

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Petro Mohyla Black Sea National University

Medical Institute

Department of Surgical Disciplines



CURRICULUM OF THE TRAINING DISCIPLINE

SURGERY, INCLUDING PEDIATRIC SURGERY

Specialty 222 "Medicine"

Developer

Head of the Department

Guarantor of Educational Program

Director of the Institute

Head of TDD

Nedieliiev O.I.

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1. Description of training discipline

Name of the indicator	discipline profile	
Name of discipline	Surgery	
field of expertise	22 "Health".	
specialty	222 "Medicine"	
Specialization (if any)		
education programme	Surgery	
Level of higher education	Master	
discipline status	Normative	
training course	Year 6	
school year	2021/2022	
Semester numbers:	Daytime Form	extramural form
	11th, 12th.	-
Total number of ECTS credits / hour	10 credits (6/4) / 300 hours	
Course Structure: <ul style="list-style-type: none"> - lectures - practical exercises - hours of students' independent work 	Daytime Form	extramural form
	-	
	150 (90/60) hours 150 (90/60) hours	
Percentage of class workload	50%; independent work of students 50%	
Language of instruction	English	
Form of intermediate control (if any)	Attestation for the 11th semester	
Form of final control	Credit - 12th semester	

2. Goal, objectives and planned learning outcomes

purpose: assimilation of theoretical and practical knowledge of etiology, pathogenesis, clinic of typical and atypical symptomatology of surgical diseases of certain nosology, methods of diagnostics, conservative and operative treatment, rehabilitation of surgical pathology according to training program of general practitioner.

Learning objectives: acquisition of competencies, knowledge, skills and abilities by the student to carry out professional activities in the specialty

- To assimilate the anatomical and physiological features of the thoracic cavity and endocrinology;
- Interpret the etiology, pathogenesis and classification, clinical presentation of diseases of the thoracic cavity and endocrinology;
- determine methods of diagnostics, methods of conservative and surgical treatment of the mentioned diseases;
- identify indications and contraindications for lung and heart transplantation;
- Define the principles of postoperative treatment and rehabilitation of patients with endocrine organ and thoracic cavity pathology;
- to learn the risk factors for complications;
- interpret the results of laboratory and instrumental examination;
- Demonstrate mastery of the moral and ethical principles of a medical specialist and the principles of professional subordination in surgery;
- to carry out prognosis of life and prognosis of prognosis of life and prognosis of prognosis of these surgical diseases;
- Interpret the general principles of treatment, rehabilitation and prevention of surgical diseases of the endocrine organs and thoracic cavity;
- Demonstrate proficiency in medical record keeping in the surgical clinic;
- provide emergency medical care for urgent surgical diseases of the thoracic cavity.
- learn the anatomical and physiological features of the vascular system;
- Interpret the etiology, pathogenesis and classification, clinical presentation of diseases of the vascular system;
- Identify methods of diagnosis, methods of conservative and surgical treatment of diseases of the vascular system and injuries of great vessels;
- to highlight the principles of postoperative treatment and rehabilitation of patients with vascular pathology;
- identify risk factors for complications;
- interpret the results of laboratory and instrumental examination;
- Demonstrate mastery of the moral and ethical principles of a medical specialist and the principles of professional subordination in surgery;
- perform prognosis of life and disability in surgical diseases of the vascular system;
- interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases of the vascular system;
- Demonstrate proficiency in medical record keeping in the surgical clinic;
- Provide emergency medical care in urgent conditions of surgical diseases of the vascular system (trauma of the main vessels).

Expected learning outcomes. As a result of studying the discipline students should:

to know:

- etiological and pathogenetic factors of the most common surgical diseases according to OKC list 1;
- various clinical variants and complications of the most common surgical diseases of the thoracic cavity, cardiovascular and endocrine systems;
- Diagnostic and treatment algorithm of medical care for emergency conditions in the clinic of surgical diseases;
- indications and contraindications to surgery in elective and urgent thoracic, cardiovascular, endocrine surgery, management of the postoperative period;
- know the indications and contraindications for lung and heart transplantation;

To be able to:

- Identify the most common clinical symptoms and syndromes in the thoracic, cardiovascular, endocrine surgery clinic
- diagnose and provide medical care for emergencies in the clinic of thoracic, cardiovascular, endocrine surgery
- Demonstrate mastery of the moral and ethical principles of medical specialist and the principles of professional subordination in surgery
- Interpret the general principles of treatment, rehabilitation and prevention of the most common diseases of thoracic, cardiovascular, endocrine surgery
- Perform prognosis of life and disability in the most common diseases of thoracic, cardiovascular, endocrine surgery
- Identify the main etiological and pathogenetic factors of the most common diseases of thoracic, cardiovascular, endocrine surgery
- Classify and analyze the typical clinical picture of the most common diseases of thoracic, cardiovascular, endocrine surgery
- Make an examination plan and analyze the data of laboratory and instrumental examinations in the typical course of the most common diseases of thoracic, cardiovascular, endocrine surgery
- Determine indications and contraindications for surgery in elective and urgent thoracic, cardiovascular, endocrine surgery
- Determine the tactics of the post-operative period, prescribe the necessary treatment
- Demonstrate ability to perform necessary medical manipulations

mother of competence

The developed program corresponds to the educational and professional program (EPP) and focuses on the formation of competencies:

general (GK) - GK1 to GK3 of the SRB:

- ability to think abstractly, analyze and synthesize; ability to learn and master modern knowledge;
- ability to apply knowledge in practical situations;
- knowledge and understanding of the subject area and understanding of professional activities;

professional competencies (FC) - FC1-FC9, 11, 14, 15, 18 RPF

- Patient Interviewing Skills.
- ability to determine the required list of laboratory and instrumental examinations and to evaluate their results.
- ability to establish a preliminary and clinical diagnosis of the disease.
- the ability to determine the necessary work and rest regimes for the treatment of diseases.
- the ability to determine the nature of nutrition in the treatment of diseases.

- the ability to determine the principles and nature of disease management.
- ability to diagnose emergencies.
- the ability to determine emergency medical care tactics.
- Emergency medical care skills.
- Skills in performing medical manipulations.
- ability to carry out sanitary and preventive measures.
- ability to plan and carry out preventive and anti-epidemic measures for infectious diseases.

The developed program is consistent and focused on the formation and provision of **program learning outcomes (PLO): 11; 13 - 18; 22; 25; 28; 30; 32; 33; 35; 41 PLO.**

PLO 11	<p>Collect data on patient complaints, medical history, life history (including professional anamnesis), in conditions of health care facility, its unit or at home of the patient, using the results of the interview with the patient, according to the standard scheme of interviewing the patient. In all circumstances (in a health care facility, its unit, at the patient's home, etc.), using knowledge of the person, his organs and systems, according to certain algorithms:</p> <p>collect information about the patient's general condition (consciousness, constitution) and physical appearance (examination of skin, subcutaneous fat globules, palpation of lymph nodes, thyroid and mammary glands);</p> <p>assess the child's psychomotor and physical development;</p> <p>examination of the cardiovascular system (examination and palpation of the heart and superficial vessels, percussion of the heart and vessels, auscultation of the heart and vessels)</p> <p>examine the respiratory system (chest and upper respiratory tract examination, palpation of the chest, percussion and auscultation of the lungs)</p> <p>examine the condition of the abdominal organs (abdominal examination, palpation and percussion of the intestines, stomach, liver, spleen, palpation of the pyloric gland, kidneys, pelvic organs, palpation of the rectum);</p> <p>examine the musculoskeletal system (examination and palpation)</p> <p>to examine the condition of the nervous system;</p> <p>examine the condition of the genitourinary system;</p> <p>assess the state of fetal intrauterine development with fetal weight and fetal heartbeat auscultation.</p>
PLO 13	<p>In the setting of a health-care facility, its subdivision and among the attached population:</p> <p>Identify and report the leading clinical symptom or syndrome (List 1) by making an informed decision using initial history of the patient, physical examination of the patient, knowledge of the individual, his or her organs and systems, and adhering to relevant ethical and legal standards.</p> <p>Be able to establish the most probable or syndromic diagnosis</p> <p>Diagnose the most likely or syndromic case (List 2) by making an informed decision, comparing standards, using initial history and physical examination data, based on the leading clinical symptom or syndrome, using knowledge of the individual, his/her organs and systems, and adhering to appropriate ethical and legal guidelines.</p>
PLO 14	<p>In the setting of a health care facility, its subdivision:</p> <ul style="list-style-type: none"> - • Prescribe laboratory and/or instrumental examination of the patient (List 4) by making an informed decision based on the most probable or syndromic diagnosis, using standardized schemes, using knowledge of the person, his/her organs and systems, adhering to relevant ethical and legal rules.

	<ul style="list-style-type: none"> - • Carry out differential diagnosis of diseases (list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, given a laboratory and instrumental examination of the patient, knowledge of the person, his organs and systems, adhering to the relevant ethical and legal standards. - • Establish a provisional clinical diagnosis (List 2) by informed decision-making and logical analysis using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient, findings of referential diagnosis, knowledge of the person, his or her organs and systems, and appropriate ethical and legal standards.
PLO 15	Determine appropriate work and rest patterns for the treatment of illness (List 2) in the health care setting, in the patient's home and during medical evacuation phases, including in the field, based on a preliminary clinical diagnosis, using knowledge of the person, their organs and systems, following appropriate ethical and legal standards, by making informed decisions based on existing algorithms and standard schemes.
PLO 16	Determine appropriate therapeutic nutrition for disease management (List 2), in the healthcare setting, in the patient's home and during medical evacuation phases, including. In the field based on a preliminary clinical diagnosis, using knowledge of the person, his/her organs and systems, adhering to relevant ethical and legal standards, by making informed decisions based on existing algorithms and standard schemes.
PLO 17	<p>Determine the nature of treatment (conservative, surgical) of the disease (list 2), in the health care facility, at the patient's home and during medical evacuation, including the stages of medical evacuation. In the field based on a preliminary clinical diagnosis, using knowledge of the person, its organs and systems, adhering to the relevant ethical and legal standards, by making an informed decision on the existing algorithms and standard schemes.</p> <p>Determine principles of disease management (List 2), in the health care setting, at home and during medical evacuations, including in the field. In the field, based on a preliminary clinical diagnosis, using knowledge of the person, his/her organs and systems, adhering to relevant ethical and legal standards, by making informed decisions based on existing algorithms and standard schemes.</p>
PLO 18	Establish a diagnosis (List 3) by making an informed decision and assessment of the person's condition, in all circumstances (home, street, health facility, its unit), including in an emergency, in the field, under conditions of lack of information and limited time, using standard techniques of physical examination and possible anamnesis, knowledge of the person, its organs and systems, adhering to relevant ethical and legal standards.
PLO 22	Perform medical manipulations (list 5) in a facility, home or workplace setting based on a preliminary clinical diagnosis and/or patient measures, using knowledge of the person, their organs and systems, adhering to appropriate ethical and legal standards, by making informed decisions and using standard techniques.
PLO 25	<p>Shape, in the context of a health care facility, its units in the workplace, using a generalized human health assessment procedure, knowledge of the human being, its organs and systems, adhering to appropriate ethical and legal standards, by making informed decisions, among the assigned population :</p> <p>dispensary groups of patients;</p> <p>groups of healthy people subject to dispensary monitoring (Newborns, children, adolescents, pregnant women, representatives of professions, must undergo compulsory dispensary monitoring).</p>
PLO 28	Organize secondary and tertiary prevention activities among the assigned population using a generalized health assessment procedure (screening,

	preventive health examinations, seeking medical care), knowledge of the human being, its organs and systems, adhering to relevant ethical and legal standards, by making informed decisions, in the health facility setting, among others: form dispensary observation groups; organize therapeutic and recreational activities differentiated by the dispensary group.
PLO 30	Carry out in the setting of a health care facility, its subdivision: - • Detection and early diagnosis of infectious diseases (according to list2) * primary anti-epidemic measures in the focus of infectious disease.
PLO 32	In a health care facility or in the patient's home, based on the patient's health status, using standardized charts, using knowledge of the person, their organs and systems, adhering to appropriate ethical and legal standards, by making an informed decision: determine the tactics of examination and secondary prevention of patients, to be subject to dispensary observation; Determine screening and primary prevention tactics for healthy individuals subject to dispensary care; calculate and prescribe appropriate foods for infants and toddlers.
PLO 33	Determine the presence and degree of disability, type, degree and duration of disability with registration of appropriate documents, in the conditions of health care facilities on the basis of data on the disease and its course, the peculiarities of professional activity of the person.
PLO 35	In the service area according to standard descriptive, analytical epidemiological and medico-statistical research methods: conduct screening for major non-communicable diseases; assess in dynamics and in comparison with statistical averages the indicators of morbidity, including chronic non-infectious diseases, disability, mortality, integral health indicators; Identify risk factors for the occurrence and course of diseases; form at-risk populations.
PLO 41	In the setting of a health care facility or its subdivision, according to standard methods: select and use evidence-based standardized clinical protocols for the delivery of health care; Participate in the development of local medical protocols; conduct quality control of health care based on statistical data, expert assessment and sociological data using structure, process and outcome indicators; identify barriers to improving the quality and safety of medical care.

3. Programme of study discipline

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

The curriculum of the discipline consists of two blocks:

Block 1: General surgical issues

sections:

1. general part
2. Diseases of the thoracic organs
3. Diseases of the abdominal cavity organs
4. Vascular and endocrine diseases

Block 2 Pediatric Surgery

sections:

1. general part
2. Diseases of the thoracic organs
3. Diseases of the abdominal cavity organs

section 1

unit 1

Topic 1. History of surgery in Ukraine. Organization of surgical care in Ukraine. Ethics and deontology in surgery. Sepsis in surgical patients. Systemic inflammatory response syndrome. Pathogenesis, significance in various diseases and injuries, principles of diagnosis and treatment. The rules of antibiotic therapy in the prevention and treatment of surgical infection.

Theme 2 Modern surgical trauma in disasters, emergencies and combat situations, principles of evacuation measures. Stages of medical evacuation. Classification of traumas, pathomorphology of the wound process, clinical presentation, treatment of gunshot wounds. Primary and secondary surgical treatment of wounds.

Topic 3 Critical conditions in surgical patients: multiple organ failure syndrome, acute respiratory distress syndrome, acute cardiovascular failure syndrome, acute renal failure, acute liver failure. AIDS in surgical clinic: peculiarities of examination and surgical treatment of patients. Prevention of intraoperative trauma and infection in surgeons.

Topic 4. Features of the course of surgical diseases in pregnant women and the elderly. Diagnosis and differential diagnosis of acute diseases of the abdominal cavity, features of the examination, surgical tactics, prevention of preterm birth.

section 2

Topic 5. Damage to the thoracic cavity organs. Clinic and diagnosis of pneumothorax, hemothorax and chylothorax, treatment tactics. Diagnostic program for cardiac injury. The triad of cardiac injury symptoms, clinical and diagnostic and therapeutic and surgical program for cardiac injuries.

Topic 6. Surgical pathology of lungs and pleura. Principles of diagnosis and tactics and choice of treatment methods. Etiology and pathogenesis: pulmonary abscess, abscessed pneumonia. Purulent diseases of skin and soft tissues. Mastitis. Classification, clinic, diagnosis, differential diagnosis, methods of conservative and surgical treatment

Chapter 3

Topic 7. abdominal trauma. Symptomatology of injuries to the abdominal cavity and retroperitoneal space, methods of diagnosis, treatment tactics. Bleeding from the digestive tract. Causes of occurrence, diagnosis and differential diagnosis, treatment tactics.

Topic 8: Acute abdominal syndrome. Diagnosis, differential diagnosis and treatment tactics. Differential diagnosis of acute diseases of the abdominal cavity.

Topic 9. local and widespread purulent inflammatory Processes of the abdominal cavity and peritoneum. Etiology, pathogenesis, clinic, classification (Saveliev V.S. et al.) phase of the process, complications. The methods of investigation of the patients. Differential diagnosis and treatment.

Topic 10. Mechanical jaundice. Causes of occurrence, differential and diagnostic tactics. Functional, instrumental methods of research in diseases of the liver, extrahepatic bile ducts, pancreas. Modern principles of treatment. Liver failure in surgical diseases, methods of prevention and treatment.

Topic 11. Focal liver lesions. Simple cysts. Echinococcosis (echinococcal cysts) of the liver, liver abscess (inflammatory liver cysts), Traumatic liver cysts (hematoma, Billoma, seroma). Hemangioma of the liver. Clinical manifestations, methods of diagnosis, traditional surgical and minimally invasive treatment of patients.

Topic 12. Gallstone disease. Clinic, diagnostics and treatment tactics. Cholecystectomy: types of surgical access, surgical technique. Modern surgical technique. Postcholecystectomy syndrome. Pilyagastrosectomy and pilyavagotomni syndromes. Clinic,

diagnostics and treatment tactics. lung abscess, pancreas. Bronchiectatic disease. Etiology, pathogenesis. Classification. Symptomatology and clinical course.

Topic 13. Differential diagnosis and treatment of diseases of the rectum and PARARECTAL space. Acute and chronic hemorrhoids (etiology, pathogenesis, clinic, features of clinical manifestations of different stages of hemorrhoids, methods of examination, differential diagnosis, conservative and surgical treatment, types of operations). Acute and chronic paraproctitis (etiology, pathogenesis, clinic, methods of investigation, differential diagnosis, conservative and operative treatment). Anal fissure, anal itching.

section 4

Topic 14. arterial and venous thrombosis and embolism. Syndrome of limb ischemia. Causes of occurrence, clinic, differential diagnosis, conservative therapy and methods of surgical treatment. Prevention of venous thrombosis. Differential diagnosis and treatment of acute vascular thrombosis.

Topic 15. Differential diagnosis and treatment of diseases of the thyroid and parathyroid glands. Differential diagnosis and treatment of adrenal tumors. Diagnostic program. Clinical-diagnostic and therapeutic-surgical program. Rehabilitation of patients.

Block 2 Pediatric Surgery

section 1

Topic 16. Pediatric surgery as a specialty. Organization and current state of surgical care for children. Surgical department of a polyclinic. Structure of the department. The equipment of its premises. States. Sanitary and preventive work. Features of the organization of outpatient surgery. Pediatric surgical service of the region, the country. Modern methods of examination in pediatric surgery: laboratory, instrumental. Principles of rehabilitation of surgical, orthopedic, urologic and traumatologic patients at polyclinic level.

Topic 17. Child traumatism. Its structure. Features of childhood traumatism. Prevention of domestic, street, school and sports traumatism. Blood and blood substitutes transfusion. Infusion therapy. Indications and contraindications. Complications of blood transfusion. Combat hemotransfusion shock.

Topic 18. Emergency conditions in pediatric surgery. Clinical classification of respiratory failure. Principles of emergency care in respiratory failure. The main clinical manifestations of cardiovascular insufficiency. Differentiation of cardiovascular insufficiency depending on its type and cause of occurrence. General principles of treatment of cardiovascular insufficiency. The main clinical manifestations of renal failure in children. Algorithm of actions of the doctor in acute and chronic renal failure in children. Basic clinical manifestations of cerebral edema. Algorithm of physician's actions in case of cerebral edema

section 2

Topic 19. Bronchiectatic disease. Classification of bronchiectasis in children. The main clinical symptoms of bronchiectasis in children. Diagnostic methods of bronchiectasis in children. Conservative and surgical treatment of bronchiectasis in children. Preoperative preparation and postoperative management of the patients. Rehabilitation of patients. Destructive pneumonias. Etiology and microbiology of destructive pneumonias in children. Classification of destructive pneumonias in children. Main clinical symptoms of destructive pneumonia in children. Diagnostic methods of destructive pneumonia in children. Conservative and surgical treatment of complications of destructive pneumonia in children. Preoperative preparation and postoperative

management of patients. Rehabilitation of patients.

Topic 20. Pneumothorax. Piopneumothorax. Diagnostics. Principles of treatment. Etiology and microbiology of pneumothorax and pyopneumothorax in children. Classification of pneumothorax and pyopneumothorax. Main clinical symptoms of pneumothorax and pyopneumothorax. Diagnostic methods of pneumothorax and pyopneumothorax. Treatment of pneumothorax and pyopneumothorax in children. Preoperative preparation and postoperative management of patients. Rehabilitation of patients. Trauma of the thorax. Hemothorax. Peculiarities of trauma of the thorax in children. Closed injury of the thorax in children. Closed injury of the thoracic cavity in children. Open trauma of the thorax in children Treatment.

Chapter 3

Topic 21. Surgical diseases of the abdominal cavity and rectum. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results, dispensary. Surgical diseases of urogenital system. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications.

Topic 22. Intussusception. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results, medical follow-up. Obturation intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results.

Topic 23. Strangulation intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results, medical follow-up. Dynamic intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results.

Topic 24. Peritonitis in newborns. Pathogenesis, clinic, differential diagnosis. Ulcerative-necrotic enterocolitis. Forms: Molten NEC, spontaneous intestinal perforation (IBS) Pathogenesis, clinic, differential diagnosis. Peptic ulcer disease of the stomach and 12 duodenum. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences. Operations on the stomach and duodenum.

Topic 25. Anorectal malformations in children. Anatomical classification based on treatment tactics and prognosis. Anorectal defects in boys (perineal fistula, rectourethral fistula, rectomihubertal fistula, atresia without fistula, rectal atresia, combined malformations). Anorectal defects in girls (perineal fistula, vestibular fistula, persistent cloaca, atresia without fistula, rectal atresia, combined malformations). Clinical manifestations and primary care. Posterior sagittal anoproctoplasty. Colostomy. Complications, their prevention and treatment.

Structure of the training discipline

Module and topic names	number of hours	
	daytime form	
	total	including but not limited to

		л	п	lab.	CPC	and that's it.
1	2	3	4	5	6	7
Block #1. General issues of surgery						
1. general part						
Topic 1. History of surgery in Ukraine. Organization of surgical care in Ukraine. Ethics and deontology in surgery. Sepsis in surgical patients. Systemic inflammatory response syndrome. Pathogenesis, significance in various diseases and injuries, principles of diagnosis and treatment		-	6			Individual work - scientific literature review or experimental study
Theme 2 Modern surgical trauma in disasters, emergencies and combat situations, principles of evacuation measures. Stages of medical evacuation. Classification of traumas, pathomorphology of the wound process, clinical presentation, treatment of gunshot wounds. Primary and secondary surgical treatment of wounds.		-	6			
Topic 3 Critical conditions in surgical patients: multiple organ failure syndrome, acute respiratory distress syndrome, acute cardiovascular failure syndrome, acute renal failure, acute liver failure. AIDS in the surgical clinic		-	6			
Topic 4. Features of the course of surgical diseases in pregnant women and the elderly. Diagnosis and differential diagnosis of acute diseases of the abdominal cavity			6			
2. Diseases of the thoracic organs						
Topic 5. Damage to the thoracic cavity organs. Clinic and diagnosis of pneumothorax, hemothorax and chylothorax, treatment tactics. Diagnostic program for cardiac injury. The triad of symptoms of cardiac injury,		-	6			Individual work - scientific literature review or experimental study
Topic 6. Surgical pathology of lungs and pleura. Principles of diagnosis and tactics and choice of treatment methods. Etiology and pathogenesis: pulmonary abscess, abscessed pneumonia. Purulent diseases of skin and soft tissues. Mastitis. Classification, clinic, diagnosis, differential diagnosis, methods of conservative and surgical treatment		-	6			
3. Diseases of the abdominal cavity organs						
Theme 7. abdominal trauma.		-	6			I n d

symptomatology of abdominal injuries. Abdominal and retroperitoneal organs injuries, diagnostic methods and treatment tactics. Bleeding from the digestive tract. Causes of occurrence, diagnosis and differential diagnosis, treatment tactics.					
Topic 8: Acute abdominal syndrome. Diagnosis, differential diagnosis and treatment tactics. Differential diagnosis of acute diseases of the abdominal cavity.		-	6		
Topic 9. Local and widespread purulent inflammatory processes of the abdominal cavity and peritoneum. Etiology, pathogenesis, clinic, classification		-	6		
Topic 10. Mechanical jaundice. Causes of occurrence, differential and diagnostic tactics. Functional, instrumental methods of research in diseases of the liver, extrahepatic bile ducts, pancreas		-	6		
Topic 11. Focal liver lesions Simple cysts, Echinococcosis (echinococcal cysts) of the liver, Liver abscess (inflammatory liver cysts), Traumatic liver cysts (hematoma, Billoma, seroma) Liver hemangioma		-	6		
Topic 12. Biliary stone disease. Clinic, diagnosis and treatment tactics. Choecystectomy: types of surgical approaches, surgical technique. Modern surgical technique. Postcholecystectomy syndrome.		-	6		
Topic 13. Differential diagnosis and treatment of diseases of the rectum and PARARECTAL space. Acute and chronic hemorrhoids (etiology, pathogenesis, clinic, features of clinical manifestations of different stages of hemorrhoids, methods of examination, differential diagnosis, conservative and surgical treatment, types of operations).		-	6		
Topic 14. arterial and venous thrombosis and embolism. Syndrome of limb ischemia. Causes of occurrence, clinic, differential diagnosis, conservative therapy and methods of surgical treatment		-	6		
Topic 15. Differential diagnosis and treatment of diseases of the thyroid and 13glands. Differential diagnosis		-	4		

Individual work - scientific literature review or experimental study

and treatment of adrenal tumors. Diagnostic program. Clinical- diagnostic and therapeutic-surgical program. Rehabilitation of patients.						
Final control work			2			
together			90		90	
Block 2 Pediatric Surgery						
1. general part						
Topic 16. Pediatric surgery as a specialty. Organization and current state of surgical care for children. Surgical department of a polyclinic. Structure of the department. The equipment of its premises. States. Sanitary and preventive work. Features of the organization 6ambulatory-polyclinic surgery. Children's surgical service of the region, the country.			6			
Topic 17. Child traumatism. Its structure. Features of childhood traumatism. Prevention of domestic, street, school and sports traumatism. Blood transfusion and blood substitutes. Infusion therapy. Indications and contraindications.			6			
Topic 18. Emergency conditions in pediatric surgery. Clinical classification of respiratory failure. Principles of emergency care in respiratory failure. The main clinical manifestations of cardiovascular insufficiency. Differentiation of cardiovascular insufficiency depending on its type and cause.			6			
2. Diseases of the thoracic organs						
Topic 19. Bronchiectatic disease. Classification of bronchiectasis in children. The main clinical symptoms of bronchiectasis in children. Diagnostic methods of bronchiectasis in children. Conservative and surgical treatment of bronchiectasis in children. Preoperative preparation and postoperative management of patients.			6			
Topic 20. Pneumothorax. Piopneumothorax. Diagnostics. Principles of treatment. Etiology and microbiology of pneumothorax and pyopneumothorax in children. Classification of pneumothorax and pyopneumothorax. Main clinical symptoms of pneumothorax and pyopneumothorax. Diagnostic methods of pneumothorax and pyopneumothorax. Treatment of pneumothorax and pyopneumothorax in children.			6			

3. Diseases of the abdominal cavity organs						
Topic 21. Surgical diseases of the abdominal cavity and rectum. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results, dispensary. Surgical diseases of urogenital system			6			
Topic 22. Intussusception. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results, medical follow-up. Obturation intestinal obstruction			6			
Topic 23. Strangulation intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences, long-term results, medical follow-up. Dynamic intestinal obstruction.			6			
Topic 24. Peritonitis in newborns. Pathogenesis, clinic, differential diagnosis. Ulcerative-necrotic enterocolitis. Forms: Molten NEC, spontaneous intestinal perforation (IBS)			4			
Topic 25. Anorectal malformations in children. Anatomical classification based on treatment tactics and prognosis. Anorectal defects in boys and girls			4			
Final control work 2			2			
credit			2			
in total:			60		60	
Total - 300 hours. UST credits - 10						

4. Content of the training discipline

4.1 Practical lesson plan

No of ite	Topic of the practical session	teaching hours

ms.		
Block 1: General surgical issues		
1.	Topic 1. History of surgery in Ukraine. Organization of surgical care in Ukraine	6
2.	Theme 2 Modern surgical trauma in disasters, emergencies and combat situations, principles of evacuation measures	6
3.	Topic 3 Critical conditions in surgical patients: multiple organ failure syndrome, acute respiratory distress syndrome, acute cardiovascular failure syndrome	6
4.	Topic 4: Peculiarities of the course of surgical diseases in pregnant and elderly people	6
5.	Topic 5. Damage to the thoracic cavity organs. Clinic and diagnosis of pneumothorax, hemothorax and chylothorax, treatment tactics	6
6.	Topic 6. Surgical pathology of pulmonary tapeworm. Clinic and diagnosis	6
7.	Topic 7: Abdominal injuries. Symptomatology of abdominal injuries	6
8.	Topic 8: Acute abdominal syndrome. Diagnosis, differential diagnosis and treatment tactics.	6
9.	Topic 9. Local pyoinflammatory processes of the organs of the abdominal cavity and peritoneum.	6
10.	Topic 10. Mechanical jaundice. Causes of occurrence, differential diagnostic tactics	6
11.	Topic 11. Focal liver lesions Simple cysts, Echinococcosis	6
12.	Topic 12. Gallstone disease. Clinic, diagnostics Diagnostics and treatment tactics	6
13.	Topic 13. Differential diagnosis and treatment of diseases of the rectum and PARARECTAL space.	6
14.	Topic 14. arterial and venous thrombosis and embolism. Ischemic limb syndrome.	6
15.	Topic 15. Differential diagnosis and treatment of thyroid and parathyroid diseases	4
16.	Final control work No. 1	2
	together	90
Block 2 Pediatric Surgery		
17.	Topic 16. Pediatric surgery as a specialty. Organization and current state of surgical care for children. Surgical department of the polyclinic. structure of the department.	6
18.	Topic 17. Child traumatism. Its structure. Features of childhood traumatism	6
19.	Topic 18. Emergency conditions in pediatric surgery. Clinical classification of respiratory failure.	6
20.	Topic 19. Bronchiectatic disease. Classification of bronchiectasis in children	6
21.	Topic 20. Pneumothorax. Piopneumothorax. Diagnostics. Principles of treatment	6
22.	Topic 21. Surgical diseases of the abdominal cavity and rectum.	6
23.	Topic 22. Intussusception. Etiology, pathogenesis, clinical symptomatology	6

24.	Topic 23. Strangulated intestinal obstruction. Etiology, pathogenesis, clinical symptomatology	6
25.	Topic 24. Peritonitis of newborns. Pathogenesis, clinic, differential diagnosis. Necrotic ulcerative enterocolitis.	4
26.	Topic 25. Anorectal malformations in children. Anatomical classification based on treatment tactics and prognosis.	4
27	Final control work No. 2	2
28	credit	2
	together	60
total		150

4.2 Plan of students' independent work

№	topic	quantity hours	view controls
1.	Preparation for the practical exercises. Theoretical training and practical skills training.	38	
2.	Independent study of the topics that are not included in the plan of classroom lessons: <ol style="list-style-type: none"> 1. Differential diagnosis of gastrointestinal bleeding; 2. Functional, instrumental methods investigations in diseases of the stomach, small and large intestine; 3. Modern methods of diagnosis and treatment of diseases of the cardiovascular and respiratory systems; 4. Transplantology. General provisions. Transplantation of kidney, heart, liver, pancreas; 5. Surgical complications in patients with infectious pathology. Differential diagnosis between acute surgical and infectious diseases 6. Differential diagnosis and treatment of mediastinal diseases; 7. Syndrome of chest pain, respiratory and heart failure in the diagnosis and differential diagnosis of diseases of the chest cavity; 8. Anticoagulant and thrombolytic therapy in acute thrombosis. Prophylactic anticoagulant therapy; 9. Differential diagnosis, prevention and treatment of acute ulcer of the digestive tract; 	79	Current control in the classroom
	10. Evaluation of limb pain syndrome in the diagnosis and differential diagnosis of vascular diseases, lesions of the nervous system and pathology of the musculoskeletal system.		

3.	Individual independent work of students: 1. A review of the scientific literature of choice; 2. Work in the student scientific circle; 3. Participation in competitions and Olympiads on surgery; 4. Participation in the writing of a research paper or report; 5. Patient management.	33	
in total:		150	

Typical test problems to be solved in practical classes:

Test Assignment No. 0

1. A patient has come to the hospital complaining of pain in the perineum and descending canal, fever. The pain increases with movement and defecation. Objectively: examination of the perineum revealed an oval-shaped red bulge 3 cm from the anus, sharply painful, with softening in the centre. Which of the therapeutic measures is the most effective in this case?

- A Dissection and drainage of the pus
- B Massive antibiotic therapy
- C Detoxification therapy
- D UHF
- E Demicidal and other medicinal solution compresses

2. A 72-year-old patient has applied to a proctologist in a polyclinic. He complained of unpleasant feelings in the rectum area, presence of mucus and blood in the stool. For the last few weeks he noticed that feces became ribbon-shaped. What disease can be suspected?

- A Colorectal cancer
- B Cracks in the rear
- C Paraproctitis
- D Hemorrhoids
- E Rectal fistula

3. Which rectal disease is a precancerous condition and must be monitored and treated?

- A Polyp of the rectum
- B Rectal fissures
- C Hemorrhoids
- D Fistulas
- E anal strictures

4. While examining patient D., 47 y.o., you have diagnosed a perforated peptic ulcer. Specify the characteristic symptomatology of pain in this pathology:

- A Dagger Pain
- B Shingling pain
- C Clutching pain
- D Dull pain
- E Intense pain radiating to shoulder and scapula

5. A patient has been admitted to the emergency room complaining of blunt pain in the right iliac region, body temperature increase up to 37.2oC, nausea. What is the first priority action of the paramedic?

- A Call the surgeon on duty immediately

- B Administer pain medication
- C Administer styptic agents
- D Cold on the stomach
- E Gastric lavage

6. A patient was delivered from the scene of an accident with complaints of pelvic pain, which intensifies with leg movements. The patient is lethargic, answers questions unilaterally. On palpation there is painfulness in the projection of the pubic communication. The symptom of "stuck heel" is observed. Determine the diagnosis:

- A Fracture of the pelvic bones
- B Fracture of the lumbar spine
- C Soft tissue slaughter
- D Hip fracture
- E Dislocation of the hip

7. Patient K., 35 y.o., complains of frequent cold feet, pain in the calf muscles that increases when walking. Believes he has been sick for the last 3 years. Smoker. On examination - skin on the feet is cold, pale. Pulsation of the arteries of the feet is weak in both legs. What do these symptoms indicate?

- A Obliterative endarteritis
- B Varicose veins
- C obliterating atherosclerosis
- D Mouth
- E Raynaud's disease

8. A paramedic at the FAP was approached by a patient, who said that 7 days ago he stepped on a nail. He did not consult a doctor and treated the wound with iodine. Now he is disturbed by pulling pains in the wound and twitching of muscles around the wound. What can be suspected in the first place?

- A Tetanus
- B Gas gangrene
- C Mole
- D obliterative endarteritis
- E Rabies

9. A man came to the FAP with complaints of axillary pain. He had been in pain for 3 days. The skin remained unchanged, palpation revealed a dense, painful, not fused to the skin infiltrate. On questioning, the patient was found to have wounded the second finger of the right hand a week ago, the wound has healed. Preliminary diagnosis:

- A Lymphadenitis
- B Carbuncle, operative
- C Abscess
- D Mouth
- E Phlegmon

10. You have been called to a patient, 70 years old, who complains of stool retention, recurrent vomiting, cramping abdominal pain. The abdomen is swollen, painful on palpation in all parts, increased peristalsis can be heard at a distance. What should be administered first before transporting the patient to hospital?

- A Cold on the stomach
- B Give an enema
- C Flush the stomach
- D Give pain medicines

E heating pad on the right subcostal area

"0" version of the credit card

Petro Mohyla Black Sea National University

Educational qualification level - master

Knowledge Sector: 22 Health care

specialty 222 Medicine

Option No. 0

1. Emergency conditions in pediatric surgery. Clinical classification of respiratory failure.
(The maximum number of points is 15).
2. History of surgery in Ukraine. Organization of surgical care in Ukraine.
(The maximum number of points is 15).
3. Missing third question
(The maximum number of points is 15).
4. peculiarities of the course of surgical diseases in pregnant women.
(The maximum number of points is 15).
5. A 34-year-old patient. For the last 5 years he has been experiencing pain in the left foot and lower leg while walking, can walk only 50-60 m without stopping. Local status: skin of the left foot and lower leg up to the middle third is pale, colder than symmetrical areas of the right lower extremity. Active movements in the joints of the affected limb are complete, sensitivity in the foot is reduced. Pulsation of the femoral and popliteal arteries is distinct, no pulsation is detected in the foot arteries.
 1. What kind of disease can you think of?
 2. Suggest an examination scheme to clarify the diagnosis.
 3. What treatment is indicated for the patient?

(The maximum number of points is 20).

*Approved at the meeting of the Department of "Surgical disciplines", Minutes № ____ of
"__" _____ 2020*

Minutes No. ____ of "____" _____ 20 ____

Head of the Department: Professor Tarasenko O.N.

examiner: _____

4.4 Ensuring the educational process

Lectures are provided with technical support:

- computer
- projection screen
- multimedia projector
- presentation materials (lectures)

Practical exercises:

- Dummy simulator "Maxim-3"
- Simulators in \ venous injections, bladder catheterization, blood pressure measurement.

5. Final control

List of questions of final control (credit)

1. Diagnostic program for cardiac injury. The triad of cardiac injury symptoms.
2. Beck's triad, which is characteristic of cardiac tamponade.
3. Why the clinical diagnostic and therapeutic and surgical program for cardiac injury should be integrated into a single process.
4. Surgical tactics for cardiac injury.
5. How quickly and where should you perform X-ray examination, ultrasound of the chest cavity, ECG, clinical and biological blood and urine tests, determination of blood group, rhesus factor, hematocrit, CVD, CIC in a victim with a heart wound?
6. Mechanism of valve pneumothorax.
7. Clinical picture of valve pneumothorax.
8. Therapeutic tactics for valvular pneumothorax.
9. The most common sources of bleeding into the chest cavity.
10. Diagnostic program for hemothorax.
11. Clinical presentation of small, medium and large hemothorax.
12. Basic principles of treatment program in traumatic hemothorax.
13. Clinical presentation of lung wounds.
14. Conservative and surgical treatment of lung wounds.
15. Clinical and diagnostic program of acute appendicitis.
16. Differential diagnosis of acute appendicitis with kidney disease, uterine appendages, enterocolitis, food poisoning, pleuropneumonia.
17. Surgical tactics in acute appendicitis.
18. Clinical and diagnostic program of impinged hernias.
19. Differential diagnosis of pinched inguinal hernia with orchioepididymitis, acute dropsy of the spermatic cord and testicular sheath.
20. Differential diagnosis of impinged femoral hernia with inflammation of the femoral lymph nodes, abscess, sharply revealed nodular vein dilation in the area of the femoral triangle.
21. Surgical tactics for impinged hernia.
22. Phases of clinical course of perforative gastric and duodenal ulcer.
23. Clinical and diagnostic program of perforating gastric and duodenal ulcer.
24. Differential diagnosis of perforative gastric and duodenal ulcer with acute cholecystitis, pancreatitis, acute intestinal obstruction.
25. Surgical tactics in perforative gastric and duodenal ulcer.
26. Clinical and diagnostic program in mechanical acute intestinal obstruction.
27. Classification of acute intestinal obstruction.
28. Differential diagnosis of acute intestinal obstruction with mesenteric embolism thrombosis, food toxicosis.
29. Surgical tactics in acute intestinal obstruction.
30. Clinical and diagnostic program in acute cholecystitis.
31. Complications of acute cholecystitis.
32. Surgical tactics in acute cholecystitis.
33. Clinical and diagnostic program in acute pancreatitis.
34. Surgical tactics in acute pancreatitis.
35. Clinical and diagnostic program in acute mesenteric circulation disorder.
36. Surgical tactics in acute mesenteric circulation disorder.
37. Clinical and diagnostic program in acute colonic obstruction.
38. Surgical tactics in acute obstruction of the colon.

39. What is the extent of surgical intervention for a peptic anastomosis ulcer
40. Define Mallory-Weiss syndrome.
41. Complaints in patients with Mallory-Weiss syndrome?
42. What are the objective manifestations of Mallory-Weiss syndrome?
43. What research methods are used to clarify the diagnosis of Mallory-Weiss syndrome?
44. With which diseases should we make a differential the diagnosis of Mallory-Weiss syndrome?
45. Therapeutic tactics for Mallory-Weiss syndrome.
46. What are the indications for surgical treatment of Mallory-Weiss syndrome?
47. Etiology and pathogenesis of gastrointestinal bleeding.
48. Methods of examination of patients with gastrointestinal bleeding.
49. Classification of ulcerative bleeding.
50. Clinic of gastrointestinal bleeding.
51. Differential diagnosis of ulcerative bleeding.
52. Peculiarities of the course of gastroduodenal ulcer bleeding depending on the degree of its activity.
53. Features of the clinical course of active bleeding.
54. Peculiarities of the clinical course of ulcerative bleeding that has stopped.
55. Techniques for sewing up an ulcer that is bleeding.
56. Selection of the method of stopping bleeding depending on the degree of its activity.
57. Indications for conservative treatment of ulcerative bleeding.
58. Gastrointestinal bleeding therapy.
59. Methods of endoscopic hemostasis and indications for their use.
60. Methods of operative interventions for ulcerative bleeding.
61. The choice of surgical intervention method depending on the patient's condition, the intensity of bleeding, the degree of blood loss, ulcer localization.
62. Peculiarities of surgical techniques in case of ulcerative bleeding.
63. Complications in the early postoperative period when performing surgical interventions for ulcerative bleeding.
64. Treatment of complications in the early postoperative period when performing surgical interventions for ulcerous bleeding.
65. Peculiarities of management of patients with peptic ulcer bleeding in the early and late postoperative period.
66. General principles of diagnosis in acute gastrointestinal bleeding.
67. General principles of infusion and transfusion therapy of acute gastrointestinal bleeding.
68. Surgical tactics in acute gastrointestinal bleeding.
69. Clinical and diagnostic program for ectopic pregnancy.
70. Surgical tactics for ectopic pregnancy.
71. Clinical and diagnostic program of liver damage, extrahepatic biliary tract, gallbladder.
72. Surgical tactics for liver injury.
73. Clinical and diagnostic program of spleen injury.
74. Surgical tactics for spleen injury.
75. Clinical and diagnostic program of pancreatic injury.
76. Surgical tactics for pancreatic injury.

77. Clinical and diagnostic program of damage to the stomach, duodenum.
78. Surgical tactics for damage to the stomach, duodenum.
79. Clinical and diagnostic program of small and large intestine injury.
80. Surgical tactics for small and large intestine injuries.
81. Clinical and diagnostic program of hemorrhagic shock.
82. Clinical picture of hemorrhagic shock depending on the stage.
83. Treatment of hemorrhagic shock.
84. Clinical picture of toxic-infectious shock.
85. Treatment of toxic-infectious shock.
86. Clinical picture of acute respiratory failure.
87. Treatment of respiratory failure.
88. Clinical manifestations and diagnostic methods of pulmonary artery branch thromboembolism.
89. Treatment of various forms of pulmonary embolism.
90. Clinical and diagnostic program for aortic arch syndrome.
91. Treatment of aortic arch syndrome.
92. Clinical and diagnostic program for Raynaud's syndrome.
93. Treatment of Raynaud's syndrome.
94. Clinical and diagnostic program of multifocal atherosclerosis.
95. Treatment of atherosclerosis of cerebral arteries, coronary, renal, mesenteric arteries and arteries of lower extremities.
96. Clinic and diagnosis of abdominal aortic aneurysms.
97. Treatment of abdominal aortic aneurysms.
98. Clinico-diagnostic program of phlegmonic, pachvinal and subpectral phlegmon.
99. Treatment of purulent inflammatory diseases of the fibrous spaces.
100. Examination of patients with diseases of the hand.
101. Classification, prevention of panarisis.
102. Clinical picture of different types of panaricles.
103. Treatment of various types of panaritis.
104. Clinic, diagnosis of phlegmon of the hand (interfinger, spaces thenar, hipothenar, mizhfascial, median longitudinal space, Pirogov U-space).
105. Treatment of phlegmon of the hand.
106. Symptomatology, clinical, diagnostic program of lung abscesses, gangrene and cysts.
107. Treatment of abscesses, gangrene and cysts of the lungs.
108. Variants of clinical course, diagnostic program of pleural empyema.
109. Choice of treatment for pleural empyema.
110. Symptomatology, clinical course, and diagnostic program of pyopneumothorax.
111. Choice of treatment for pyopneumothorax.
112. Symptomatology, clinical course and diagnostic program of spontaneous pneumothorax.
113. Choice of treatment for spontaneous pneumothorax.
114. Clinical manifestations of sepsis.
115. Clinical picture of septic shock.
116. The main directions of intensive therapy of sepsis.
117. AIDS in a surgical clinic.
118. Definition of plastic surgery. Historical data.

119. Certain areas of plastic surgery (rhinoplasty, abdominoplasty, mammoplasty, sex correction).
120. Clinic, diagnostic program, differential diagnosis of surgical complications of typhoid fever.
121. Treatment of surgical complications of typhoid fever.
122. Clinic, diagnosis of surgical complications of abdominal tuberculosis.
123. Treatment of surgical complications of abdominal tuberculosis.
124. Clinic, diagnosis of abdominal forms of pseudotuberculosis.
125. Surgical tactics in abdominal forms of pseudotuberculosis.
126. Clinic, diagnosis, differential diagnosis of abdominal forms of intestinal yersiniosis.
127. Surgical tactics and treatment of intestinal yersiniosis.
128. Clinic, diagnostic program, differential diagnosis of complicated forms of opisthorchiasis.
129. Surgical tactics and choice of treatment method for complicated forms of opistorchosis.
130. Clinic, diagnostic program, differential diagnosis of complicated forms of amebiasis.
131. Surgical tactics and choice of method of treatment of complicated forms of amebiasis.
132. Clinic, diagnostic program, differential diagnosis of complicated forms of ascariasis.
133. Surgical tactics in complicated forms of ascariasis.
134. Modern diagnostic methods in abdominal surgery.
135. Endoscopic surgery, X-ray surgery, ultrasound-guided surgery. Telesurgery. Robotic surgery.
136. Classification of post-resection and pislavagotomy syndromes.
137. Dumping syndrome. Symptomatology and clinical course.
138. Choice of treatment for dumping syndrome.
139. Post-resection asthenia, drive loop syndrome. Symptomatology and clinical course.
140. Peptic ulcer of gastroenteroanastomosis. Causes, diagnosis, clinical course.
141. Tactics and choice of treatment method for peptic viscus of gastroenteric anastomosis.
142. Gastrointestinal-oesophageal fistula. Clinic, diagnosis and choice of treatment method
143. Ulcer recurrence after vagotomy. Symptomatology and clinical course. Choice of treatment method.
144. Post-gastric diarrhea. Clinic, diagnosis, treatment.
145. The significance of the symptom of pain in different parts of the abdominal cavity in the diagnosis and differential diagnosis of diseases of the abdominal organs.
146. The symptom of vomiting - the value in the diagnosis ta differential diagnosis of diseases of the abdominal organs.
147. Symptom of defecation disorder - importance in the diagnosis and differential diagnosis of diseases of the abdominal organs.
148. Classification, diagnostic program of esophageal diverticula.
149. Symptomatology, variants of clinical course and complications of esophageal diverticula.
150. Tactics and choice of treatment method for esophageal diverticula.
151. Classification, diagnostic program of esophageal-cardiac junction achalasia.

152. Clinic, variants of the clinical course and complications of achalasia of the stravoxyoid-cardiac junction.
153. Tactics and choice of treatment for achalasia of the esophageal-cardiac junction.
154. Classification, diagnostic program of esophageal strictures.
155. Symptomatology, variants of clinical course and complications of esophageal strictures.
156. Tactics and choice of treatment of esophageal strictures.
157. Classification, diagnostic program of acute mediastinitis.
158. Symptomatology, variants of clinical course and complications of acute mediastinitis.
159. Tactics and choice of treatment of acute mediastinitis.
160. Classification of portal hypertension.
161. Intrahepatic portal hypertension. Symptomatology, clinical course, diagnostic program, differential diagnosis.
162. Tactics and choice of treatment of intrahepatic portal hypertension.
163. Suprahepatic portal hypertension. Clinic, diagnosis, choice of treatment method.
164. Suprahepatic portal hypertension (Chiari disease). Clinic, diagnosis, and treatment.
165. Bronchiectatic disease. Classification of bronchiectasis in children.
166. The main clinical symptoms of bronchiectasis in children. Diagnostic methods for bronchiectasis in children.
167. Conservative and surgical treatment of bronchiectasis in children. Preoperative preparation and postoperative management of patients. Rehabilitation of patients.
168. Destructive pneumonias. . Etiology and microbiology of destructive pneumonias in children. Classification of destructive pneumonia in children. Main clinical symptoms of destructive pneumonia in children.
169. Methods of diagnostics of destructive pneumonia in children. Conservative and surgical treatment of complications of destructive pneumonia in children. Preoperative preparation and postoperative management of patients. Rehabilitation of patients.
170. Pneumothorax. Piopneumothorax. Diagnosis. Principles of treatment. Etiology and microbiology of pneumothorax and pyopneumothorax in children.
171. Classification of pneumothorax and pyopneumothorax. Main clinical symptoms of pneumothorax and pyopneumothorax. Methods of diagnostics of pneumothorax and pyopneumothorax.
172. Treatment of pneumothorax and pyopneumothorax in children. Preoperative preparation and postoperative management of patients. Rehabilitation of patients.
173. Chest trauma. Hemothorax. Peculiarities of thoracic trauma in children. Closed thoracic injury in children.
174. Closed injuries of the thoracic cavity in children. Open trauma of the thorax in children Treatment.
175. Surgical diseases of the abdominal cavity and rectum. Etiology, pathogenesis, clinical symptomatology, objective examination,
176. Surgical diseases of urogenital system. Etiology, pathogenesis, clinical symptomatology, objective examination,
177. Intussusception. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination
178. Obturation intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, diagnosis.
179. Strangulation intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination.

180. Dynamic intestinal obstruction. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment
181. Peritonitis of newborns. Pathogenesis, clinic, differential diagnosis.
182. Necrotic ulcerative enterocolitis. Forms: Ulcerative NEC, spontaneous intestinal perforation (IBS) Pathogenesis, clinic, differential diagnosis.
183. Peptic ulcer disease of the stomach and 12 duodenum. Etiology, pathogenesis, clinical symptomatology, objective examination, additional methods of examination, treatment, complications, consequences.
184. Gastric and 12 duodenal surgeries.
185. Anorectal malformations in children. Anatomical classification based on treatment tactics and prognosis.
186. Anorectal defects in boys (perineal fistula, rectourethral fistula, rectomyjugular fistula, atresia without fistula, rectal atresia, combined malformations).
187. Anorectal defects in girls (perineal fistula, vestibular fistula, persistent cloaca, atresia without fistula, rectal atresia, combined malformations).

6. Assessment criteria and means of diagnostics of learning outcomes

methods of control

- Questioning (testing of theoretical knowledge and practical skills).
- Test control.
- Writing reviews of scientific literature (abstracts), performance of individual assignments, their defense.

Current control. Check in practical classes of theoretical knowledge and assimilation of practical skills, as well as the results of independent work of students. Supervised by teachers in accordance with the specific objectives of the curriculum. Assessment of the level of students' training is carried out by: questioning students, solving and analysis of situational tasks and test tasks, interpretation of the results of experimental and clinical-laboratory studies, control of assimilation of practical skills.

Intermediate control. Verification of students' ability to use for clinical-diagnostic analysis received theoretical knowledge and practical skills on all studied topics, as well as the results of students' independent work. It is carried out at the last class of the section by passing the practical skills, solving situational tasks and testing.

The final control work is carried out at the end of studying all the topics of the block at the last control session of the semester.

For intermediate and final control (certification) are allowed students who attended all prescribed curriculum lectures, in-class training sessions, completed a full amount of independent work and during the learning process gained a score not less than the minimum - 70 points in the **first block and 40 points in the second block.**

Distribution of points awarded to students

In the first block, a positive grade for each practical lesson can be from 4.7 to 8 points. A grade below 4.7 points means "unsatisfactory", the lesson is not assigned and is subject to workout in the prescribed manner. On the final control work (PCR) with block 1, a student can receive a

maximum of 80 points. PKR is considered to be credited if a student scores at least 50 points.

In the second block, a positive grade on the practical training may be from 4 to 8 points. A grade below 4 points means "unsatisfactory", the lesson is not assigned and is subject to workout in the established order. A student may receive a maximum of 40 points on the PKR for Block 2. The PKR is considered to be credited if the student scores at least 30 points.

In order to assess the learning outcomes of the whole discipline, a final control in the form of credit is carried out. Only students who are assigned both TQFs (on block 1 and 2) on the discipline are allowed to pass the test.

Assessment of student performance

Type of activity (tasks)	Maximum number of points
unit 1	
Topic 1	8
Topic 2	8
Topic 3	8
Topic 4	8
Topic 5	8
Topic 6	8
Topic 7	8
Topic 8	8
Topic 9	8
Topic 10	8
Topic 11	8
Topic 12	8
Topic 13	8
Topic 14	8
Topic 15	8
together	120
RPC on Block 1	80
Together with Block 1	200
unit 2	
Topic 1	8
Topic 2	8
Topic 3	8
Topic 4	8
Topic 5	8
Topic 6	8
Topic 7	8
Topic 8	8
Topic 9	8
Topic 10	8
together	80
PKR for Block 2	40
Together with Block 2	120
credit	80
Together with Block 2 and credit	200

Knowledge assessment criteria

A grade of 7-8 points in the first and second units, 71-80 points in PKR No. 1, 38-40 points in PKR No. 2 and 71-80 points in credit (A on ECTS scale and 5 on national scale) a student's answer is graded if she demonstrates profound knowledge of all theoretical statements and the ability to apply theoretical material for practical analysis and does not have any inaccuracies.

The answer is evaluated with 6-7 points in the first and second units, 61-70 points in PKR №1, 35-37 points in PKR №2 and 61-70 points in the credit (B and C on ECTS scale and 4 on national scale) if it shows the knowledge of all theoretical provisions, ability to apply them in practice, but some principal inaccuracies are allowed.

A grade of 4.7-6 in Unit 1, 4-6 in Unit 2, 50-60 in PCR Unit 1, 30-34 in PCR Unit 2, and 50-60 in the credit (D and E on ECTS scale and 3 on national scale) is awarded, provided the student knows the main theoretical points and can use them in practice.

7. Recommended literature

Main

1. Babak O.Y., Fadeenko D. Gastroesophageal reflux disease. Kiev, 2000, Interpharm. - 176 C.

2. Belov Y.V. Guidance on vascular surgery with atlas of operative technique / Yuri Vladimirovich Belov. - K.-Kiev: Danu - 2000 - 350C.
3. Belov Y.V. Repeated reconstructive surgery on the aorta and main arteries / Y.V. Belov, A.B. Stepanenko. B.Stepanenko. MOSCOW: MIA, 2009. - C.174.
4. Bergan D.J. Vein disease. Guidelines, / D.J. Bergan, D. Buckman, K.F. Fade. [et al], Translated from English, ed. by H.S. Fronek. GEOTHRMedia, 2010. - C. 208.
5. Vinitskaya I. M. M. First aid in basic surgical diseases and injuries: a textbook [Text] / Vinitskaya I. M. M., Kotovskaya E. B.; Yuzh. fed. univ. - Rostov n / D: Phoenix, 2009. - 378 p.: ill. . - Higher Education
6. Voyno-Yasenetsky V. F. Sketches of purulent surgery [Text] / Voyno-Yasenetsky V. Ф.
7. Vdovichenko Y.V. Features of conservative and surgical treatment of deep vein thrombosis in pregnant women / Y.V. Vdovichenko, N.Goyda, V.Y. Smorzhevskaya, D.R. Shadlun, N.R. Prisyazhna Methodical guidelines. - Kiev, 2012 - p.28.
8. Volkov L. Modern concepts of hemostasis system (G. Volkov, T.N. Platonova [et al]. - M.: Nauchnaya mysl': - 2005. - c.295.
9. Getman V.G. Clinical thoracoscopy. - Moscow: Zdorov'e. - 1998. - 208 C.
10. Grigoryev V.G., Starodub E.L., Yakovenko E.L. et al. Diseases of the Digestive System: Diagnosis and Treatment. Ternopil: Ukrmedkniga. - 2000. - 446 C.
11. Gostischev V.K. General surgery: textbook with CD-ROM [Text] / V.K. Gostischev. - Fourth edition. - M.: GEOTAR-Media, 2006. - 822 c.
12. Diagnosis and treatment of patients with chronic critical lower limb ischemia associated with multifocal atherosclerosis: Ukrainian Consensus. - M.: 2006. - C. 75.
13. Dolinin V.A. . Surgery in wounds and injuries / V.A. Dolinin, N.P. Bisenkov. - Folio, 2005 - P.192.
14. Evplov V. I. Disinfection and sterilization in a medical institution: collection of papers, comments, recommendations [Text] / Evplov V. I.. - Rostov n / D.: Phoenix, 2003. - 478 c. : ill. - Medicine for you.
15. Zavada N.V. Surgical sepsis: textbook [Text] / Zavada N.V., Gaina Y.N., Alekseev S.A. - Minsk: Novoe znanie, 2003. - 236 p.: 37 abstracts. . - Medical education.
16. Zubarev P. N. N. General surgery: textbook for medical universities [Text] / edited by P.N. Zubarev, M.I. Lytkin, N.V. Epifanov; [Author: S.A. Alentyeva et al.] - Second ed. modified and revised. - SPb. SpetsLit, 2004. - 492 p.: ill.
17. Kulikov V.P. . Ultrasound diagnosis of vascular diseases. / V.P. Kulikov - STROM, 2011. - c.512.
18. Lukomsky G.I., Shulutko M.L., Wiener M., Ovchinnikov A.A. 19. Secrets of gastroenterology. MOSCOW: GEOTAR. - 2000. - 600 C.
19. pediatric surgery: textbook / V.I. Sushko, D.Y. Krivchenya, A.A. Danilov, V.A. Digtyar et al. - Second ed., revised and ext. - M.: Medicine, 2009. - 800 c.20. Sushko V.I. Surgery of childhood. - K: Zdorov'e, 2002. - 704 c.21. Dolnitsky A.V., Krivchenya D.Y., Polishchuk N.E. The pediatric traumatology. - Moscow: Kniga-plus, 2006. - 472 c.22. Malformations in Children (independent classroom and in-class work of students) / V.A. Digtyar, V.I. Sushko, L.M. Kharitonyuk, O.M. Barsuk et al. / Dnipropetrovsk, 2011 -334 p.23 . Ashcraft K.W., Holder T.M. Pediatric Surgery, in 3 volumes / Per. from English. St. Petersburg: Hartford, 1996.24. D.Yu.Krivchenya, S.V. Lisak, O.M. Plotnikov. Surgical diseases in children-Vinnitsa, "New Book", 2008 - 256 p.25. F. Surgical diseases of childhood. - Moscow: Medicine, 2004. - In 2 volumes.26. Pediatric surgery: national manual / edited by Yu.F. Isakov, A.F. Dronov. - Moscow: GEOTAR-Media, 2009. - 1168 c.27. F. Isakov, Y.M. Lopukhin, E.A. Stepanov, V.A. Mikhelson, Y.A. Tikhonov, et al; Under the editorship of Y.F. Isakov, Y.M. Lopukhin. - M. Lopukhin. -M.: Medicine, 1989. - 592 c.

More

28. Congenital malformations. Bases of diagnostics and treatment: monograph / O.V.Dolnitsky, V.O.Galagan, O.V.Romadina - Moscow, 2009 - 1040 p.

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