

Federal State Autonomic Educational Institution of Higher Education
«Peoples' Friendship University of Russia»

Medical Institute

Recommended MCSD

SYLLABUS
(STUDY GUIDE)

Subject

Hospital Surgery, Pediatric Surgery

Recommended for the direction of training (specialty)

31.05.01 General Medicine

Program (profile, specialization)

General Medicine

1. Aims and objectives of discipline:

The object of the Hospital Surgery, Pediatric Surgery course is to teach students the ability to diagnose surgical diseases, to determine the treatment and prevention methods. The academic course program provides for further study of diseases that are not included in the program of previous disciplines. In the process of training the special attention is paid to the clinical education of students, the ability of general examination of surgical patients and the ability to summarize the obtained data for the differential diagnosis.

2. Place of discipline in the structure of OP HE:

Discipline Hospital Surgery, Pediatric Surgery refers to the basic part of Block 1 of the curriculum.

Table №1 given preceding and following discipline aimed at forming competence discipline in accordance with the matrix competences EP HE.

Table 1.

Preceding and following the discipline aimed at creating competencies

№	Code and title of competence	Preceding disciplines	Following disciplines
Общепрофессиональные компетенции			
1	GPC-5	biochemistry, normal physiology, topographic anatomy and operative surgery, faculty surgery, faculty therapy	anesthesiology, intensive care, intensive therapy
2	GPC-7	faculty surgery, faculty therapy	polyclinic therapy
Профессиональные компетенции (вид профессиональной деятельности)			
	PC-1	topographic anatomy and operative surgery, faculty surgery	anesthesiology, intensive care, intensive therapy
	PC-2	faculty surgery, faculty therapy	anesthesiology, intensive care, intensive therapy
	PC-3	faculty surgery	anesthesiology, intensive care, intensive therapy
	PC-5	Urology, faculty therapy	maxillofacial surgery, oncology, radiation therapy

3. Requirements to results of development of discipline: The process of studying the discipline is aimed at the formation of the following competencies: GPC-5, GPC-7, PC-1, PC-2, PC-3, PC-5.

General Professional Competence Category	General Professional Competence Code and Name	General Professional Competence Achievement Indicator Code and Name
Etiology and pathogenesis	GPC-5. Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	GPC-5.1. Mastering the algorithm of clinical, laboratory and functional diagnosis when dealing with professional tasks. GPC-5.2. Being able to evaluate the results of clinical, laboratory and functional diagnosis when dealing with professional tasks. GPC-5.3. Being able to determine morpho-functional, physiological states and pathological processes of the human body.

Treatment of diseases and conditions	GPC-7. Being able to prescribe treatment and monitor its efficacy and safety	GPC-7.1. Mastering skills in the methods of general clinical examination, interpretation of laboratory results, instrumental diagnostic methods. GPC-7.2. Being aware of the algorithm for making a preliminary diagnosis with the subsequent referral of the patient to the relevant medical specialist.
--------------------------------------	--	--

Professional Competence Code and Name	Professional Competence Achievement Indicator Code and Name
PC-1. Being able to provide emergency or urgent medical care to a patient	<p>PC-1.1. Being able to assess the condition of a patient who needs emergency or urgent medical care.</p> <p>PC-1.2. Being able to recognize conditions that arise from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and which require emergency medical care.</p> <p>PC-1.3. Being able to provide emergency medical care to patients with sudden acute diseases, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life.</p> <p>PC-1.4. Being able to recognize conditions which pose a threat to the patient's life, including conditions of clinical death (cessation of the vital bodily functions (blood circulation and/or respiration) which require emergency medical care.</p> <p>PC-1.5. Being able to provide emergency medical care to patients in conditions which pose a threat to the patient's life, including clinical death (cessation of the vital bodily functions (blood circulation and/or respiration).</p> <p>PC-1.6. Being able to use drugs and medical devices when providing medical care in emergency or urgent forms.</p>
PC-2. Being able to examine a patient in order to determine a diagnosis	<p>PC-2.1. Mastering the skills to collect complaints, anamnesis of the patient's life and disease, as well as conduct a complete physical examination of the patient (examination, palpation, percussion, auscultation).</p> <p>PC-2.2. Being able to make a preliminary diagnosis and make up a plan of laboratory and instrumental examinations of a patient.</p> <p>PC-2.3. Being able to refer a patient to a laboratory examination in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the medical care standards.</p> <p>PC-2.4. Being able to refer a patient to an instrumental examination in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.5. Being able to refer a patient to consult with a medical specialist if there is a medical indication in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical</p>

	<p>care.</p> <p>PC-2.6. Being able to refer a patient to be provided with specialized medical care in an inpatient setting or in a day hospital in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.7. Being able to carry out differential diagnosis with other diseases/conditions, including the urgent ones, as well as to make a diagnosis taking into account the current international statistical classification of diseases and problems related to health (ICD).</p>
<p>PC-3. Being able to prescribe treatment and monitor its efficacy and safety</p>	<p>PC-3.1. Being able to develop a treatment plan for a disease or condition taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.2. Being able to prescribe medicinal drugs, medical devices and medical nutrition taking into account the diagnosis, age and clinical picture of the disease and in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.3. Being able to prescribe non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.4. Being able to assess the efficacy and safety of the use of drugs, medical devices, medical nutrition and other treatment methods.</p> <p>PC-3.5. Being able to provide palliative care in collaboration with medical specialists and other healthcare professionals.</p> <p>PC-3.6. Being able to organize personalized treatment for a patient, including pregnant women, elderly and senile patients; assess the efficacy and safety of treatment.</p>
<p>PC-5. Being able to carry out preventive measures and measures to promote a healthy lifestyle and sanitary and hygiene education among population and monitor their effectiveness</p>	<p>PC-5.1. Being able to organize and conduct medical examinations taking into account age, health status, profession in accordance with applicable legislative acts and other documents.</p> <p>PC-5.2. Being able to organize and monitor the immunization of the adult population against infectious diseases in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-5.3. Being able to carry out medical examination of the adult population aimed at early detection of chronic noncommunicable diseases and the main risk factors for their development in accordance with the current legislative acts and other documents.</p> <p>PC-5.4. Being able to carry out follow-up care of patients with diagnosed chronic noncommunicable diseases.</p> <p>PC-5.5. Being able to prescribe preventive measures to patients taking into account risk factors in accordance with</p>

the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.

PC-5.6. Being able to monitor observing preventive measures.

PC-5.7. Being able to determine medical indications to introduce restrictive measures (quarantine) and indications for referral to a medical specialist in the event of infectious (parasitic) diseases.

PC-5.8. Being able to issue and send an emergency notification to the territorial body of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing when an infectious or occupational disease is detected.

PC-5.9. Being able to carry out anti-epidemic measures in the event of the occurrence of a focus of infection, including quarantine measures when especially dangerous (quarantine) infectious diseases are detected.

PC-5.10. Being able to develop healthy lifestyle programmes, including the ones to reduce alcohol and tobacco consumption, prevent and combat non-medical use of narcotic drugs and psychotropic substances.

PC-5.11. Being able to assess the effectiveness of preventive patient care.

As a result of study of discipline, a student must:

Know:

1. etiology, pathogenesis and prevention of the most common surgical diseases; modern classification of diseases;
2. clinical picture, features of the course and possible complications of the most common surgical diseases that occur in typical form in different age groups;
3. diagnostic methods for direct examination of the patient's surgical profile, modern methods of clinical, laboratory, instrumental examination of patients (endoscopic, x-ray methods, ultrasound diagnostics and etc.);
4. criteria for the diagnosis of various surgical diseases;
5. clinical manifestations of the surgical syndromes;

Be handy at:

1. to determine the patient's status: to take anamnesis, to examine of the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, blood pressure measurement, etc.); to assess the patient's condition, to make a decision about the need to provide the medical care; conduct a primary examination of the systems and organs;
2. to establish priorities for solving patient health problems: a critical (terminal) condition, a condition with pain syndrome, a condition with chronic disease, a condition with an infectious disease, disability, geriatric problems, and a condition of mentally ill patients;
3. to assess the social factors affecting the patient's physical and psychological health: cultural, ethnic, religious, individual, family, social risk factors (unemployment, violence, illness and death of relatives, etc.); to set a preliminary diagnosis - to synthesize information about the patient in order to determine the pathology and the causes of it;
4. to outline the additional examination in accordance with the disease prognosis, to clarify the diagnosis and obtain a reliable result;
5. to select an individual type of care for the patient in accordance with the situation: primary care, ambulance, hospitalization;
6. to formulate a clinical diagnosis;

7. to determine a plan of surgical interventions, taking into account the course of the disease and its treatment;

8. to formulate indications for the chosen method of treatment.

Manage:

1. proper maintenance of medical documents;
2. public health assessments;
3. methods of clinical examination;
4. interpretation of the laboratory, instrumental diagnostic methods results;
5. algorithm of establishing a clinical diagnosis;
6. algorithm of establishing a preliminary diagnosis with the subsequent referral of the patient to the appropriate specialist;
7. the main medical diagnostic and therapeutic measures for the provision of first medical aid in emergency and life-threatening conditions.

4. Volume of discipline and types of study

General credit value of the discipline is 10 credit units.

Type of study load	Total hours	Semesters			
		9	10	11	12
Class hours (total)	216	72	36	36	36
<i>Practical training (PT)</i>	216	72	36	36	36
<i>in interactive form (IF)</i>	50	18	12	12	8
Independent work (total)	108	36	36	36	36
Exam	36		36		
Total labor input	hours	360	108	108	72
	credit unit.	10	3	3	2

5. Content of the discipline

5.1. The content of the discipline sections

№	Name of the section of discipline	Contents of the section
1.	Abdominal Surgery	Acute appendicitis. Peritonitis. Compartment syndrome. Acute cholecystitis. Complications of gallstones. Choledocholithiasis. Mechanical jaundice. Cholangitis. Liver abscess. Cholecystopancreatitis. Acute pancreatitis. Chronic pancreatitis. Liver injury. Cysts, abscesses and tumors of the liver. Echinococcosis, alveococcosis. Peptic ulcer and duodenal ulcer. Complications of peptic ulcer: bleeding, perforation, penetration, pyloro-duodenal stenosis, malignancy. Ulcerative gastroduodenal bleeding. Hypoglycemic syndrome. Anemia. Post-resection asthenia. Alkaline reflux gastritis, reflux esophagitis. Non-healing or recurrent ulcers after vagotomy. Ulcerative colitis and Crohn's disease. Intestinal bleeding. Classification of intestinal obstruction. Tactic treatment depending on the type of intestinal obstruction. Indications for surgical treatment and the volume of surgery for acute intestinal obstruction.
2.	Thoracic Surgery	Semiotics diseases of the chest wall. Patient questioning, examination, percussion, palpation, auscultation. Research methods: non-invasive and invasive. Methods of surgical

		<p>treatment. Surgical accesses. Open and closed injury. Compression of the chest, soft tissue injury, traumatic asphyxia. Pneumothorax, hemothorax, hemopneumothorax, hydrothorax, chylothorax, pyopneumothorax. Congenital malformations of the chest wall. Inflammatory diseases: non-specific and specific. Chest wall tumors: benign and malignant. Congenital tracheal defects. Traumatic injuries of the trachea. Tracheal stenoses: primary and secondary (compression), expiratory stenosis. Acquired esophageal-tracheal fistula. Tracheal tumors. Malformations (agenesis, aplasia, hypoplasia, congenital stenosis of the bronchi, sequestration, congenital lobar emphysema, true and false cysts, arteriovenous aneurysm). Nonspecific inflammatory diseases of the lungs (pneumonia, staphylococcal destruction, acute and chronic abscess, gangrene) - etiology, pathological anatomy, outcomes. Specific inflammatory diseases of the lungs (tuberculosis, syphilis, actinomycosis, pneumonia against the backdrop of AIDS). Bronchiectasis. Etiology, classification, treatment. Acquired lung cysts (solitary and multiple, complicated and uncomplicated, echinococcal).</p> <p>Anatomical and physiological information about the esophagus, research methods. Congenital anomalies of the esophagus (atresia, stenosis, congenital bronchoesophageal and esophageal-tracheal fistulas, congenital short esophagus, congenital achalasia, esophageal duplication). Foreign body esophagus. Damage to the esophagus. Burns the esophagus. Burn strictures of the esophagus. Benign tumors of the esophagus. Esophageal carcinoma. Reflux esophagitis, classification, diagnosis. Cysts of the esophagus. Esophagus diverticula. Cardiospasm. Achalasia cardia. Syndrome of Barsoni-Teschendorf. Differential diagnosis of neuromuscular diseases of the esophagus and cancer of the esophagus and cardia. Treatment of patients with neuromuscular diseases of the esophagus. Cysts and tumors of the diaphragm.</p>
3.	Cardiovascular Surgery	<p>Anatomical and physiological information about the cardiovascular system. History of Cardiovascular Surgery. Semiotics and classification of cardiovascular diseases. Non-invasive research methods: RVG, capillaroscopy, Doppler ultrasound, radioisotope indication, functional tests, functional diagnostics, X-ray, echocardiography, computed tomography, nuclear magnetic resonance. Invasive research methods: aortography, phlebography, percutaneous puncture arteriography, radioisotopic angiography, heart sounding, coronary angiography. Methods of surgical treatment of vascular diseases. Surgical accesses. Vascular suture. Artery operations. Vascular microsurgery. Vascular prostheses. The basic principles of surgical interventions on the heart: hypothermia, artificial blood circulation. Prosthetic heart valves and ascending aorta. Endovascular surgery. Principles, advantages and disadvantages. Congenital malformations of</p>

		<p>arterial vessels. Malformations of peripheral veins. Vascular injuries (wounding of the arteries, damage to the main veins).</p> <p>Arterial thrombosis and embolism: basic concepts: causes, pathogenesis, differential diagnosis, basic treatment methods. Classification of acute ischemia by degree. The main causes of chronic obliterating diseases: prevalence, risk factors, pathogenesis, differential diagnosis, basic principles of treatment. Syndrome of atypical aortic coarctation. Chronic ischemia of the brain and upper limbs (Takayasu syndrome). Compression syndrome of the neurovascular bundle upon its exit from the chest (scalenus syndrome, costoclavicular syndrome, hyperabduction syndrome). Chronic lower limb ischemia. Stage ischemia (Pokrovsky-Fountain). Leriche syndrome. Vasorenal hypertension. Chronic ischemia of the digestive system (angina abdominalis). Definition of aneurysm, classification of aneurysms by type, etiology and wall structure. Aneurysms of the thoracic aorta (ascending aorta, arch, descending thoracic aorta). Aneurysms of the abdominal aorta. Thoracoabdominal aneurysms. Stratifying aortic aneurysm. Peripheral artery aneurysm. The main methods of surgical treatment of aneurysms. The anatomical structure of the venous system of the lower extremities. Varicose veins. Diagnostic methods: assessment of the valve apparatus and communicating veins, functional tests, instrumental, diagnostics. Differential diagnosis. Non-operative treatment methods: drug therapy, compression therapy, sclerotherapy. Modern methods of surgical treatment. Indications, complications, management of the postoperative period. Causes of recurrence after surgery. Definition of concepts of thrombophlebitis and phlebothrombosis.</p> <p>Thrombosis in the system of the inferior vena cava: Acute thrombophlebitis of the superficial and deep veins of the lower extremities, Thrombosis of the deep veins of the lower extremities, Thrombosis of the inferior vena cava.</p> <p>Complications: white painful phlegmasia, venous gangrene (Gregoire's disease). Differential diagnosis. Thrombosis in the system of the superior vena cava: Thrombosis of the subcutaneous veins of the upper extremities, Subclavian vein thrombosis (Paget's syndrome-Schretter syndrome).</p> <p>Pulmonary embolism. Anticoagulant and thrombolytic therapy, indications and contraindications, drugs, doses, routes of administration. Methods of prevention, indications and contraindications to the implantation of a cava filter.</p> <p>Postthrombophlebitic syndrome. Classification (varicose, swollen-painful, ulcerative forms). Chronic venous insufficiency. Complications of CVI: trophic ulcers. Anatomy of the lymphatic vessels of the extremities. Diseases of the lymphatic vessels of the extremities. Chronic insufficiency of the lymphatic system: lymphedema (lymphostasis, elephantiasis). Chylothorax, chilo-pericardium,</p>
--	--	--

		<p>chiloperitoneum. Indications for drainage of the thoracic lymphatic duct. Congenital heart defects: classification of congenital malformations and pulmonary hypertension. "Pale" defects: open arterial duct, atrial septal defect, isolated pulmonary stenosis, ventricular septal defect, congenital stenosis of the aortic mouth. "Blue" defects: defects of the Fallot Group, the transposition of the great vessels, Ebstein's anomaly. Etiology, pathogenesis, pathomorphology, pathophysiology of acquired heart defects. Mitral stenosis and mitral insufficiency. Aortic stenosis, aortic insufficiency. Defects of the tricuspid valve. Mitral aortic, mitral-tricuspid, mitral-aortic-tricuspid malformations. The combination of valvular lesions with coronary artery disease. Etiology and clinical manifestations of chronic ischemic heart disease. Surgical treatment: coronary angioplasty, coronary and mammarocoronary bypass surgery, laser "tunneling". Postinfarction complications: cardiac aneurysm, mitral insufficiency, ventricular septal defect. Types of cardiac arrhythmias and conduction. Electrophysiological diagnostics. Electrocardiostimulation: diagnostic, therapeutic, times</p>
4.	Pediatric Surgery	<p>Anatomical and physiological features of the child's body. The principal differences in pediatric surgery. Features of examination of young children and newborns. Classification of intestinal obstruction in children. Congenital intestinal obstruction in children. Acquired intestinal obstruction in children. Damage to the chest cavity. Damage to the abdominal organs. Damage to tubular and flat bones. Damage to nerves and blood vessels. Traumatic brain injury. Inguinal hernia in children. Femoral hernia in children. Umbilical and hernia of the white line of the abdomen. Features of pediatric surgery: goals and objectives, history of development. Syndromology. General embryology and teratology. Features of the children's surgeon. Intensive therapy and reanimation of children's age. Etiology and pathogenesis of surgical infection of childhood. Principles of diagnosis and treatment of purulent surgical infection in children. Purulent-inflammatory diseases of lymphoid tissue (lymphadenitis). Sepsis. Methods for detoxifying patients with purulent surgical infection. Etiopathogenesis and classification of acute purulent destructive pneumonia (OGDP) in children. Etiopathogenesis of intestinal invagination. Clinical course and diagnostic algorithm. Disinvagination options. Clinical and morphological characteristics of congenital pyloric stenosis; diagnosis and treatment. Edema of testicular and spermatic cord. Varicocele. Cryptorchidism. Phimosis, paraphimosis, balanoposthitis. Acute diseases of the scrotum. Purulent diseases of soft tissues: newborn phlegmon, omphalitis, purulent mastitis. Acute hematogenous osteomyelitis in children. Chronic osteomyelitis in children. Atypical (rare) forms of osteomyelitis in children. Acute appendicitis in</p>

		children. Peritonitis of newborns. Embryology of lung malformations. Agenesis and aplasia of the lung. Cystic and simple pulmonary hypoplasia. Lobar emphysema. Lung sequestration. Tracheobronchomatization (Mounier – Kuhn syndrome). Bronchiectasis. Foreign bodies of the trachea and bronchi.
--	--	--

5.2. Sections of disciplines and types of classes

№	Name of the section of discipline	PC	SIW	Total hours
1.	Cardiovascular Surgery	72	36	108
2.	Abdominal Surgery	36	36	72
3.	Thoracic Surgery	36	36	72
4.	Pediatric Surgery	36	36	72
	Exam		36	36
	TOTAL:	180	180	360

6. Laboratory training (not provided)

7. Practical training (seminars)

№	Discipline section	Themes of practical training (seminars)	Workload (hours)
1.	Abdominal Surgery	Acute appendicitis	4
2.	Abdominal Surgery	Gallbladder disease.	4
3.	Abdominal Surgery	Diseases of the extrahepatic bile ducts.	4
4.	Abdominal Surgery	Diseases of the pancreas.	3
5.	Abdominal Surgery	Liver Diseases	4
6.	Abdominal Surgery	Diseases of the stomach and duodenum.	3
7.	Abdominal Surgery	Diseases of the operated stomach.	4
8.	Abdominal Surgery	Diseases of the intestines.	4
9.	Abdominal Surgery	Acute intestinal obstruction.	3
10.	Abdominal Surgery	Peritonitis.	3
11.	Thoracic Surgery	General issues of diagnosis and treatment of lung diseases.	3
12.	Thoracic Surgery	Damage to the chest, trachea, bronchi, lungs and pleura.	3
13.	Thoracic Surgery	Diseases of the chest wall and pleura.	3
14.	Thoracic Surgery	Lesions and foreign bodies of the esophagus.	3
15.	Thoracic Surgery	Burns and cicatricial strictures of the esophagus.	3
16.	Thoracic Surgery	Tumors of the esophagus.	3
17.	Thoracic Surgery	Diseases of the trachea.	3
18.	Thoracic Surgery	Benign and malignant tumors of the lung.	3
19.	Thoracic Surgery	Diagnosis and treatment of mediastinal tumors and cysts.	3
20.	Thoracic Surgery	Diseases of the diaphragm.	3
21.	Thoracic Surgery	Malformations, cysts and esophageal diverticula.	3
22.	Thoracic Surgery	Neuromuscular diseases of the esophagus.	3
23.	Cardiovascular Surgery	Anatomy of the cardiovascular system. General issues of diagnosis and treatment of diseases of the heart and blood vessels.	5

24.	Cardiovascular Surgery		5
25.	Cardiovascular Surgery	Congenital malformations of blood vessels. Traumatic damage to blood vessels.	5
26.	Cardiovascular Surgery	Acute arterial thrombosis and embolism.	3
27.	Cardiovascular Surgery	Stenosing diseases of the branches of the aorta.	3
28.	Cardiovascular Surgery	Aneurysms of the aorta and arteries.	4
29.	Cardiovascular Surgery	Varicose veins of the lower extremities.	4
30.	Cardiovascular Surgery	Thrombophlebitis and phlebothrombosis. Pulmonary embolism.	4
31.	Cardiovascular Surgery	Postthrombophlebitic syndrome. Chronic venous insufficiency.	4
32.	Cardiovascular Surgery	Diseases of the lymphatic system.	5
33.	Cardiovascular Surgery	Endovascular methods of diagnostic and treatment	5
34.	Cardiovascular Surgery	Congenital heart defects.	5
35.	Cardiovascular Surgery	Acquired heart defects.	4
36.	Cardiovascular Surgery	Coronary heart disease and its complications	4
37.	Cardiovascular Surgery	Pathology of the cardiac conduction system.	4
38.	Cardiovascular Surgery	Pathology of the pericardium (pericarditis, tamponade, cysts, pericardial tumors)	4
39.	Cardiovascular Surgery	Myocardial pathology (myocarditis, cardiomyopathy).	4
40.	Pediatric Surgery	Features of pediatric surgery: goals and objectives, history of development.	2
41.	Pediatric Surgery	Anatomical and physiological features of the child's body.	2
42.	Pediatric Surgery	Features of purulent surgical infection in children.	2
43.	Pediatric Surgery	Soft tissue ulcers: newborn phlegmon, omphalitis, purulent mastitis, pseudofurunculosis.	2
44.	Pediatric Surgery	Acute hematogenous osteomyelitis in children.	2
45.	Pediatric Surgery	Acute purulent destructive pneumonia in children.	2
46.	Pediatric Surgery	Surgical lung pathology in children: congenital lung malformations, bronchiectasis, tracheal and bronchial foreign bodies.	3
47.	Pediatric Surgery	Acute appendicitis in children.	3
48.	Pediatric Surgery	Peritonitis of newborns and infants. Etiology diagnosis, treatment.	3
49.	Pediatric Surgery	Acute intestinal obstruction in children (congenital and acquired).	3
50.	Pediatric Surgery	Malformations of the newborn.	3
51.	Pediatric Surgery	Esophagus atresia, diaphragmatic hernia, pyloric stenosis, anal atresia.	3

52.	Pediatric Surgery	Inguinal hernia and dropsy of the testicular membranes; varicocele, phimosis, cryptorchidism in children.	3
53.	Pediatric Surgery	Peculiarities of childhood traumatology; trauma to skeletal bones, chest, abdomen and head injury.	3

8. Material and technical support of the discipline:

№	Subjects, disciplines (modules) in accordance with the curriculum	The name of the equipped classrooms, facilities for conducting practical exercises with a list of basic equipment and / or software	Actual address of classrooms and facilities	Form of ownership, use (property, operational management, rent, free use, etc.)
1	Abdominal surgery	2 auditoriums for 30 seats, a conference hall for 250 seats. Overhead, multimedia projector, plasma panel, laptop, magnetic board, A set of dummies, a set of educational videos and presentations, a set of analog and digital radiographs, tomograms, sonograms, educational posters and tables	Central Clinical Hospital of the Russian Academy of Sciences, Moscow, Litovskii boulevard 1A	Under an agreement on the practical training of students (free use)
2	Thoracic surgery	2 auditoriums for 30 seats, a conference hall for 250 seats. Overhead, multimedia projector, plasma panel, laptop, magnetic board, A set of dummies, a set of educational videos and presentations, a set of analog and digital radiographs, tomograms, sonograms, educational posters and tables	Central Clinical Hospital of the Russian Academy of Sciences, Moscow, Litovskii boulevard 1A	Under an agreement on the practical training of students (free use)
3	Cardiovascular surgery	3 auditoriums for 25 seats, a conference hall for 300 training seats. Multimedia projector (2 pcs), laptop (3 pcs), plasma panel, magnetic board. A set of dummies, a set of training videos and presentations, a set of analog and digital radiographs, training posters and tables	NUZ Central Clinical Hospital №2 named after N.A. Semashko JSC Russian Railways, Moscow, st. Budayskaya, 2	Under an agreement on the practical training of students (free use)
4	Pediatric surgery	1 auditorium equipped with multimedia equipment for 30 seats. Overhead, multimedia projector, plasma panel, laptop, magnetic board, A set of dummies, a set of educational videos and presentations, a set of analog and digital radiographs, tomograms, sonograms, educational posters and tables	Morozovskaya DGKB, Moscow, 4-1 Dobryninsky per., 1/9	Under an agreement on the practical training of students (free use)

9. Information support of the discipline:

a) Software: Testing program Mentor

б) Databases, reference and search systems:

1. Electronic Library System (ELS) of the RUDN University and third-party ELS, to which university students have access on the basis of concluded contracts:

– Electronic library system of the RUDN University <http://lib.rudn.ru/>

– Scientific electronic library (<http://elibrary.ru/defaultx.asp>);

– Universal library ONLINE (<http://biblioclub.ru>);

– Library of electronic journals BENTHAM OPEN (<http://www.benthamscience.com/open/a-z.htm>);

– Library of electronic journals Elsevier (<http://www.elsevier.com/about/open-access/open-archives>)

– Medical online library MedLib (<http://med-lib.ru/>)

– US National Library System <http://www.ncbi.nlm.nih.gov/pubmed/>

– <http://www.ispub.com/>

10. Educational and methodical support of the discipline:

a) Main literature

1) Osnovnye etapy razvitiya otechestvennoj hirurgii detskogo vozrasta: Uchebno-metodicheskoe posobie / P.I. Manzhos [i dr.]. - M.: Izd-vo RUDN, 2015. - 69 s. - ISBN 978-5-209-06308-7: 54.97. 57.334/337 - O-75

2) Kvalifikacionnye testy po hirurgii detskogo vozrasta: Uchebno-metodicheskoe posobie / P.I. Manzhos [i dr.]. - M.: Izd-vo RUDN, 2015. - 134 s.: il. - ISBN 978-5-209-06307-0: 95.44. 57.334/337 - K32

3) Abdominal'naya, neotlozhnaya i gnojnaya hirurgiya u detej: Uchebno-metodicheskoe posobie / P.I. Manzhos [i dr.]. - M.: Izd-vo RUDN, 2015. - 149 s. - ISBN 978-5-209-06770-2: 94.13. 57.3 - A 13

4) Osnovnye voprosy hirurgii detskogo vozrasta: Uchebnoe posobie dlya studentov medicinskogo fakul'teta special'nosti "Lechebnoe delo" / V.A. Bychkov, P.I. Manzhos. - M.: Izd-vo RUDN, 2011. - 329 s.: il. - ISBN 978-5-209-03570-1: 260.00. 57.334/337 - B9

5) Detskaya hirurgiya: Uchebnik / Pod red. YU.F. Isakova, A.YU. Razumovskogo. - M.: GEOTAR-Media, 2016.

6) Obshchie ponyatiya o gravitacionnoj hirurgii [Tekst/elektronnyj resurs]: Uchebno-metodicheskoe posobie / A.V. Fajbushevich [i dr.]. - Elektronnye tekstovye dannye. - M.: Izd-vo RUDN, 2017. - 43 s.: il. - ISBN 978-5-209-08065-7: 32.66. 54.5 - O-28

7) Testovye voprosy po serdechno-sosudistoj hirurgii = Test question on cardiovascular surgery: Uchebno-metodicheskoe posobie: na anglijskom yazyke / A.G. Fajbushevich [i dr.]. - M.: Izd-vo RUDN, 2014. - 28 s. - ISBN 978-5-209-06309-4: 33.42. 54.573.651 - T36

8) Serdechno-sosudistaya hirurgiya v voprosah i otvetah=Questions and answers in cardiovascular surgery: Uchebnoe posobie / A.G. Fajbushevich. - Kniga na anglijskom yazyke. - M.: Izd-vo RUDN, 2014. - 252 s. - ISBN 978-5-209-05847-2 : 87.23. 54.573.651 - S32

9) Serdechno-sosudistaya hirurgiya v voprosah i otvetah: Uchebnoe posobie / A.G. Fajbushevich, V.YU. Baranovich. - M.: Izd-vo RUDN, 2013. - 292 s. - ISBN 978-5-209-05402-3 : 113.81. 54.573.651 - S32

10) Izbrannye voprosy hirurgii: Uchebnoe posobie / M.A. CHinikov, S.R. Dobrovol'skij. - M.: Izd-vo RUDN, 2013. - 119 s. - ISBN 978-5-209-04840-4 : 85.14. 54.57 - I32

11) Torakal'naya hirurgiya v voprosah i otvetah: Uchebno-metodicheskoe posobie / YU.V. Tarichko. - M.: Izd-vo RUDN, 2012. - 114 s. - ISBN 978-5-209-04642-4: 24.19. 54.573 - T59

12) Abdominal'naya hirurgiya v voprosah i otvetah: Uchebno-metodicheskoe posobie / YU.V. Tarichko. - M.: Izd-vo RUDN, 2012. - 83 s. - ISBN 978-5-209-04656-1: 29.43. 54.5 - A13

13) Osnovy uhoda za pacientom v hirurgicheskoj klinike: Uchebnoe posobie / N.G. Koscova [i dr.]. - M.: Izd-vo RUDN, 2017. - 176 s.: il. - ISBN 978-5-209-08167-8: 171.17. 54.5 - O-75

b) Additional literature

1) Hirurgicheskie bolezni u detej [Elektronnyj resurs]: Uchebnoe posobie / V.V. Podkamenev. - 2-e izd., pererab i dop. - M.: GEOTAR-Media, 2015. - 432 s. - ISBN 978-5-9704-3283-9.

2) Koronarnaya angiografiya [Tekst]: Uchebnoe posobie / Z.H. SHugushev [i dr.]. - M.: Izd-vo RUDN, 2017. - 79 s.: il. - ISBN 978-5-209-07433-5 : 56.17.

3) Hirurgicheskoe lechenie vrozhdennyh porokov serdca [Elektronnyj resurs] / Per. s angl.; pod red. M.V. Boriskova. - M.: GEOTAR-Media, 2017. - 736 s. - ISBN 978-5-9704-4087-2.

4) Klinicheskie rekomendacii po vedeniyu detej s vrozhdennymi porokami serdca [Tekst] / Pod. red. L.A. Bokeriya. - M.: NCSSKH im. A.N. Bakuleva RAMN, 2015. - 342 s. - ISBN 978-5-7982-0335-2: 0.00

5) Limfoproliferativnye zabolevaniya (opuholi limfaticeskoy sistemy) [Tekst/elektronnyj resurs]: Uchebno-metodicheskoe posobie / V.K. Al'pidovskij, T.C. Garmeva. - elektronnye tekstovye dannye. - M.: Izd-vo RUDN, 2012. - 32 s. - ISBN 978-5-209-04122-1: 0.00

6) Ostrye hirurgicheskie zabolevaniya organov bryushnoj polosti: ostryj appendicit, ostryj kal'kuleznyj holecistit, ostryj pankreatit [Elektronnyj resurs]: Metodicheskie rekomendacii k prakticheskim zanyatijam dlya studentov IV–VI kursov, obuchayushchihsya po speci-al'nosti «Lechebnoe delo» / S.V. Berelavichus, A.V. Smirnov. - Elektronnye tekstovye dan-nye. - M.: Izd-vo RUDN, 2018. - 68 s.: il. - ISBN 978-5-209-09088-5.

7) Abdominal Surgery in Questions and Answers [Tekst/elektronnyj resurs]: Education-al-Methodical Handbook / F.S. Kurbanov [i dr.]. - Elektronnye tekstovye dannye. - M.: Peoples` Friendship University of Russia, 2018. - 78 c. - ISBN 978-5-209-08750-2: 48.74.

11. Guidelines for students on the development of the discipline (module)

Students are required to attend classes, complete teacher assignments, etc. The quality of work in the classroom, the quality of performance of the teacher's assignments, and the ability to independently study the educational material are assessed.

Independent work outside the classroom hours can be held in the classrooms of the department and the premises of the educational and scientific information-library center (Scientific Library), where students can study the material on presentations prepared by teachers of the department, as well as computer tests.

Presentations on occupation topics can be recorded on CDs or flash cards for independent work of residents on a home computer.

Manuals in electronic form on a number of studied topics are posted on the pages of the department and staff of the Department of Hospital Surgery with the course of the Pediatric Surgery on the TUIS RUDN, as well as on the local resources of the RUDN Electronic Library System.

Extracurricular independent work includes:

study of the material on the textbook, textbooks on paper and electronic media; preparation of abstract messages on the chosen topic; preparation for the performance of tests and tests.

1. Requirements for medical history

1. Complaints now.

2. Complaints during the examination.

3. Anamnesis of the disease (a detailed description of the history, including complaints at the time of admission to the clinic).

4. Anamnesis of life (social, professional, for women - gynecological; past diseases, epidemiological history, insurance history, heredity).

5. Objective examination of the patient:

o General condition, nutrition, condition of the skin;

o the state of the cardiovascular, respiratory, digestive, urinary, nervous, endocrine, lymphatic systems, musculoskeletal system, etc.);

o Status localis (a detailed description of the identified local signs and symptoms of the underlying disease).

6. Preliminary diagnosis.

7. Data of laboratory, radiological, instrumental and other special diagnostic methods (To assess the results of the analysis - the norm or pathology).

8. Conclusions of medical consultants (therapist, cardiologist, neuropathologist, etc.).

9. Differential diagnosis.

10. The diagnosis of the disease (Indicate, in accordance with the classification, the name of the main disease, its shape, stage, complications).

11. Clinical diagnosis:

o underlying disease;

o associated diseases;

o complications.

12. Justification of the clinical diagnosis by consistently reviewing the obtained data (anamnestic, objective, laboratory, etc.).

13. Treatment and its rationale:

o Principles of conservative and surgical treatment. The choice of therapeutic methods in a curated patient: a scheme of conservative treatment, indications and contraindications for surgical intervention. Justification of the choice of the method of operation in this patient, operational access, method of anesthesia.

14. Daily observation diary (general condition, hemodynamic indices, body temperature, dynamics of changes in the symptoms of the underlying disease, the state of the surgical wound).

15. Preoperative epicrisis (written in the observation diary on the eve of the operation):

o Surname and age of the patient, the nature of the patient's arrival (emergency, plan), and the date of hospitalization;

o the main disease, the stages of its development, clinical manifestations and their severity;

o Basic survey data, including laboratory, instrumental, etc.;

o the nature and severity of comorbidities;

o the nature of preoperative preparation, its effectiveness;

o the patient's condition on the day before surgery, including status localis;

o Justification of the need for surgical treatment, evaluation of the available counter-indications, surgical and anesthetic risks of the intervention;

o the planned volume of the operation, the type of anesthesia;

o Awareness of the patient or his relatives about the possible risk of the planned intervention and their consent to the operation.

16. Transaction log (written in the diary of daily observation on the day of surgery).

17. Epicrisis: basic data from complaints, anamnesis, objective data and clinical examination data, on the basis of which a diagnosis was made and indications for a particular treatment method were determined. The nature and effectiveness of the treatment. In the case of the operation, indicate its nature and volume, give a description of the identified changes, evaluate the postoperative period. Epicrisis ends with recommendations and prognosis of the course of the disease in relation to life, work capacity for the near and distant periods (based on literature data and applied to this patient).

Structure of the abstract

Abstract is a form of intermediate certification.

This form of control is an independent research work. Therefore, it is unacceptable to simply copy the text from the book or download the finished work from the Internet. The student should try to uncover the essence of the studied problem, bring the existing points of view, as well as substantiate his own view of it. Therefore, the requirements for the essay relate, first of all, to the design and its content, which should be logically stated, and differ in the problem-thematic nature. In addition to

clearly stated and structured material, the presence of conclusions for each paragraph and common throughout the work is required.

- It is necessary to formulate the topic correctly, select the necessary material for it.
- Use only the material that reflects the essence of the topic.
- In the introduction to the abstract it is necessary to justify the choice of topic.
- After the quotation it is necessary to make a link to the author, for example [item number in the list, page]
- The presentation should be consistent. Fuzzy language, speech and spelling errors are not allowed.
- In the preparation of the essay, it is necessary to use materials of modern publications not older than 5 years
- Registration of the abstract (including the title page, literature) should be literate.
- The list of references is made out with indication of the author, the name of the source, the place of publication, the year of publication, the name of the publisher, the pages used

12. Fund of estimated means for the interim assessment of students in the discipline (module)

Materials for assessing the level of mastering the educational material of the discipline "Hospital surgery, pediatric surgery" (evaluation materials), including a list of competencies with an indication of the stages of their formation, a description of indicators and criteria for evaluating competencies at various stages of their formation, a description of the assessment scales, standard control tasks or other materials necessary for assessing knowledge, skills, skills and (or) experience of activity, characterizing the stages of the formation of competencies in the process of mastering the educational program, methodological materials that determine the procedures for assessing knowledge, skills and (or) experience activities characterizing the stages of the formation of competencies have been developed in full and are available for students on the discipline page in the TUIS RUDN University.

The program is compiled in accordance with the requirements of the ES HE RUDN University.

Developers:

Ph.D., Associate Professor of Department of
Hospital Surgery with the Course of Pediatric Surgery

P.I. Manzhos

Ph.D., Associate Professor of Department of
Hospital Surgery with the Course of Pediatric Surgery

M.A. Chinikov

Ph.D., Associate Professor of Department of
Hospital Surgery with the Course of Pediatric Surgery

V.Yu. Baranovich

Ph.D., Associate Professor of Department of
Hospital Surgery with the Course of Pediatric Surgery

G.I. Veretnik

Head of Department of
Hospital Surgery with the Course of Pediatric Surgery

A.G. Faybushevich

Head of Program

I.V.Radysh