	Malformations of the esophagus
27.	Burns of the esophagus and their complications
28.	Section 6. Portal hypertension syndrome
29.	Anomalies and pathologies of the biliary tract, spleen and pancreas. Portal hypertension
30.	syndrome. Gastrointestinal bleeding in children.
30.	Anomalies and pathologies of the biliary tract, spleen and pancreas. Portal hypertension syndrome. Gastrointestinal bleeding in children.
31.	Anomalies and pathologies of the biliary tract, spleen and pancreas. Portal hypertension
31.	syndrome. Gastrointestinal bleeding in children.
32.	Section 7. Malformations causing acute respiratory failure syndrome
33.	Diaphragmatic hernia, congenital lobar emphysema, strained lung cyst, Pierre-Robin
33.	syndrome, hoan atresia
34.	Diaphragmatic hernia, congenital lobar emphysema, strained lung cyst, Pierre-Robin
3	syndrome, hoan atresia
35.	Section 8. Purulent surgical infection in children
36.	Purulent-septic diseases of the skin and subcutaneous fat
37.	Purulent-septic diseases of the skin and subcutaneous fat
38.	Acute hematogenous osteomyelitis, epiphyseal osteomyelitis. Chronic hematogenic and
	primary chronic osteomyelitis
39.	Acute hematogenous osteomyelitis, epiphyseal osteomyelitis. Chronic hematogenic and
	primary chronic osteomyelitis
40.	Acute hematogenous osteomyelitis, epiphyseal osteomyelitis. Chronic hematogenic and
	primary chronic osteomyelitis
41.	Acute and chronic suppurative lung diseases in children. Destructive pneumonia, classification,
	clinic, treatment
42.	Acute and chronic suppurative lung diseases in children. Destructive pneumonia, classification,
	clinic, treatment
43.	Acute and chronic suppurative lung diseases in children. Destructive pneumonia, classification,
	clinic, treatment
44.	Section 9. Diseases and malformations of the urinary system
45.	Hydronephrosis. Obstructive pyelonephritis
46.	Hydronephrosis. Obstructive pyelonephritis
47.	Malformations of the upper urinary tract. Testicular dropsy, hypospadias, epispadias,
	cryptorchidism, bladder exstrophy

48.	Malformations of the upper urinary tract. Testicular dropsy, hypospadias, epispadias,								
	cryptorchidism, bladder exstrophy								
49.	Section 10. Features of traumatology and orthopedics of childhood								
50.	Features of limb bone damage in children - Features of limb bone damage in children								
51.	Birth injuries in children - Birth injuries in children								
52.	Congenital hip dislocation, clubfoot, torticollis - Congenital hip dislocation, clubfoot, torticollis								
53.	Congenital hip dislocation, clubfoot, torticollis								
54.	Section 11. Features of intensive care and resuscitation of children								
55.	Features of intensive care and resuscitation of children								

#### List of main and additional literature:

#### Main literature:

Pediatric surgery: [studies. for higher Prof. education] / [A. F. Dronov et al.]; edited by Yu. F. Isakov, A. Y. Razumovsky. – Moscow: GEOTAR-Media, 2015.

### **Additional literature:**

- 1. Razin M. P. Pediatric urology andrology: [studies. manual] / M. P. Razin, V. N. Galkin, N. K. Sukhoi. Moscow: GEOTAR-Media, 2011
- 2. Traumatology and orthopedics: [studies. for higher Prof. education] / edited by N. V. Kornilov. Moscow: GEOTAR-Media, 2014.

### Интернет-ресурсы:

http//www.edu.ru

http//www.medicina.ru

http://marc.rsmu.ru

http://www.journals.uchicago.edu/JAD/home.html

# Monitoring and evaluation of learning outcomes The content of the rating system for assessing student performance

The rating assessment of students' knowledge in each academic discipline, regardless of its total labor intensity, is determined on a 100 (one hundred) - point scale and includes current, boundary, intermediate and final control.

The distribution of rating scores between types of control is established in the following ratio (according to the table of the score-rating system of assessments):

Form of control								
current (CC)*	boundary control (BC)**	mid-term exams (MC)***	Final /exam (FE)	Discipline Rating (RD)				
0-100 points	0-100 points	0-100 points	0-100 points	0-100 points, with the translation of points into a letter designation				

#### Note:

\* TK(middle) =  $\frac{\sum_{1}^{n} \times point}{\sum_{1}^{n}}$ , where n is the number of types of classroom and extracurricular work of students in the discipline;

\*\*PK (middle) =  $\frac{\sum_{1}^{n} credit \times point}{\sum_{1}^{n} credits}$ , where n is the number of modules (credits) in the discipline;

\*\*\* $\Pi$ K (middle) =  $\frac{\sum_{1}^{n} \times point}{\sum_{1}^{n}}$ , where n is the number of intermediate controls (2 controls per semester: in the middle and at the end of the semester) by discipline;

\*\*\*\*ИК – examination conducted at the end of the study of the discipline

\*\*\*\*\* $P_{\Pi} = \frac{TKcp + PKcp + \Pi Kcp + MK}{4}$ , the final rating of the results of all types of control at the end of the discipline;

GPA=  $\frac{\sum_{1}^{n} \times 6a\pi\pi}{\sum_{1}^{n}}$  where, n is the number of disciplines in the semester (for the past period of study).

A student who has not passed the current, boundary and intermediate controls to the final control (exam) is not allowed

**The current control** is carried out during the period of classroom and independent work of the student on time according to the schedule, at the end of the study of the discipline, the average score of the current control (CC) is calculated. Forms of current control can be:

- testing (written or computerized);
- performance of individual homework assignments, abstracts and essays;
- student's work in practical (seminar) classes;
- various types of colloquia (oral, written, combined, express, etc.);
- control of performance and verification of reporting on laboratory work;
- visiting lectures and practical (seminar, laboratory) classes;
- Incentive rating (up to 10 points).

Other forms of current monitoring of results are also possible, which are determined by the teachers of the department and recorded in the work program of the discipline.

*The frontier control* is carried out in order to determine the results of the student's development of one credit (module) as a whole. *Frontier control* should be carried out only in writing, at the end of the study of the discipline, the average score of boundary control (BC) is calculated. As forms *of frontier control* of the training module, you can use:

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

*Intermediate control (mid-term exams)* is carried out in order to check the completeness of knowledge and skills in the material in the middle and end of the semester (2 times per semester) of studying the discipline, by the end of the study of the discipline, the average score of intermediate control (PCsr) is calculated, *forms of intermediate control (mid-term exams) can be:* 

- testing (including computer testing);
- interview with written fixation of students' answers;
- test.

Other forms of intermediate control of results are also possible.

*The final control* is carried out during the session, by conducting an exam, it can be carried out in the following forms:

- testing (including computer testing);
- written exam (ticketing system).

# Correspondence of the point-rating system of assessments used by the institute and the assessments of the European system for the transfer of credit units, labor intensity (ECTS)

			Gra	ıde				
System of letters	digital system	Traditional system	Points (%)	Scored points (max - 100)	Evaluation by discipline without an exam	Criterion		
A	4		95-100	95-100		"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic and additional literature on the discipline		
A-	3,67	5	90-94	90-94	Credited/	"Excellent" - deserves a student who has shown a deep, systematic and comprehensive knowledge of the educational material, who freely performs practical tasks, who has mastered the recommended basic literature on the discipline, but is not familiar with additional literature		
B+	3,33	4	85-89	70-89	passed	"Good" - exhibited to a student who has shown a systematic and comprehensive knowledge of the educational material, able to independently replenish and update this knowledge in the course of training, performing practical tasks, familiar with the main literature on the discipline		
В	3,0	4	80-84			"Good" is given to a student who has shown a systematic and comprehensive knowledge of the educational material, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline		

В-	2,67		75-79			"Good" - is given to a student who has shown the systematic nature of knowledge in the discipline, who is able to independently replenish this knowledge in the course of training, performing practical tasks, but not fully familiar with the main literature on the discipline
C+	2,33		70-74			"Satisfactory" - is given to a student who does not have a systematic nature of knowledge in the discipline, who is not capable of independently replenishing and updating knowledge in the course of further education, performing practical tasks with errors
С	2,0		65-69			"Satisfactory" - is given to a student who made mistakes in completing assignments, but who has the necessary knowledge to eliminate them under the guidance of a teacher
C-	1,67	3	60-64	50-69		"Satisfactory" - is set to a student who made errors in the performance of tasks, but who has the possible knowledge to eliminate them under the guidance of a teacher
D+	1,33		55-59			
D-	1,0		50-54			Satisfactory" - is given to a student who has made significant errors in the performance of tasks, who does not have the necessary knowledge to eliminate them
FX	0,5	2	25-49	Less of	not	"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them
F	0	2	0-24	credited/not passed	"Unsatisfactory" - is set to a student who has not completed the task, does not have the necessary knowledge to eliminate them, even under the guidance of a teacher	

# **Academic achievement requirements:**

Attendance by students of all classroom classes without delay is mandatory.

In case of absence, classes are worked out in the order established by the dean's office.

If there are three passes, the teacher has the right not to allow the student to attend classes until the issue is administratively resolved.

If the absence of classes is more than 20.0% of the total number of classes, the student automatically enters the summer semester.

#### Note to the student:

- ✓ regularly review lecture material;
- ✓ Do not be late and do not miss classes;
- ✓ work off missed classes if you have permission from the dean's office;
- ✓ Actively participate in the classroom (individually and in groups;)
- ✓ timely and fully complete homework assignments;
- ✓ submit all assignments within the time specified by the teacher;
- ✓ independently study the material in the library and at home;
- ✓ timely and accurately fulfill the tasks of the teacher, individual tasks for the IWS to achieve learning outcomes:
- ✓ to master the basic and additional literature necessary for the study of the discipline;
- ✓ performing tasks, the student should not copy or reproduce the work of other students, scientists, practitioners, plagiarism;
- ✓ develop their intellectual and oratory skills;

In case of non-compliance with the requirements of the Memo, the student will be penalized in the form of deducting points (one point for each violated item).

If the requirements of the Memo are fully met, the student is encouraged in the form of an additional 10 points to the final control in the discipline.

# **Academic Integrity, Conduct and Ethics Policy:**

- turn off your cell phone during class;
- Be polite;
- respect other people's opinions;
- formulate objections in the correct form;
- do not shout or raise your voice in the audience;
- independently complete all semester assignments;
- Eliminate plagiarism from your practice;

#### Methodical instructions.

It is recommended to organize the time required to study the discipline as follows:

When preparing for a practical lesson, you must first read the abstract with the teacher's explanations. When performing exercises, you must first understand what you want to do in the exercise, then proceed to its implementation.

*Literature work.* The theoretical material of the course becomes more understandable when books are studied in addition to the abstract. After studying the main topic, it is recommended to perform several exercises.

**Preparation for boundary and intermediate controls.** In preparation for the boundary and intermediate control, it is necessary to study the theory: the definitions of all concepts before understanding the material and independently do several exercises.

*Independent work of students* is organized on all studied topics of each section. Independent work is carried out in the form of:

- work in Internet sites;
- work with basic and additional literature;
- fulfillment of written assignments;
- preparation of reports, abstracts, tables and posters on