

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Petro Mohyla Black Sea National University

Medical institute

Department of Therapeutic and Surgical Disciplines

"APPROVE "

The first vice-rector

Ishchenko NM

“ ” 2021

## CURRICULUM WORK PROGRAM

### SURGERY

Specialty 222 "Medicine"

Developer

Head of the Department of Developer

Guarantor of the educational program

D Directors Institute

Chief of NMV

Frolov Yu. A.

Zack M. Yu.

Klymenko MO

Grishchenko GV

Shkirchak SI

1.

Mykolaiv - 2021 year

### Description of the disciplinary us

Characteristic	Characteristics of the discipline	
Name of discipline	Surgery	
Branch of knowledge	22 "Health care	
Specialty	222 "Medicine"	
Specialization (if any)	No I	
Educational program	Surgery	
Level of higher education	Master	
Discipline status	Normative	
Curriculum	4 , 5, 6 years	
Academic year	20 21 /20 22	
Semester numbers:	Full-time	Correspondence form
	7, 8 9, 10 11.12	Missing
Total number of ECTS credits / hours	16 credits / 480 hours	
Course structure: - lectures - seminars (practical, laboratory, semi-group) - hours of independent work of students	Full-time	Correspondence form
	25.5	-
	246.5 208	- -
Percentage of classroom load	57%	
Language of instruction		
Form of intermediate control (if any)		
Form of final control	8, 10 semester - Exam 12th semester - Credit	

## 2. Purpose, tasks and results of studying the discipline

The general purpose of teaching / studying the discipline "Surgery" is for students to master the measures for the organization of the sanitary-epidemic regime in the surgical clinic; types of dressings and methods of its application. Know the types of bleeding and ways to stop it temporarily and finally; transfusion of donor blood components, complications of blood transfusion and their prevention; basics of anesthesiology and resuscitation; clinic, diagnosis, first aid. Principles of treatment for traumatic injuries; general issues of surgical infection; clinic, diagnosis, treatment, prevention of certain types of surgical infection; basics of transplantology, basics of clinical oncology; methodology of examination of a surgical patient. H adannya student in with nan of the etiology and pathogenesis of, classification, clinic, diagnosis, differential diagnosis of the most common surgical diseases . As a result of studying the discipline the student **should know** :

- 2.1 modern concepts of domestic and foreign theoretical and practical surgery;
  - 2.2. basic principles of organization of surgical care for the population of Ukraine;
  - 2.3. basics of the organization of a rational mode and treatment of the surgical patient;
  - 2.4. general elements of care for surgical patients;
  - 2.5. theoretical aspects of dressings and methods of its application;
  - theoretical foundations of modern antiseptics;
  - theoretical aspects of prevention of the occurrence and spread of in-hospital infections; classification, clinical manifestations, consequences of bleeding, methods of temporary and final stop
  - bleeding; theoretical and practical aspects of transfusion of donor blood preparations and blood substitutes;
  - complications during blood transfusion, measures for their prevention and treatment;
  - basics of anesthesiology;
  - basics of resuscitation, clinical manifestations of terminal conditions, their diagnosis, stages and measures
  - during cardiopulmonary resuscitation; general issues of traumatology, oncology and transplantology;
  - means and methods of transport immobilization;
  - theoretical aspects of wounds and wound process, wound healing;
  - general issues of surgical and HIV infection;
  - clinic, diagnosis and treatment of certain purulent-inflammatory diseases of soft tissues,
  - tendons, bones and joints; methods of examination of the patient, features of examination of the patient with surgical pathology;
  - the structure of the medical card of an inpatient.
- 
- Etiology, pathogenesis, classification, clinic, diagnosis, differential diagnosis of acute appendicitis and its complications.
  - Herniated disc syndrome and complications of abdominal wall hernias.
  - Acute cholecystitis
  - G acute pancreatitis y .
  - Diseases complicated by mechanical jaundice (mechanical jaundice syndrome).
  - Acute and chronic bleeding into the cavity of the gastrointestinal tract.
  - Acute intestinal obstruction syndrome.
  - Peritoneal syndrome.
  - M o o di operations and know the indications for surgical intervention.
  - Know surgical access for surgical diseases.
  - O c thus a key stage of the surgery
  - Indications for drainage
  - Master the protocols of the treatment program.
  - The main symptoms and syndromes
  - Must be able to** :
  - apply a bandage to different parts of the body;

- apply a plaster splint;
- choose a vehicle for transport immobilization, apply a tire Cramer, Diterix;
- to carry out disinfection of various tools and subjects of care of patients;
- to organize appropriate sanitary and epidemiological conditions for different premises of the surgical department;
- perform subcutaneous, intramuscular injections, venipuncture, make
- intravenous catheter, set up a system for transfusion of blood substitutes and donor blood components; perform catheterization of the bladder with a soft catheter, put a cleansing and siphon
- enema, gastric lavage with a probe; prepare the operating field;
- apply measures to prevent bedsores;
- to carry out differential diagnosis at bleeding, to reveal signs of development of hemorrhagic
- shock; apply methods of temporary cessation of bleeding, choose a method for final cessation
- bleeding; to determine the blood group according to the ABO and Rh system, to conduct tests for individual compatibility
- blood of the recipient and donor, select compatibility tests for transfusion of donor blood components, organize and conduct transfusion of erythrocyte mass, fresh-frozen plasma; choose an adequate method of anesthesia for a particular intervention;
- to carry out diagnostics of terminal states, to carry out measures of elementary support
- life; diagnose various traumatic injuries;
- provide first aid for various traumatic injuries;
- choose surgical tactics in the treatment of various stages of the wound process;
- to choose means for local application at treatment of wounds depending on a stage
- wound process; to diagnose various infectious surgical processes, to carry out between them
- differential diagnosis; to diagnose a purulent-necrotic stage of development of an infectious surgical disease;
- choose appropriate surgical tactics for different stages of surgical infection;
- to make the medical program at various infectious surgical diseases;
- to collect anamnesis and objective examination of the surgical patient;
- to issue a card of an inpatient for a patient with surgical pathology.
- Collect complaints anamnesis data
- In initiate the main clinical symptoms
- Be able to perform and interpret symptom information
- Formulate and obhrunt in wool clinical diagnosis.
- Carry out differential diagnosis
- Justify the indications and contraindications of surgical treatment.
- Justify indications for conservative treatment
- Justify the list of laboratory and hardware examinations
- Justify consultations of specialists
- Rate information of clinical, laboratory, renth e tech, ultrasound, endoscopy at least trackers patient

**Competences and learning outcomes** , the formation of which is facilitated by the discipline.

The discipline provides students with the acquisition of **competencies**:

- *integral*: the ability to solve typical and complex specialized problems and practical problems in professional activities in the field of health care or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements;
- *general*:
  1. ability to abstract thinking, analysis and synthesis;
  2. ability to learn and master modern knowledge;

3. ability to apply knowledge in practical situations;
4. ability to plan and manage time;
5. knowledge and understanding of the subject area and understanding of professional activity;
6. skills of using information and communication technologies;
7. ability to adapt and act in a new situation;
8. ability to make informed decisions;
9. ability to work in a team;
10. interpersonal skills;
11. certainty and persistence in terms of tasks and responsibilities;
12. the desire to preserve the environment;
13. ability to act on the basis of ethical considerations (motives;

➤ *special (professional, subject):*

1. collection of anamnesis from a surgical patient;
2. conducting an objective examination of a surgical patient;
3. assessment of the severity of clinical manifestations of the disease;
4. drawing up a survey plan and evaluating their results;
5. conducting differential diagnostics;
6. providing care for the seriously ill;
7. identify and evaluate acute medical conditions;
8. first aid;
9. providing basic life support and cardiopulmonary resuscitation in accordance with current European recommendations;
10. pain treatment;
11. appointment of appropriate treatment;
12. performance of medical procedures and medical manipulations (measurement of arterial pressure, carrying out venipuncture and catheterization of a vein, application of means for carrying out intravenous transfusion, carrying out hypodermic, intramuscular injections, catheterization of a bladder, gastric lavage, statement of an enema);
13. Carrying out primary surgical treatment of a wound.
14. transportation of patients;
15. transfusion of donor blood components;
16. application of measures to prevent the occurrence and spread of nosocomial infections

The developed program corresponds to the ***educational-professional program*** and is focused on the formation of ***competencies***:

***general (GC) -GC1-GC10:***

- Ability to apply knowledge in practical situations;
- Knowledge and understanding of the subject area and understanding of the profession;
- Ability to exercise self-regulation, lead a healthy lifestyle, ability to adapt and act in a new situation.
- Ability to choose a communication strategy; ability to work in a team; interpersonal skills
- Ability to communicate in the native language both orally and in writing; ability to communicate in a second language
- Skills in the use of information and communication technologies
- Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.
- Ability to apply knowledge in practical situations.
- Ability to evaluate and ensure the quality of work performed.
- Definiteness and persistence in terms of tasks and responsibilities
- Ability to act socially responsible and public consciousness
- The desire to preserve the environment.

***professional (PC) 1 - PC19:***

– Ability to process state, social, economic and medical information.

According to the educational-professional program, the expected *program learning outcomes (PLO)* include the skills of **PLO4, PLO12**:

- Know the types and methods of adaptation, principles of action in a new situation. To be able to apply means of self-regulation, to be able to adapt to new situations (circumstances) of life and activity. Establish appropriate connections to achieve results. Be responsible for the timely use of self-regulatory methods.

- Evaluate information on the diagnosis in the health care institution, its unit, using a standard procedure, using knowledge about the person, his organs and systems, based on the results of laboratory and instrumental studies (according to list 4).

### 3. The structure of the discipline

Name of modules and topics	Number of hours, of which				
	Total	Classroom		individual	
		Lectures	Practical classes	IS	VTS
	<b>480</b>	<b>25.5</b>	<b>246.5</b>	<b>208</b>	<b>-</b>
ECT credits S	<b>16.0</b>				
Content block 1 (4 course 7 semester)	81.5	7.5	4 0	34	-
Content block 2 (4th year, 8th semester) Exam	78	-	44	34	
Content block 3 ( 5th year 9 semester)	88	10	40	38	-
Content block 4 (5th year 10 semester) Exam	72	-	40	32	-
Content block 5 (6th year 11 semester)	86	8	4 2	36	-
Content block 6 (6 course 12 semester) Credit	74.5	-	40 .5	34	-

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

The curriculum consists of 6 blocks:

Name of content modules and topics	Number of hours					
	Full-time					
	total	L.	P	lab	ind	CPC
1	2	3	4	5	6	7
<b>BLOCK 1. INTRODUCTION TO SURGERY. DESMURGY. FUNDAMENTALS OF SANITARY AND EPIDEMIC REGIME IN THE SURGICAL CLINIC. URGENT SURGICAL CONDITIONS. FUNDAMENTALS OF TRANSFUSIOLOGY, ANESTHESIOLOGY AND RESUSCITATION</b>						
4th year 7th semester						
<b>Topic 1.</b> Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.	5	1	2			2
<b>Topic 2.</b> Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique.	2		2			
<b>Topic 3.</b> Antiseptics. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.	5	1	2			2

<b>Topic 4.</b> Nosocomial infection. Sanitary epidemic - logical mode. Asepsis.	5	1	2			2
<b>Topic 5.</b> Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.	5	1	2			2
<b>Topic 6.</b> Bleeding and blood loss. Methods of temporary and final cessation of bleeding.	4		2			2
<b>Topic 7.</b> Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test.	4		2			2
<b>Theme 8.</b> Operation hemotrans - fusion. Features of transfusion of various components of blood.	2		2			
<b>Theme 9.</b> Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.	4		2			2
<b>Topic 10.</b> Local znebo lyuvan - tion. See. Indications, protypoka - Zanni, complications.	3	1	2			
<b>Topic 11.</b> General znebo lyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention.	5	1	2			2
<b>Topic 12.</b> Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.	4		2			2
<b>Topic 13.</b> Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.	4		2			2
<b>Topic 14.</b> Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment.	4		2			2
<b>Topic 15 .</b> Polytrauma. Multiple injuries combined and combi - President dieter f injury. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment.	4		2			2
<b>Topic 16.</b> Wounds, definition, classification. Wound structure and course of the wound process. Features	5	1	2			2

of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment.						
<b>Topic 17.</b> Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.	4.5	0.5	2			2
<b>Topic 18.</b> Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.	4		2			2
<b>Topic 19.</b> Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.	4		2			2
<b>Topic 20.</b> Frostbite. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.	4		2			2
Final block control (FPC)						
<b>Together:</b>	<b>81.5</b>	<b>7.5</b>	<b>40</b>			<b>34</b>

Name of content modules and topics	Number of hours					
	Full-time					
	total	L.	P	lab	ind	CPC
1	2	3	4	5	6	7
<b>BLOCK 2.</b> Curation of a surgical patient. Acute surgical diseases of the abdominal cavity, complications . Surgical diseases of arterial and venous vessels						
<b>4th year 8th semester</b>						
1. General issues of surgery. Examination of patients with a surgical profile	4		2			2
2. General principles of care for surgical patients.	4		2			2
3. Symptoms and syndromes in surgery.	4		2			2
4. Surgical pathology of the venous and lymphatic systems	3		2			1
of a surgical patient	3		2			1
6. Acute cholecystitis. Complications of acute cholecystitis	4		2			2
7. Acute pancreatitis. Chronic diseases of the pancreas	4		2			2
8. Peritonitis	3		2			1
9. Diseases of the small and large intestine.	3		2			1
10. Acute complications of peptic	3		2			1



ulcer disease and 12 items of the cat.						
11. Perforated ulcer	3		2			1
12. Diseases of the liver and spleen	4		2			2
13. Diseases of the extrahepatic bile ducts.	3		2			1
14. External and internal abdominal hernias. Complications of hernias	4		2			2
15. External and internal abdominal hernias. Complications of hernias	4		2			2
16. Acute appendicitis. Complications of acute appendicitis	4		2			2
17. Chronic ischemia of the lower extremities: Obliterating atherosclerosis, obliterating endarteritis, Raynaud's disease, Takayasu's disease. Causes, pathogenesis, classification of chronic ischemia according to the level of occlusion of the aorta and arteries of the extremities. Clinic, diagnosis, differential diagnosis, treatment.	4		2			2
18. Diabetic foot syndrome: causes, pathogenesis, classification. Clinical manifestations, variants of clinical course, complications. Diagnosis, differential diagnosis. Conservative and surgical treatment of diabetic angiopathy,	3		2			1
19. Syndrome of acute ischemia of the extremities. Causes: arterial thrombosis and embolism, limb injury, compartment syndrome. Classification of acute limb ischemia syndrome. Clinic, variants of clinical course, complications. Diagnosis, first aid, treatment tactics	4		2			2
20. Syndrome of chronic venous insufficiency. Varicose veins of the lower extremities, primary and secondary varicose veins. Causes, pathogenesis, classification, clinic, diagnosis, complications.	3		2			1
21. Thrombosis and thrombophlebitis of superficial and deep main veins of the extremities. Causes, pathogenesis, classification, clinic, diagnosis, complications. Conservative and surgical treatment.	3		2			1
22. Postrombophlebitic syndrome. Etiopathogenesis, classification. Clinic. Diagnosis, differential diagnosis. Conservative and methods of surgical treatment. Trophic ulcer as a complication of varicose veins: causes, pathogenesis, clinic, methods of treatment. Lymphedema of the extremities.	4		2			2
<b>Examination</b>						
<b>Total:</b>	<b>78</b>		<b>44</b>			<b>34</b>

Name of content modules and topics	Number of hours					
	Full-time					
	total	L.	P	lab	ind	CPC
1	2	3	4	5	6	7
<b>BLOCK 3. URGENT ABDOMINAL SURGERY. SURGICAL GASTROENTEROLOGY AND PROCTOLOGY</b>						
5th year 9th semester						
1. Acute appendicitis. Anatomical and physiological information. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Treatment tactics.	5	1	2			2
2. Atypical clinical picture of acute appendicitis Complications of acute appendicitis and appendectomy. Diagnostic and treatment program.	5	1	2			2
3. Anatomical and physiological features of the biliary tract. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Surgical tactics.	4		2			2
4. Features of the clinical course, clinical picture of acute cholecystitis and diagnostic and treatment program in the elderly and patients with concomitant pathology. Complications of acute cholecystitis and cholecystectomy	4	1	2			1
5. Etiology and pathogenesis, classification of acute pancreatitis. Clinic of mild and severe acute pancreatitis. Differential diagnosis of acute pancreatitis.	4	1	2			1
6. Complications of acute pancreatitis: acute pseudocyst of the pancreas, pancreatic abscess, widespread peritonitis, necrosis of the walls of the cavity, bleeding into the abdominal cavity, acute ulcers of the digestive tract, bleeding from acute ulcers into the cavity of the digestive tract, perforation.	4		2			2
7. Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. Clinic of typical and atypical perforated gastroduodenal ulcer. Therapeutic tactics for perforated gastroduodenal ulcer	6	2	2			2
8. Etiopathogenesis, classification of ulcerative hemorrhage. Clinic of ulcerative bleeding. Laboratory and endoscopic methods for the diagnosis of ulcerative hemorrhage. Therapeutic tactics for ulcerative hemorrhage.	6	2	2			2
9. Acute intestinal obstruction Etiology and pathogenesis. Typical clinical picture. Classification	4		2			2

10. Acute intestinal obstruction Principles of conservative and surgical treatment	4		2			2
11 . Etiology, pathogenesis, classification of acute peritonitis. Clinic. Treatment tactics for acute peritonitis .	4		2			2
12. Classification of abdominal hernias. Etiology. Pathogenesis. Clinic of the disease. Principles of surgical treatment. Complications .	4		2			2
13. Curation of patients. Writing a medical history.	4		2			2
14. Complications of peptic ulcer of the stomach and duodenum. Conservative and operative treatment, types of operations. Diseases of the operated stomach	4		2			2
15. Liver disease Fibrosis, liver cirrhosis .. Liver failure. Parasitic and non-parasitic liver lesions. Examination methods. Complication. Principles of treatment tactics ”.	4		2			2
16. Jaundice as a surgical problem. Gallstone disease. Clinical manifestations. Research methods. Differential diagnosis. Principles of treatment. Postcholecystectomy syndrome.	5	1	2			2
17. Chronic pancreatitis. Diagnostic methods. Clinic. Diagnosis. Complications of chronic pancreatitis. Principles of treatment. Cysts and fistulas. Principles of surgical tactics ”. Diseases of the spleen	5	1	2			2
18. Classification of surgical diseases of the small intestine. Nonspecific ulcerative colitis. Crohn's disease of the colon. Diverticular disease and polyposis of the colon	4		2			2
19. Diseases of the rectum - hemorrhoids, paraproctitis, anal fissure, rectal prolapse	4		2			2
20. Diseases of the soft tissues of the perineum “Perineal omission syndrome. Pyoderma of the perineum. Perineal condyloma. Epithelial coccygeal immersion	4		2			2
Final block control (FPC)						
<b>Together:</b>	<b>88</b>	<b>10</b>	<b>40</b>			<b>38</b>

Name of content modules and topics	Number of hours	
	Full-time	

	total	L.	P	lab	ind	CPC
1	2	3	4	5	6	7
<b>BLOCK 4 .. Abdominal pain, assessment of the features of the pain syndrome in the differential diagnosis of diseases of the abdominal cavity. SURGICAL INFECTION</b>						
5th year 10th semester						
1. Abdominal pain, assessment of the features of the pain syndrome in the differential diagnosis of diseases of the abdominal cavity.	3		2			1
2 . Syndromes of dysphagia, vomiting and violation of the act of defecation. Significance in diagnosis and differential diagnosis. Medical tactics.	4		2			2
3. Acute abdomen syndrome. Diagnosis, differential diagnosis and treatment tactics. Differential diagnosis of acute diseases of the abdominal cavity.	4		2			2
4. Local and widespread purulent-inflammatory processes of the abdominal cavity and peritoneum. Etiology, pathogenesis, clinic, diagnosis and treatment.	3		2			1
5. Mechanical jaundice. Causes. Differential diagnostic tactics. Modern approaches to treatment. Hepatic insufficiency in surgical diseases, methods of prevention and treatment.	3		2			1
6. Bleeding from the digestive tract. Causes, diagnosis and differential diagnosis, treatment tactics.	4		2			2
7. Life traumas. Symptoms of damage to the abdominal cavity and retroperitoneal space. Instrumental diagnostic methods. Therapeutic and diagnostic tactics	3		2			1
8. Features of the course of surgical diseases in pregnant women. Diagnosis and differential diagnosis of acute diseases of the abdominal cavity. Features of the survey. Surgical tactics. Prevention of premature birth.	4		2			2
9. The course of acute diseases in the elderly .	3		2			1
10 Surgical complications in patients with infectious pathology. Differential diagnosis between acute surgical and infectious diseases. .	3		2			1
11. Modern methods of diagnosis and treatment of diseases of the cardiovascular and respiratory systems	4		2			2
12. Syndromes of chest pain, respiratory and heart failure in the diagnosis and differential	4		2			2

diagnosis of diseases of the thoracic cavity.						
13. Surgical pathology of the lungs and pleura. Principles of diagnosis and treatment.	3		2			1
14. Damage to the thoracic cavity. Diagnostic program for heart damage. Triad of heart injury symptoms. The only clinical-diagnostic and medical-surgical program for heart injuries	3		2			1
15. Damage to the thoracic cavity. Clinic and diagnosis of pneumothorax, hemothorax and chylothorax. Therapeutic approaches.	4		2			2
16. Aortic arch syndrome. Clinic, diagnosis, differential diagnosis, treatment approaches	4		2			2
17. Syndrome of limb ischemia. Causing diseases. Conservative and surgical treatment of occlusions of the lower extremities.	4		2			2
18. Assessment of pain syndrome in the extremities in the diagnosis and differential diagnosis of vascular diseases, lesions of the nervous system and pathology of the musculoskeletal system.	4		2			2
19. Problems of thrombosis and embolism. Causes, ways of prevention, diagnosis and differential diagnosis, treatment tactics. Modern possibilities of conservative treatment. Indications for surgical treatment and its main methods.	4		2			2
20. Diseases of the veins. Syndrome of the superior vena cava. Lower vena cava syndrome. Causes, diagnosis, differential diagnosis, treatment tactics.	4		2			2
<b>Examination</b>						
<b>Together:</b>	<b>72</b>		<b>40</b>			<b>32</b>

Name of content modules and topics	Number of hours					
	Full-time					
	total	L.	P	lab	ind	CPC
1	2	3	4	5	6	7
<b>BLOCK 5. THORACIC, CARDIAC, ENDOCRINE SURGERY</b>						
6 course 11 semester						
1. Chest injuries. Classification. Early and late complications. Differential diagnosis. First aid and treatment tactics.	4	1	2			1
2. Diseases of the lungs and pleura. Lung abscess and gangrene, bronchiectasis. Acute and chronic pleural empyema,	5	1	2			2

pyopneumothorax. Features of the clinical course. Differential diagnosis. Methods of conservative and surgical treatment.						
3. Modern methods of diagnosis, minimally invasive surgical treatment of heart disease	4		2			2
4. Acquired heart defects. Classification. Diagnosis. Indications for surgical treatment. Methods of surgical interventions. Complication	3		2			1
5. Ischemic heart disease. Diagnosis. Indications for surgical treatment. Methods of surgical interventions	5	2	2			1
6. myocardial infarction, cardiac aneurysm, conduction disorders. Indications for surgical treatment. Methods of surgical interventions.	4		2			2
7. Diseases of the interstitium Classification. Diagnosis. Differential diagnosis. Methods of surgical treatment. Diseases and injuries of the esophagus.	3		2			1
8. Euthyroid and toxic goiter. Classification. Special research methods. Diagnosis. Differential diagnosis. Preoperative preparation. Surgical treatment	4		2			2
9. Diseases of the breast (dyshormonal, tumor) Mastitis	5	2	2			1
10. Arterial thrombosis and embolism.	3		2			1
11. Classification i Katz i i acute i Shem i J K i SC i wok. Kl i n i chn i stud i ji pereb i gu. Diagnosis. Differential diagnosis. Methods of surgical treatment .	4		2			2
12. Classification of acute limb ischemia. Clinical stages of the course. Diagnosis. Differential diagnosis. Methods of surgical treatment .	4		2			2
13. Pulmonary artery thromboembolism. Clinic, diagnosis, treatment. Means of prevention.	4		2			2
14. Abdominal ischemic syndrome. Clinical variants of the course. Diagnosis. Differential diagnosis. Complication. Methods of conservative treatment. Prevention. Rehabilitation.	4		2			2
15. Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities	4		2			2

16. Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities	5	1	2			2
17 . Varicose veins of the lower extremities. Classification. Complication. Diagnosis. Special research methods. Methods of surgical treatment.	5	1	2			2
18 . Thrombosis of the main veins. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of conservative and surgical treatment	4		2			2
19 . Postthrombophlebitic syndrome. Classification. Diagnosis. Conservative and surgical methods of treatment.	4		2			2
20 . Lymphedema of the extremities. Forms of the disease. Clinic. Diagnosis. Variants of the clinical course. Conservative and surgical treatment	4		2			2
21 . Lymphedema of the extremities. Forms of the disease. Clinic. Diagnosis. Variants of the clinical course. Conservative and surgical treatment	4		2			2
Final block control (FPC)						
<b>Together:</b>	<b>86</b>	<b>8</b>	<b>42</b>			<b>36</b>

Name of content modules and topics	Number of hours					
	Full-time					
	total	L.	P	lab	ind	CPC
1	2	3	4	5	6	7
<b>BLOCK 6. Trauma in children. Emergency medical care. Neoplasm. Cardiovascular surgery</b>						
6 course 12 semester						
1. Trauma in children .. Emergency medical care	3		2			1
2. Trauma of the thoracic cavity and damage to the esophagus. Purulent diseases of the lungs and pleura	4		2			2
3. Acquired intestinal obstruction. Inflammatory diseases of the abdominal cavity. Closed life trauma. . Bleeding from the digestive system. Portal hypertension .	4		2			2
4. Urolithiasis. Swollen scrotum syndrome. Traumatic injuries of the urinary system.	3		2			1
5. Purulent-inflammatory diseases of bones and joints. Purulent-inflammatory diseases of soft tissues.	3		2			1

6. Benign neoplasms of soft tissues	4		2			2
7. Malignant neoplasms of soft tissues	4		2			2
8. Shock. Shock therapy. Cardiopulmonary resuscitation in a hospital	4		2			2
9. Ultrasound diagnosis of the cardiovascular system. X-ray and radioisotope methods for diagnosing cardiovascular diseases	3		2			1
10. Angiocardiology and catheterization of the heart cavities and basins of the main vessels	3		2			1
11. Anesthesiology, intensive care, resuscitation, artificial circulation, transfusiology and myocardial protection	4		2			2
12. Surgery for coronary heart disease	4		2			2
13. Surgery for congenital heart disease	4		2			2
14. Surgery for acquired heart defects	4		2			2
15. Surgery of arrhythmias and conduction	4		2			2
16. Surgery for other heart diseases	4		2			2
17. The main dangers and complications in cardiovascular surgery	4		2			2
18. The main dangers and complications in cardiovascular surgery	4		2			2
19. Urgent cardiovascular surgery	3		2			1
20. Urgent cardiovascular surgery	4, 5		2, 5			2
Test:						
<b>Together:</b>	<b>74.5</b>		<b>40.5</b>			<b>34</b>



### 3.1. Lecture plan

№	Lesson topic / plan
	<b>Block №1</b>
1	Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest. Antisepsis. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.
2	Nosocomial infection. Sanitary epidemic - logical mode. Asepsis. Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.
3	Local znebolyuvan - tion. See. Indications, protypoka - Zanni, complications. General znebolyuvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention
4.	Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment. Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound
	<b>Block №3</b>
5	Acute appendicitis. Anatomical and physiological information. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Treatment tactics. Atypical clinical picture of acute appendicitis Complications of acute appendicitis and appendectomy. Diagnostic and treatment program.
6	Features of the clinical course, clinical picture of acute cholecystitis and diagnostic and treatment program in elderly patients and patients with concomitant pathology. Complications of acute cholecystitis and cholecystectomy. Etiology and pathogenesis, classification of acute pancreatitis. Clinic of mild and severe acute pancreatitis. Differential diagnosis of acute pancreatitis
7.	Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. Clinic of typical and atypical perforated gastroduodenal ulcer. Therapeutic tactics for perforated gastroduodenal ulcer
8.	Etiopathogenesis, classification of ulcerative hemorrhage. Clinic of ulcerative bleeding. Laboratory and endoscopic methods for the diagnosis of ulcerative hemorrhage. Therapeutic tactics for ulcerative hemorrhage.
9.	Jaundice as a surgical problem. Gallstone disease. Clinical manifestations. Research methods. Differential diagnosis. Principles of treatment. Postcholecystectomy syndrome. Chronic pancreatitis. Diagnostic methods. Clinic. Diagnosis. Complications of chronic pancreatitis. Principles of treatment. Cysts and fistulas. Principles of surgical tactics ". Diseases of the spleen
	<b>Block №5</b>
11.	Chest injuries. Classification. Early and late complications. Differential diagnosis. First aid and treatment tactics. Mr niyni lung disease i pleura. Lung abscess and gangrene, bronchiectasis. Acute and chronic pleural empyema, pyopneumothorax. Features of the clinical course. Differential diagnosis. Methods of conservative and surgical treatment.
12.	Ischemic heart disease. Diagnosis. Indications for surgical treatment. Methods of surgical interventions
13.	Diseases of the breast (dyshormonal, tumor) Mastitis. Clinic, pathogenesis. Modern methods of examination and treatment conservative, operative)
14.	Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities. Varicose veins of the lower extremities. Classification. Complication. Diagnosis. Special research methods. Methods of surgical treatment.

### 3.2. Plan of practical (seminar, laboratory, semi-group) classes

№	Lesson topic / plan
	(4 course 7 semester)
1.	Desmurgia. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest. Definition of desmurgia. Classification of bandages, dressings. Requirements for dressings. General rules for applying bandages. Typical bandages on the upper limb, head, neck, chest.
2.	Desmurgia. Bandages on the abdomen, perineum, lower extremity. Plaster technique. Typical bandages on the abdomen, perineum, limbs. Types of hardening bandages. Typical plaster bandages. Tests for the quality of gypsum powder. Rules of gypsum equipment .

3.	Antisepsis. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application. History of the emergence and development of the antiseptic method. Methods of modern antiseptics, their characteristics. Mechanism of action of physical, chemical, biological antiseptics. Classification of chemical antiseptics. Methods of application of antiseptics.
4.	Nosocomial infection. Sanitary epidemic - logical mode. Asepsis. The concept of nosocomial infection. Sanitary and epidemiological regime and its components. Ensuring the sanitary-epidemiological regime in the surgical department. Asepsis. Ways of spreading exogenous and endogenous infection. Preparation for sterilization, sterilization, storage of sterility of surgical linen, dressings, surgical instruments, suture material. Surgeon's hands and skin treatment in the area of the operating field. Prevention of the spread of HIV in the surgical department.
5.	Surgery. The concept of surgery. Classification of surgical operations by features of performance, purpose, purpose, stages, etc. The main stages of surgery. Determination of the preoperative period, its duration and tasks. Features of preparation of patients for emergency, urgent and planned operations. Preoperative period: skin care of the patient, sanitation of the oral cavity, shaving hair, bowel cleansing with enemas, hygiene of linen and clothing of patients. The main aspects of patient care in the postoperative period, prevention of possible complications. Nutrition of patients. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery
6.	Bleeding and blood loss. Methods of temporary and final cessation of bleeding. Definition and classification of bleeding. Determination of blood loss, methods for determining the amount of blood loss, classification of blood loss depending on its size. Adaptive pathophysiological changes in blood loss. The mechanism of self-stopping bleeding. Methods of temporary cessation of bleeding (finger pressure, pressure bandage, twist, tourniquet, etc.). Methods of final cessation of bleeding: mechanical, physical, biological. The concept of vascular suture. Ways to restore the integrity of the damaged main channel.
7.	Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test. History of blood transfusion. Aspects of the doctrine of blood groups. Methods for determining blood group by ABO and Rh-factor systems. The method of determining the individual compatibility of the ABO system, options for determining the individual compatibility of the Rh-factor system. Biocompatibility testing.
8.	Operation hemotrans - fusion. Features of transfusion of various components of blood. Indications and contraindications to blood transfusion and its components. Ways and methods of blood transfusion .. The mechanism of action of transfused blood and its components. Macroscopic determination of blood product quality before transfusion. Classification of drugs containing blood components. The organization and carrying out of operation blood transfusion. Filling in the blood transfusion protocol.
9.	Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application. Complications during transfusion of blood components, their classification, pathogenesis, clinic, differential diagnosis. Blood transfusion shock, clinic, diagnosis, principles of treatment. Prevention of complications during blood transfusion. Aspects of prevention of infectious disease transmission by transfusion of blood components. Blood substitutes, their classification, indications for use, methods of application.
10.	Local zneboluyvan - tion. See. Indications, protypoka - Zanni, complications. Determination of local anesthesia. Varieties of local anesthesia (superficial, layered infiltrative, regional, subarachnoid, epidural, intraosseous). Drugs and their doses for local anesthesia. Indications, contraindications for the use of various methods of local anesthesia. Possible complications during local anesthesia and their prevention.
11.	General zneboluyvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention. Determination of general anesthesia. Varieties of general anesthesia. Indications and contraindications for different types of anesthesia. The concept of premedication. Preparations for inhalation and non-inhalation anesthesia. Mask anesthesia, methods. Stages of ether anesthesia. Structure of the device for inhalation anesthesia. Types of respiratory circuits. Algorithm for endotracheal anesthesia. Varieties of non-inhalation anesthesia, application. Features of non-inhalation anesthesia. Possible complications of general anesthesia and their prevention.
12.	Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation. Definition of resuscitation. Urgent conditions and their clinical manifestations. Clinical death: clinic, diagnosis. Stages of resuscitation measures in clinical death according to Safar and their purpose. Indications and techniques for basic life support activities (CAB). Monitoring the effectiveness of basic life support measures. Testing the algorithm of actions in the diagnosis of clinical death and carrying out measures of basic life support. Ethical and legal aspects of resuscitation.
13.	Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment. The concept of injury. Types of soft tissue damage: bruising, concussion, rupture. Pathomorphological and pathophysiological aspects of closed soft tissue injuries. Clinical manifestations, diagnosis, differential diagnosis of closed soft tissue injuries. Clinical manifestations of closed damage to the brain, chest organs, abdominal organs, organs of the urinary system. First aid and features of transportation of victims with various closed soft tissue injuries. Prevention of traumatic shock. Principles of treatment of soft tissue injuries in the hospital.

14.	Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment. Determination of bone fracture. Classification of fractures. The mechanism of fracture and its effect on the displacement of bone fragments. Pathophysiological and pathomorphological aspects of bone regeneration in fracture. Clinical manifestations of cat fractures, methods of instrumental diagnosis of fractures. Tasks and algorithm of first aid for bone fractures. Prevention of traumatic shock at the prehospital stage of care for a victim with a fracture. Means of transport immobilization and features of their application at bone fractures. Principles of treatment of bone fractures in the hospital. Determination of dislocation. Classification of dislocations. Pathophysiological and pathomorphological aspects of dislocation. Clinical manifestations and diagnosis of dislocation. Elements of first aid for dislocation. General conditions for repositioning in dislocation and methods of repositioning depending on the location of the dislocation. Principles of treatment of dislocation.
15.	Polytrauma. Multiple injuries combined and combi - President dieter f injury. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment. Definition of polytrauma, classification. Modern methods of diagnosis and treatment in the context of hostilities and natural disasters. Traumatic shock: pathogenesis, clinical manifestations, diagnosis, principles of prevention and treatment at the pre-hospital and hospital stages of care for the victim. Prolonged compression syndrome: definition, pathophysiological and pathological aspects, clinical manifestations, classification, diagnosis. Algorithm of first aid for long compression syndrome. Principles of hospital treatment .
16.	Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment. Wound determination, wound structure, wound classification, characteristics of different types of wounds. Pathophysiological and pathomorphological aspects of the wound. Elements of first aid for wounds. Conditions conducive to the development of the infectious process in a contaminated wound. Prevention of the development of the infectious process in an accidental contaminated wound (primary surgical treatment). Pure postoperative wound, its features. Healing of a pure wound by primary tension (stages of wound process at a pure wound). Primary surgical suture and its varieties. Treatment of a clean wound in the postoperative period. Pathomorphological features of a gunshot wound. Features of structural and functional changes of fabric from the type of weapon. Primary surgical treatment of gunshot wounds, its features.
17.	Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound. Identification of an infected wound. The course of the wound process in an infected wound, the characteristics of the different stages of the wound process in an infected wound. The principle of treatment of an infected wound depending on the stage of the wound process. Surgical treatment of a purulent wound: indications, contraindications, technique. Types of purulent wound drainage. Types of secondary surgical sutures, indications and contraindications for their use. Surgical operations that can be used in the stage of epithelialization and scarring. Clinical analysis of a patient with an infected wound.
18.	Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures. Definition of burns. Varieties of burns. Classification of burns by depth, area, severity. Clinical manifestations of thermal burns depending on the degree of damage. Algorithm for providing first aid for thermal burns. Symptoms of varying degrees of burns with chemical compounds, features of first aid for this type of lesion. Radiation burn: causes, clinical manifestations, first aid, prevention. Determining the depth and area of the lesion in burns, the value of these data in providing medical care to the victim. Features of damage by light radiation of a nuclear explosion, incendiary mixtures, first aid for these lesions.
19.	Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns. Definition of burn disease. Periods of burn disease. Pathophysiological and pathomorphological aspects of periods of burn disease. Principles of local treatment of burns. Features of treatment of different periods of burn disease. Calculation of transfusion volume in the treatment of burn shock. Types of surgical operations in the treatment of burns .
20.	Freezing. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features. Definition of frostbite. Factors contributing to the occurrence of cold injury. Periods of frostbite. Pathophysiological and pathomorphological aspects of the occurrence and course of frostbite lesions. Classification of frostbite: degrees of lesions and their clinical manifestations. Features of first aid to the victim with frostbite in the pre-reactive period. Principles of treatment of frostbite in the postoperative period. Surgical operations used in the treatment of frostbite. Electrotrauma: pathomorphological and pathophysiological aspects; clinical manifestations, features of first aid.
(4th year 8th semester)	
1.	General issues of surgery. Examination of patients with a surgical profile. general issues of surgery. Examination of patients with a surgical profile The principle of anatomical accessibility. The principle of physiological resolution. The principle of technical feasibility. The principle of legal permission. The principle of moral or

	ethical permission. Diagnosis of surgical diseases as a complex cognitive process. Interpretation of symptoms and syndromes in dynamics. The validity of the use for the diagnosis of surgical diseases data: history, results of physical examination, laboratory and instrumental studies.
2.	General principles of care for surgical patients. The regime of medical institutions. Medical and protective regime. Sanitary and hygienic regime. Sanitary and hygienic regime in the operating room, wards and intensive care units. Personal hygiene of patients and staff. Sanitary and hygienic diet of patients. Surgical diets. Parenteral nutrition in a surgical clinic.
3.	Symptoms and syndromes in surgery. Features of the concept of symptom and syndrome. Symptoms and syndromes of surgical diseases: acute appendicitis, acute cholecystitis, extrahepatic bile duct disease, acute peritonitis, acute pancreatitis, acute intestinal obstruction, perforated ulcer, liver and spleen diseases, external and internal hernias of the abdomen, two diseases of the abdomen, chronic diseases n \ extremities
4.	Surgical pathology of the venous and lymphatic systems . Varicose veins of the lower extremities. Classification. Complication. Diagnosis. Special research methods. Methods of surgical treatment of main vein thrombosis. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of conservative surgical likuvannya.Pislyatrom i - boflebitychnyy syndrome. Classification. Diagnosis. Conservative and surgical methods of treatment. Lymphedema of the extremities. Forms of the disease. Clinic. Diagnosis. Variants of the clinical course. Conservative and surgical treatment.
5.	a surgical patient .
6.	Acute cholecystitis. Complications of acute cholecystitis . Acute cholecystitis and its complications. “Anatomical and physiological features of the biliary tract. Definition, etiology and pathogenesis of acute cholecystitis. Classification. Clinic, diagnostics, differential diagnosis. Surgical tactics. Features of the clinical course, clinical picture of acute cholecystitis and diagnostic and treatment program in elderly patients and patients with concomitant pathology. Complications of acute cholecystitis (perforation of the gallbladder, perivesical infiltrate and abscess, cholangitis, cholangiogenic liver abscesses, biliary peritonitis, liver failure, mechanical jaundice, cholecystopancreatitis). Complications of cholecystectomy (intraoperative damage to the extrahepatic bile ducts, blood vessels, abdominal organs). Diagnosis and surgical tactics. The role of minimally invasive methods in the diagnosis and treatment of complications of acute cholecystitis and cholecystectomy.
7.	Acute pancreatitis. Chronic diseases of the pancreas . Acute pancreatitis and its complications. “Etiology and pathogenesis, classification of acute pancreatitis. Periods of clinical course of acute pancreatitis. Clinic of mild and severe acute pancreatitis. Methods of diagnosis of acute pancreatitis: clinical, laboratory, instrumental - ultrasound, CT, laparoscopy. Differential diagnosis of acute pancreatitis. ” “Complications of acute pancreatitis: acute pseudocyst of the pancreas, pancreatic abscess, widespread peritonitis, necrosis of the walls of the cavity, bleeding into the abdominal cavity, acute ulcers of the digestive tract, bleeding from acute ulcers into the cavity of the digestive tract, perforation. Modern treatment tactics for acute pancreatitis. Conservative therapy. Indications for surgical treatment. Methods of minimally invasive and open surgical interventions. ”
8.	Peritonitis . Acute peritonitis. “Etiology, pathogenesis, classification of acute peritonitis. Clinical characteristics of the stages of peritonitis. Features of the clinical course of primary and secondary peritonitis. Clinical characteristics of local and 9 common acute peritonitis. Diagnostic program. Instrumental research methods in acute peritonitis. Differential diagnosis of acute local and widespread peritonitis. Surgical tactics for acute local and widespread peritonitis. Puncture methods of treatment. Methods of prolonged rehabilitation of the abdominal cavity. Laparostomy. Intensive care for purulent peritonitis. Practical skills of work in a dressing room (care of a wound, drainages, change of bandages, removal of drainages, removal of seams, cultivation of a wound, surgical processing of the purulent center). Work in the intensive care unit. Work in the operating room (assistance in operations, catheterization of central veins, anesthesia, transfusion of drugs
9.	Diseases of the small and large intestine. Diseases of the small intestine. Research methods. Classification of surgical diseases of the small intestine. Diverticula, Meckel's diverticulum, its complications. Crohn's disease of the small intestine, intestinal infectious and parasitic diseases. Surgical tactics for complicated forms of infectious and parasitic diseases of the small intestine. “Nonspecific ulcerative colitis (etiology, pathogenesis, classification, clinic, research methods, differential diagnosis, conservative and operative treatment). Crohn's disease of the colon (etiology, pathogenesis, classification, clinic, research methods, differential diagnosis, conservative and operative treatment).
10.	Acute complications of gastric ulcer and cat 12. Complications of peptic ulcer of the stomach and duodenum. “Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. “Pyloroduodenal stenosis (pathogenesis, classification, clinic, features of clinical manifestations of different degrees of stenosis, differential diagnosis, research methods, conservative and operative treatment, types of operations). Duodenal stenosis. Malignancy of the ulcer (problem condition, clinical manifestations, differential diagnosis, research methods, features of surgical interventions). Ulcerogenic endocrine diseases (primary hyperparathyroidism, Zollinger-Ellison syndrome, clinical features, diagnosis and treatment). Mallory-Weiss syndrome
11.	Perforated ulcer . Perforated ulcer. Clinic of typical and atypical perforated gastroduodenal ulcer. Diagnostic program for perforated ulcer. Differential diagnosis of typical and atypical perforated gastroduodenal ulcer. Therapeutic tactics for perforated gastroduodenal ulcer. Preparing the patient for surgery and choosing the optimal way to perform surgery. Conservative therapy in the postoperative period ”.
12.	Diseases of the liver and spleen . Diseases of the liver and spleen. “Fibrosis, cirrhosis of the liver. Surgical aspects of the topic. Pathogenesis, classification. Clinic. Complication. Diagnostic methods. Differential diagnosis.

	Treatment. Portal hypertension syndrome. Classification. Principles of conservative and operative treatment of portal hypertension and its complications. Hepatic failure. Problem status. Classification. Pathogenesis. Clinical manifestations depending on the severity. Modern methods of treatment of liver failure. Liver transplantation. Diseases of the spleen (trauma, abscess, cysts, heart attack, splenomegaly, hypersplenism, Werlhof's disease, Banti's disease, hemolytic jaundice, malarial splenomegaly). Clinic. Diagnosis. Differential diagnosis. Treatment. Indications for splenectomy. Postsplenectomy syndrome. Curation of patients with pathology of the hepatopancreatobiliary area”.
13.	Diseases of the extrahepatic bile ducts . “Gallstone disease. Etiology. Pathogenesis. The reasons for the formation of stones. Clinic, diagnosis. Differential diagnosis. Chronic calculous cholecystitis. Clinical manifestations. Complication. Research methods. Differential diagnosis. Principles of treatment. Indications for endoscopic, laparoscopic and interventions with minilaparotomy approaches. Postcholecystectomy syndrome. Frequency. Classification. Clinic of various forms. Differential diagnosis. Examination methods. Treatment. Jaundice as a surgical problem. Etiology, pathogenesis. Clinical and manifestations. Research methods. Principles of conservative treatment. Surgical tactics. The role of minimally invasive surgical methods in the treatment of mechanical jaundice. .
14.	External and internal abdominal hernias. Complications of hernias . External abdominal hernia. Definition. Actuality of theme. Classification. Etiology. Pathogenesis. Clinic of the disease. Modern survey methods. General principles of surgical treatment. Indications and contraindications to surgery. Hernia of the white line of the abdomen. Umbilical hernias. Postoperative hernias. A typical clinic. Classification. Differential diagnosis of each type of hernia. Methods of surgical intervention: classical and laparoscopic. Inguinal and femoral hernias. A typical clinic. Classification. Differential diagnosis. Methods of surgical intervention (Lichtenstein, Cilbert, Shouldice, classical and laparoscopic methods). Complications of hernias (acute and chronic). Types of pinching by mechanism, clinical picture. Classical clinic of pinching and features of the clinical course of its various forms. Differential diagnosis. Examination methods.
15.	Acute appendicitis. Complications of acute appendicitis . Acute appendicitis and its complications. “Acute appendicitis. Anatomical and physiological information. Etiology and pathogenesis. Classification. Clinical picture of a typical course of acute appendicitis. Diagnosis and differential diagnosis of acute appendicitis. Tactics of treatment of acute appendicitis. Types of appendectomies ”. “Peculiarities of acute appendicitis in pregnant women, children and elderly patients. Atypical forms of acute appendicitis. Diagnostic and treatment program. The role of laparoscopic technologies in the diagnosis and treatment of patients with acute appendicitis. Complications of acute appendicitis: appendicular infiltrate, appendicular abscess, internodal, subhepatic, pelvic and subphrenic abscesses, appendicular 7 peritonitis. Pylephlebitis. Sepsis. Clinic, diagnosis, modern treatment tactics. Complications of appendectomy. Diagnosis and treatment.”
16.	Chronic ischemia of the lower extremities: Obliterating atherosclerosis, obliterating endarteritis, Raynaud's disease, Takayasu's disease. Causes, pathogenesis, classification of chronic ischemia according to the level of occlusion of the aorta and arteries of the extremities. Clinic, diagnosis, differential diagnosis, treatment.
17.	Diabetic foot syndrome: causes, pathogenesis, classification. Clinical manifestations, variants of clinical course, complications. Diagnosis, differential diagnosis. Conservative and surgical treatment of diabetic angiopathy,
18.	Acute limb ischemia syndrome. Causes: arterial thrombosis and embolism, limb injury, compartment syndrome. Classification of the syndrome of acute ischemia of the extremities. Clinic, variants of clinical course, complications. Diagnosis, first aid, treatment tactics
19.	Chronic venous insufficiency syndrome. Varicose veins of the lower extremities, primary and secondary varicose veins. Causes, pathogenesis, classification, clinic, diagnosis, complications.
20.	Thrombosis and thrombophlebitis of superficial and deep main veins of the extremities. Causes, pathogenesis, classification, clinic, diagnosis, complications. Conservative and surgical treatment.
21.	Postrombophlebitic syndrome. Etiopathogenesis, classification. Clinic. Diagnosis, differential diagnosis. Conservative and methods of surgical treatment. Trophic ulcer as a complication of varicose veins: causes, pathogenesis, clinic, methods of treatment. Lymphedema of the extremities.
	5th year (9 semesters)
1.	1. Acute appendicitis. Anatomical and physiological information. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Treatment tactics.
2.	Atypical clinical picture of acute appendicitis Complications of acute appendicitis and appendectomy. Diagnostic and treatment program.
3.	Anatomical and physiological features of the biliary tract. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Surgical tactics.
4.	Features of the clinical course, clinical picture of acute cholecystitis and diagnostic and treatment program in elderly patients and patients with concomitant pathology. Complications of acute cholecystitis and cholecystectomy
5.	Etiology and pathogenesis, classification of acute pancreatitis. Clinic of mild and severe acute pancreatitis. Differential diagnosis of acute pancreatitis.
6.	Complications of acute pancreatitis: acute pseudocyst of the pancreas, pancreatic abscess, widespread peritonitis, necrosis of the walls of the cavity, bleeding into the abdominal cavity, acute ulcers of the digestive tract, bleeding from acute ulcers into the cavity of the digestive tract, perforation.
7.	Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. Clinic of typical and

	atypical perforated gastroduodenal ulcer. Therapeutic tactics for perforated gastroduodenal ulcer
8.	Etiopathogenesis, classification of ulcerative hemorrhage. Clinic of ulcerative bleeding. Laboratory and endoscopic methods for the diagnosis of ulcerative hemorrhage. Therapeutic tactics for ulcerative hemorrhage.
9.	Acute intestinal obstruction Etiology and pathogenesis. Typical clinical picture. Classification
10.	Acute intestinal obstruction Principles of conservative and surgical treatment
11.	Etiology, pathogenesis, classification of acute peritonitis. Clinic. Treatment tactics for acute peritonitis .
12.	Classification of abdominal hernias. Etiology. Pathogenesis. Clinic of the disease. Principles of surgical treatment. Complications .
13.	Curation of patients. Writing a medical history.
14.	Complications of peptic ulcer of the stomach and duodenum. Conservative and operative treatment, types of operations. Diseases of the operated stomach
15.	Liver disease Fibrosis, cirrhosis of the liver .. Liver failure. Parasitic and non-parasitic liver lesions. Examination methods. Complication. Principles of treatment tactics ”.
16.	Jaundice as a surgical problem. Gallstone disease. Clinical manifestations. Research methods. Differential diagnosis. Principles of treatment. Postcholecystectomy syndrome.
17.	Chronic pancreatitis. Diagnostic methods. Clinic. Diagnosis. Complications of chronic pancreatitis. Principles of treatment. Cysts and fistulas. Principles of surgical tactics ”. Diseases of the spleen
18.	Classification of surgical diseases of the small intestine. Nonspecific ulcerative colitis. Crohn's disease of the colon. Diverticular disease and polyposis of the colon
19.	Diseases of the rectum - hemorrhoids, paraproctitis, anal fissure, rectal prolapse
20	Diseases of the soft tissues of the perineum “Perineal omission syndrome. Pyoderma of the perineum. Perineal condyloma. Epithelial coccygeal immersion
	5th year (10 semesters)
1.	Abdominal pain, assessment of the features of the pain syndrome in the differential diagnosis of diseases of the abdominal cavity.
2.	Syndromes of dysphagia, vomiting and violation of the act of defecation. Significance in diagnosis and differential diagnosis. Medical tactics.
3.	Acute abdomen syndrome. Diagnosis, differential diagnosis and treatment tactics. Differential diagnosis of acute diseases of the abdominal cavity.
4.	Local and widespread purulent-inflammatory processes of the abdominal cavity and peritoneum. Etiology, pathogenesis, clinic, diagnosis and treatment.
5.	Mechanical jaundice. Causes. Differential diagnostic tactics. Modern approaches to treatment. Hepatic insufficiency in surgical diseases, methods of prevention and treatment.
6.	Bleeding from the digestive tract. Causes, diagnosis and differential diagnosis, treatment tactics.
7.	Life traumas. Symptoms of damage to the abdominal cavity and retroperitoneal space. Instrumental diagnostic methods. Therapeutic and diagnostic tactics .
8.	Features of the course of surgical diseases in pregnant women. Diagnosis and differential diagnosis of acute diseases of the abdominal cavity. Features of the survey. Surgical tactics. Prevention of premature birth.
9.	The course of acute diseases in the elderly .
10.	Surgical complications in patients with infectious pathology. Differential diagnosis between acute surgical and infectious diseases. .
11.	Modern methods of diagnosis and treatment of diseases of the cardiovascular and respiratory systems
12.	Syndromes of chest pain, respiratory and heart failure in the diagnosis and differential diagnosis of diseases of the thoracic cavity.
13.	Surgical pathology of the lungs and pleura. Principles of diagnosis and treatment.
14.	Damage to the thoracic cavity. Diagnostic program for heart damage. Triad of heart injury symptoms. The only clinical-diagnostic and medical-surgical program for heart injuries
15.	Damage to the thoracic cavity. Clinic and diagnosis of pneumothorax, hemothorax and chylothorax. Therapeutic approaches.
16.	Aortic arch syndrome. Clinic, diagnosis, differential diagnosis, treatment approaches
17.	Limb ischemia syndrome. Causing diseases. Conservative and surgical treatment of occlusions of the lower extremities.
18.	Assessment of pain syndrome in the extremities in the diagnosis and differential diagnosis of vascular diseases, lesions of the nervous system and pathology of the musculoskeletal system.
19.	Problems of thrombosis and embolism. Causes, ways of prevention, diagnosis and differential diagnosis, treatment tactics. Modern possibilities of conservative treatment. Indications for surgical treatment and its main methods.
20.	Diseases of the veins. Syndrome of the superior vena cava. Lower vena cava syndrome. Causes,

	diagnosis, differential diagnosis, treatment tactics.
	6 course (11 semester)
1.	Chest injuries. Classification. Early and late complications. Differential diagnosis. First aid and treatment tactics.
2.	Mr niyni lung disease i pleura. Lung abscess and gangrene, bronchiectasis. Acute and chronic pleural empyema, pyopneumothorax. Features of the clinical course. Differential diagnosis. Methods of conservative and surgical treatment.
3.	Modern methods of diagnosis, minimally invasive surgical treatment of heart disease
4.	Acquired heart defects. Classification. Diagnosis. Indications for surgical treatment. Methods of surgical interventions. Complication
5.	Ischemic heart disease. Diagnosis. Indications for surgical treatment. Methods of surgical interventions
6.	myocardial infarction, cardiac aneurysm, conduction disorders. Indications for surgical treatment. Methods of surgical interventions.
7.	Diseases of the interstitium Classification. Diagnosis. Differential diagnosis. Methods of surgical treatment. Diseases and injuries of the esophagus.
8.	Euthyroid and toxic goiter. Classification. Special research methods. Diagnosis. Differential diagnosis. Preoperative preparation. Surgical treatment
9.	Diseases of the breast (dyshormonal, tumor) Mastitis
10.	Arterial thrombosis and embolism.
11.	Classification i Katz i i acute i Shem i J K i SC i wok. Kl i n i chn i stud i ji pereb i gu. Diagnosis. Differential diagnosis. Methods of surgical treatment .
12.	Classification of acute limb ischemia. Clinical stages of the course. Diagnosis. Differential diagnosis. Methods of surgical treatment .
13.	Pulmonary artery thromboembolism. Clinic, diagnosis, treatment. Means of prevention.
14.	Abdominal ischemic syndrome. Clinical variants of the course. Diagnosis. Differential diagnosis. Complication. Methods of conservative treatment. Prevention. Rehabilitation.
15.	Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities
16.	Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities
17.	Varicose veins of the lower extremities. Classification. Complication. Diagnosis. Special research methods. Methods of surgical treatment.
18.	Thrombosis of the main veins. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of conservative and surgical treatment
19.	Postthrombophlebitic syndrome. Classification. Diagnosis. Conservative and surgical methods of treatment.
20.	Lymphedema of the extremities. Forms of the disease. Clinic. Diagnosis. Variants of the clinical course. Conservative and surgical treatment
	6 course (12 semester)
1.	Trauma in children .. Emergency medical care
2.	Chest injury and esophageal injury. Purulent diseases of the lungs and pleura
3.	Acquired intestinal obstruction. Inflammatory diseases of the abdominal cavity. Closed life trauma. . Bleeding from the digestive system. Portal hypertension .
4.	Urolithiasis. Swollen scrotum syndrome. Traumatic injuries of the urinary system.
5.	Purulent-inflammatory diseases of bones and joints. Purulent-inflammatory diseases of soft tissues.
6.	Benign neoplasms of soft tissues
7.	Malignant neoplasms of soft tissues
8.	Shock. Shock therapy. Cardiopulmonary resuscitation in a hospital
9.	Ultrasound diagnosis of the cardiovascular system. X-ray and radioisotope methods for diagnosing cardiovascular diseases
10.	Angiocardiography and catheterization of heart cavities and basins of main vessels
11.	Anesthesiology, intensive care, resuscitation, artificial circulation, transfusiology and myocardial protection
12.	Surgery for coronary heart disease
13.	Surgery for congenital heart disease
14.	Surgery for acquired heart defects
15.	Surgery for arrhythmias and conduction

16.	Surgery for other heart diseases
17.	The main dangers and complications in cardiovascular surgery
18.	The main dangers and complications in cardiovascular surgery
19.	Urgent cardiovascular surgery

Topics for VTS Course 4. (semester 7)	
1.	Desmurgia. Definition. Rules of application and types of bandages. Typical bandages on the upper limb, head, neck, chest.
2.	Antisepsis. Types of antiseptics. Characteristics of the main groups of antiseptics and the main methods of their application.
3.	Nosocomial infection. Sanitary epidemic - logical mode. Asepsis.
4.	Surgery. Classification of surgical operations. Stages of surgery. Preoperative preparation of the patient and management of the postoperative period. Features of surgery in the context of incurable disease, indications. The concept of palliative surgery.
5.	Bleeding and blood loss. Methods of temporary and final cessation of bleeding.
6.	Blood transfusion. Determination of blood groups by ABO and Rh-factor systems. Samples for individual compatibility by ABO and Rh-factor systems, biological test.
7.	Complications hemotran - sfuziyi and their prevention. Prevention of transmission of infectious diseases during transfusion of blood components. Blood substitutes: classification, mechanism of action, indications and methods of application.
8.	General zneboluyvan - tion. Inhaled and neinhalyatsiy - tion anesthesia. Indications and contraindications. Complications and their prevention.
9.	Resuscitation: terminal conditions; clinical death; basic cardiopulmonary resuscitation.
10.	Closed soft tissue injuries: bruising, concussion, rupture. Clinic, diagnosis of closed soft tissue injuries, first aid, principles of treatment.
11.	Fractures and dislocations: classification; clinical manifestations; diagnostics; first aid; principles of treatment.
12.	Polytrauma. Multiple injuries combined and combi - President dieter f injury. Traumatic shock. Prolonged compression syndrome: pathogenesis, clinic, diagnosis, first aid, principles of treatment.
13.	<b>Topic 16.</b> Wounds, definition, classification. Wound structure and course of the wound process. Features of modern fire - combustible wounds and mine-explosive damage. Random contaminated wound, the conditions for the development of infections - tion process in the wound and their removal (Pho). Net after - wound, especially treatment.
14.	Infected wounds. Stages of the wound process. Treatment of an infected wound depending on the stage of the wound process. Clinical analysis of a patient with an infected wound.
15.	Burns: classification, clinic. First aid for various types of burns. Defeat by light radiation of a nuclear explosion. Burns caused by incendiary mixtures.
16.	Burn disease. Treatment of burns in the hospital depending on the period of burn disease. Types of surgical operations used in the treatment of burns.
17.	Freezing. Classes - fikatsiya. The mechanism of defeat. Clinical signs. First aid and treatment. Electrotrauma: the mechanism of electric shock; clinical signs; diagnostics; first aid and its features.
Topics for VTS Course 4. (semester 8)	
1.	General issues of surgery. Examination of patients with a surgical profile
2.	General principles of care for surgical patients.
3.	Symptoms and syndromes in surgery.
4.	Surgical pathology of the venous and lymphatic systems
5.	a surgical patient
6.	Acute cholecystitis. Complications of acute cholecystitis
7.	Acute pancreatitis. Chronic diseases of the pancreas
8.	Peritonitis
9.	Diseases of the small and large intestine.
10.	Acute complications of gastric ulcer and cat 12.
11.	Perforated ulcer



12.	Diseases of the liver and spleen
13.	Diseases of the extrahepatic bile ducts.
14.	External and internal abdominal hernias. Complications of hernias
15.	External and internal abdominal hernias. Complications of hernias
16.	Acute appendicitis. Complications of acute appendicitis
17.	Chronic ischemia of the lower extremities: Obliterating atherosclerosis, obliterating endarteritis, Raynaud's disease, Takayasu's disease. Causes, pathogenesis, classification of chronic ischemia according to the level of occlusion of the aorta and arteries of the extremities. Clinic, diagnosis, differential diagnosis, treatment.
18.	Diabetic foot syndrome: causes, pathogenesis, classification. Clinical manifestations, variants of clinical course, complications. Diagnosis, differential diagnosis. Conservative and surgical treatment of diabetic angiopathy,
19.	Acute limb ischemia syndrome. Causes: arterial thrombosis and embolism, limb injury, compartment syndrome. Classification of the syndrome of acute ischemia of the extremities. Clinic, variants of clinical course, complications. Diagnosis, first aid, treatment tactics
20.	Chronic venous insufficiency syndrome. Varicose veins of the lower extremities, primary and secondary varicose veins. Causes, pathogenesis, classification, clinic, diagnosis, complications.
21.	Thrombosis and thrombophlebitis of superficial and deep main veins of the extremities. Causes, pathogenesis, classification, clinic, diagnosis, complications. Conservative and surgical treatment.
22.	Postrombophlebitic syndrome. Etiopathogenesis, classification. Clinic. Diagnosis, differential diagnosis. Conservative and methods of surgical treatment. Trophic ulcer as a complication of varicose veins: causes, pathogenesis, clinic, methods of treatment. Lymphedema of the extremities.
Topics for VTS Course 5 semester 9	
1.	Acute appendicitis. Anatomical and physiological information. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Treatment tactics.
2.	2. Atypical clinical picture of acute appendicitis Complications of acute appendicitis and appendectomy. Diagnostic and treatment program.
3.	3. Anatomical and physiological features of the biliary tract. Etiology and pathogenesis. Classification. Clinic, diagnostics, differential diagnosis. Surgical tactics.
4.	Features of the clinical course, clinical picture of acute cholecystitis and diagnostic and treatment program in elderly patients and patients with concomitant pathology. Complications of acute cholecystitis and cholecystectomy
5.	Etiology and pathogenesis, classification of acute pancreatitis. Clinic of mild and severe acute pancreatitis. Differential diagnosis of acute pancreatitis.
6.	Complications of acute pancreatitis: acute pseudocyst of the pancreas, pancreatic abscess, widespread peritonitis, necrosis of the walls of the cavity, bleeding into the abdominal cavity, acute ulcers of the digestive tract, bleeding from acute ulcers into the cavity of the digestive tract, perforation.
7.	Etiology and pathogenesis, classification of perforated gastroduodenal ulcers. Clinic of typical and atypical perforated gastroduodenal ulcer. Therapeutic tactics for perforated gastroduodenal ulcer
8.	Etiopathogenesis, classification of ulcerative hemorrhage. Clinic of ulcerative bleeding. Laboratory and endoscopic methods for the diagnosis of ulcerative hemorrhage. Therapeutic tactics for ulcerative hemorrhage.
9.	Acute intestinal obstruction Etiology and pathogenesis. Typical clinical picture. Classification
10.	10. Acute intestinal obstruction Principles of conservative and surgical treatment
11.	Etiology, pathogenesis, classification of acute peritonitis. Clinic. Treatment tactics for acute peritonitis .
12.	Classification of abdominal hernias. Etiology. Pathogenesis. Clinic of the disease. Principles of surgical treatment. Complications .
13.	Curation of patients. Writing a medical history.
14.	Complications of peptic ulcer of the stomach and duodenum. Conservative and operative treatment, types of operations. Diseases of the operated stomach
15.	Liver disease Fibrosis, cirrhosis of the liver .. Liver failure. Parasitic and non-parasitic liver lesions. Examination methods. Complication. Principles of treatment tactics ”.
16.	Jaundice as a surgical problem. Gallstone disease. Clinical manifestations. Research methods. Differential diagnosis. Principles of treatment. Postcholecystectomy syndrome.
17.	Chronic pancreatitis. Diagnostic methods. Clinic. Diagnosis. Complications of chronic pancreatitis. Principles of treatment. Cysts and fistulas. Principles of surgical tactics ”. Diseases of the spleen
18.	Classification of surgical diseases of the small intestine. Nonspecific ulcerative colitis. Crohn's disease of the colon. Diverticular disease and polyposis of the colon

19.	Diseases of the rectum - hemorrhoids, paraproctitis, anal fissure, rectal prolapse
20.	Diseases of the soft tissues of the perineum "Perineal omission syndrome. Pyoderma of the perineum. Perineal condyloma. Epithelial coccygeal immersion
	Topics for VTS 5th year 10th semester
1.	Abdominal pain, assessment of the features of the pain syndrome in the differential diagnosis of diseases of the abdominal cavity.
2.	Syndromes of dysphagia, vomiting and violation of the act of defecation. Significance in diagnosis and differential diagnosis. Medical tactics.
3.	Acute abdomen syndrome. Diagnosis, differential diagnosis and treatment tactics. Differential diagnosis of acute diseases of the abdominal cavity.
4.	Local and widespread purulent-inflammatory processes of the abdominal cavity and peritoneum. Etiology, pathogenesis, clinic, diagnosis and treatment.
5.	Mechanical jaundice. Causes. Differential diagnostic tactics. Modern approaches to treatment. Hepatic insufficiency in surgical diseases, methods of prevention and treatment.
6.	Bleeding from the digestive tract. Causes, diagnosis and differential diagnosis, treatment tactics.
7.	Life traumas. Symptoms of damage to the abdominal cavity and retroperitoneal space. Instrumental diagnostic methods. Therapeutic and diagnostic tactics .
8.	Features of the course of surgical diseases in pregnant women. Diagnosis and differential diagnosis of acute diseases of the abdominal cavity. Features of the survey. Surgical tactics. Prevention of premature birth.
9.	The course of acute diseases in the elderly .
10.	Surgical complications in patients with infectious pathology. Differential diagnosis between acute surgical and infectious diseases. .
11.	Modern methods of diagnosis and treatment of diseases of the cardiovascular and respiratory systems
12.	Syndromes of chest pain, respiratory and heart failure in the diagnosis and differential diagnosis of diseases of the thoracic cavity.
13.	Surgical pathology of the lungs and pleura. Principles of diagnosis and treatment.
14.	Damage to the thoracic cavity. Diagnostic program for heart damage. Triad of heart injury symptoms. The only clinical-diagnostic and medical-surgical program for heart injuries
15.	Damage to the thoracic cavity. Clinic and diagnosis of pneumothorax, hemothorax and chylothorax. Therapeutic approaches.
16.	16. Aortic arch syndrome. Clinic, diagnosis, differential diagnosis, treatment approaches
17.	Limb ischemia syndrome. Causing diseases. Conservative and surgical treatment of occlusions of the lower extremities.
18.	Assessment of pain syndrome in the extremities in the diagnosis and differential diagnosis of vascular diseases, lesions of the nervous system and pathology of the musculoskeletal system.
19.	Problems of thrombosis and embolism. Causes, ways of prevention, diagnosis and differential diagnosis, treatment tactics. Modern possibilities of conservative treatment. Indications for surgical treatment and its main methods.
20.	Diseases of the veins. Syndrome of the superior vena cava. Lower vena cava syndrome. Causes, diagnosis, differential diagnosis, treatment tactics.
	Topics for VTS 6 course 11 semester
1.	<b>1.</b> Chest injuries. Classification. Early and late complications. Differential diagnosis. First aid and treatment tactics.
2.	2. Diseases of the lungs and pleura. Lung abscess and gangrene, bronchiectasis. Acute and chronic pleural empyema, pyopneumothorax. Features of the clinical course. Differential diagnosis. Methods of conservative and surgical treatment.
3.	3. Modern methods of diagnosis, minimally invasive surgical treatment of heart disease
4.	4. Acquired heart defects. Classification. Diagnosis. Indications for surgical treatment. Methods of surgical interventions. Complication
5.	5. Ischemic heart disease. Diagnosis. Indications for surgical treatment. Methods of surgical interventions
6.	6. myocardial infarction, cardiac aneurysm, conduction disorders. Indications for surgical treatment. Methods of surgical interventions.
7.	7. Diseases of the interstitium Classification. Diagnosis. Differential diagnosis. Methods of surgical treatment. Diseases and injuries of the esophagus.
8.	8. Euthyroid and toxic goiter. Classification. Special research methods. Diagnosis. Differential diagnosis. Preoperative preparation. Surgical treatment

9.	9. Diseases of the breast (dyshormonal, tumor) Mastitis
10.	10. Arterial thrombosis and embolism.
11.	11. Classification i Katz i i acute i Shem i J K i SC i wok. Kl i n i chn i stud i ji pereb i gu. Diagnosis. Differential diagnosis. Methods of surgical treatment .
12.	12. Classification of acute limb ischemia. Clinical stages of the course. Diagnosis. Differential diagnosis. Methods of surgical treatment .
13.	13. Pulmonary artery thromboembolism. Clinic, diagnosis, treatment. Means of prevention.
14.	14. Abdominal ischemic syndrome. Clinical variants of the course. Diagnosis. Differential diagnosis. Complication. Methods of conservative treatment. Prevention. Rehabilitation.
15.	15. Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities
16.	16. Chronic ischemia of the lower extremities. Obliterating atherosclerosis and endarteritis. Classification of chronic ischemia and levels of aortic and arterial occlusion of the lower extremities
17.	17. Varicose veins of the lower extremities. Classification. Complication. Diagnosis. Special research methods. Methods of surgical treatment.
18.	18. Thrombosis of the main veins. Classification. Clinic. Diagnosis. Differential diagnosis. Methods of conservative and surgical treatment
19.	19. Postthrombophlebitic syndrome. Classification. Diagnosis. Conservative and surgical methods of treatment.
20.	20. Lymphedema of the extremities. Forms of the disease. Clinic. Diagnosis. Variants of the clinical course. Conservative and surgical treatment
	Topics for VTS 6 course 12 semester
1.	1. Trauma in children .. Emergency medical care
2.	2. Trauma of the thoracic cavity and damage to the esophagus. Purulent diseases of the lungs and pleura
3.	3. Acquired intestinal obstruction. Inflammatory diseases of the abdominal cavity. Closed life trauma. . Bleeding from the digestive system. Portal hypertension .
4.	4. Urolithiasis. Swollen scrotum syndrome. Traumatic injuries of the urinary system.
5.	5. Purulent-inflammatory diseases of bones and joints. Purulent-inflammatory diseases of soft tissues.
6.	6. Benign neoplasms of soft tissues
7.	7. Malignant neoplasms of soft tissues
8.	8. Shock. Shock therapy. Cardiopulmonary resuscitation in a hospital
9.	9. Ultrasound diagnosis of the cardiovascular system. X-ray and radioisotope methods for diagnosing cardiovascular diseases
10.	10. Angiocardiology and catheterization of the heart cavities and basins of the main vessels
11.	11. Anesthesiology, intensive care, resuscitation, artificial circulation, transfusiology and myocardial protection
12.	12. Surgery for coronary heart disease
13.	13. Surgery for congenital heart disease
14.	14. Surgery for acquired heart defects
15.	15. Surgery of arrhythmias and conduction
16.	16. Surgery for other heart diseases
17.	17. The main dangers and complications in cardiovascular surgery
18.	18. The main dangers and complications in cardiovascular surgery
19.	19. Urgent cardiovascular surgery

### **3.3. Ensuring the educational process**

Lectures are provided with technical support:

- computer
- projection screen
- multimedia projector
- presentation programs (lectures)
- Practical classes:
  - Manikin - simulator "Maxim - 3"
  - Bag - AMBU
  - Dressing material, fixing tires, jute
  - Simulators of venous injections, catheterization of the bladder, blood pressure monitor
  - Breast examination simulator
  - Device for training in tying surgical knots and suturing soft tissues
  - Laryngoscope
  - A set of air ducts
  - Airway simulator for the introduction of air ducts

### **4. Final control**

The list of theoretical questions, practical skills and professional skills that the student must master. Theoretical questions:

1. Anatomical and functional information about the cecum and appendicular process.
2. Methods of examination of patients with acute appendicitis.
3. Clinic of acute appendicitis.
4. Etiology and pathogenesis of acute appendicitis.
5. Differential diagnosis of acute appendicitis.
6. Features of the clinical course of acute appendicitis in children.
7. Features of the clinical course of acute appendicitis in pregnant women.
8. Features of the clinical course of acute appendicitis in elderly and elderly patients.
9. Complications of acute appendicitis.
10. Appendicular infiltrate (clinic, diagnosis, treatment tactics).
11. Appendicular abscess of the right iliac region (clinic, diagnosis, treatment tactics).
12. Pelvic abscess. Clinic, diagnosis, treatment tactics.
13. Subphrenic abscess. Clinic, diagnosis, treatment tactics.
14. Pylephlebitis. Clinic, diagnosis, treatment tactics.
15. Spilled appendicular peritonitis. Clinic, diagnosis, treatment tactics.
16. Technique of typical appendectomy.

17. Laparoscopic appendectomy.
18. Features of operative equipment depending on the form of acute appendicitis and location of the appendix.
19. Type of access and scope of surgery for various complications of acute appendicitis.
20. Complications during appendectomy.
21. Complications of appendectomy in the early and late postoperative period. 22. Management of the postoperative period in patients with appendicitis and its complications. 23. Anatomical and functional information about the gallbladder and extrahepatic bile ducts. 24. Etiology and pathogenesis of acute cholecystitis.
25. Classification of acute cholecystitis.
26. Methods of examination of patients with acute cholecystitis.
27. Typical clinical picture of acute cholecystitis, its features among young and senile people.
28. Differential diagnosis of acute cholecystitis.
29. Diagnostic program for acute cholecystitis.
30. Treatment program of acute cholecystitis.
31. Complications of acute cholecystitis.
32. Features of the clinical picture of acute cholecystitis in the presence of concomitant pathology.
33. Clinical picture of complications of acute cholecystitis and their differential diagnosis. 34. Indications for emergency surgery in acute cholecystitis.
35. Indications for urgent operations (24-48 hours) in acute cholecystitis.
36. The nature of surgical interventions in acute cholecystitis.
37. The nature of surgical interventions for complications of acute cholecystitis.
38. Indications for minimally invasive surgical interventions (endoscopic, laparoscopic, under the control of CT and ultrasound).
39. Intraoperative complications of cholecystectomy and their treatment.
40. Postoperative complications and their prevention and treatment.
41. Preoperative preparation of patients with acute cholecystitis.
42. Postoperative management of patients with acute cholecystitis.
43. Anatomical and functional types of the pancreas.
44. Etiology and pathogenesis of acute pancreatitis.
45. Classification of acute pancreatitis.
46. Methods of examination of patients with acute pancreatitis.
47. Typical clinical picture of acute pancreatitis.
48. Differential diagnosis of acute pancreatitis.
49. Diagnostic program for acute pancreatitis.

50. Therapeutic tactics for acute pancreatitis.
51. Complications of acute pancreatitis.
52. Features of the clinical picture of acute pancreatitis in the presence of concomitant pathology.
53. Clinical picture of complications of acute pancreatitis and their differential diagnosis.
54. Indications for surgery in acute pancreatitis.
55. The nature of surgical interventions in acute pancreatitis.
56. The nature of surgical interventions for complications of acute pancreatitis.
57. Indications for minimally invasive surgical interventions (endoscopic, laparoscopic, ultrasound-guided) in acute pancreatitis.
58. Treatment of patients with acute pancreatitis in the postoperative period.
59. Anatomical and functional information about the stomach and duodenum.
60. Modern definition and methods of diagnosis of peptic ulcer of the stomach and duodenum.
61. What are the factors of aggression in the development of peptic ulcer disease?
62. What about the factors of protection of the gastric mucosa?
63. What are the anatomical areas of the stomach?
64. At the expense of which arteries the stomach is supplied with blood?
65. What is the effect of the vagus nerve on the stomach?
66. What is the effect of sympathetic innervation on the stomach?
67. What are the complications of peptic ulcer of the stomach and duodenum?
68. What are the features of the pain syndrome in gastric ulcer localization?
69. What are the features of pain in duodenal ulcers?
70. What are the objective clinical signs found in peptic ulcer of the stomach and duodenum?
71. What is the essence of the diagnostic program for peptic ulcer of the stomach and duodenum?
72. With what diseases it is necessary to carry out differential diagnosis of a peptic ulcer of a stomach and a duodenum?
73. Methods of examination of patients with perforated ulcer.
74. Classification of perforated ulcer.
75. Etiology and pathogenesis of perforated ulcer.
76. Clinic of a typical perforated ulcer.
77. Differential diagnosis of perforated ulcer.
78. Features of the clinical course of atypical perforated ulcer.
79. Features of a clinical course of the covered perforated ulcer.
80. Features of a clinical course of a perforated ulcer at perforation in an epiploon bag.
81. Features of a perforated ulcer at its breakthrough into retroperitoneal space.
82. Choice of volume of surgical intervention at a perforated ulcer.

83. Technique of suturing a perforated ulcer.
84. Technique of pyloroduodenoplasty.
85. Choice of method of vagotomy and pyloroduodenoplasty.
86. Indications for and technique of selective vagotomy and antrumectomy.
87. Indications for performing and technique of selective proximal vagotomy and pyloroduodenoplasty.
88. Indications for conducting and technique of gastrectomy for perforated ulcer.
89. Laparoscopic technologies in the surgical treatment of perforated ulcers.
90. Complications in the early postoperative period when performing surgical interventions for perforated ulcers.
91. Complications in the late postoperative period when performing surgical interventions for perforated ulcers.
92. Treatment of complications in the late postoperative period when performing surgical interventions for perforated ulcers.
93. Features of management of patients with perforated ulcer in the early and late postoperative period.
94. Complications in the late postoperative period when performing surgical interventions for perforated ulcers.
95. What complaints are observed at patients in the presence of an obstacle at the level of initial department of a stomach?
96. What complaints are observed at patients in the presence of an obstacle at the level of distal department of a duodenum?
97. Define pyloroduodenal stenosis.
98. What are the causes of pyloroduodenal stenosis?
99. What is the classification of pyloroduodenal stenosis?
100. What complaints are observed in subcompensated stenosis?
101. What are the complaints of compensated stenosis?
102. What are the complaints of decompensated stenosis?
103. What are the objective clinical signs of subcompensated and decompensated pyloroduodenal stenosis?
104. Radiological signs of the degree of pyloroduodenal stenosis.
105. What are the principles of treatment of pyloroduodenal stenosis?
106. What are the indications for surgical treatment of peptic ulcer of the stomach and duodenum?
107. What methods of operations should be considered when localizing an ulcer in the duodenum?
108. What methods of operations should be considered when localizing a stomach ulcer?
109. Determination of peptic ulcer anastomosis.

110. What are the causes of avian ulcers anastomosis?
111. What are the complaints of patients with peptic ulcer anastomosis?
112. What are the objective clinical signs can be detected in peptic ulcer anastomosis?
113. What is the essence of the diagnostic program for peptic ulcer anastomosis?
114. What diseases should be diagnosed with peptic ulcer anastomosis?
115. What drug treatment is used for peptic ulcer anastomosis?
116. What is the scope of surgery for peptic ulcer anastomosis?
117. Define Mallory-Weiss syndrome.
118. What are the complaints of patients with Mallory-Weiss syndrome?
119. What are the objective manifestations of Mallory-Weiss syndrome?
120. What research methods are used to clarify the diagnosis of Mallory-Weiss syndrome?
121. With what diseases it is necessary to carry out differential diagnosis of Mallory-Weiss syndrome?
122. Treatment tactics for Mallory-Weiss syndrome.
123. What are the indications for surgical treatment of Mallory-Weiss syndrome?
124. Etiology and pathogenesis of gastrointestinal bleeding.
- 1 25. Methods of examination of patients with gastrointestinal bleeding.
126. Classification of ulcerative hemorrhages.
127. Clinic of gastrointestinal bleeding.
128. Differential diagnosis of ulcerative hemorrhage.
129. Features of the course of ulcerative gastroduodenal bleeding depending on the degree of its activity.
130. Features of the clinical course of active bleeding.
131. Features of the clinical course of ulcerated bleeding that has stopped.
132. Technique of suturing an ulcer that bleeds.
133. The choice of method of stopping bleeding depending on the degree of its activity.
134. Indications for conservative treatment of ulcerative hemorrhage.
135. Therapy of gastrointestinal bleeding.
136. Methods of endoscopic hemostasis and indications for their use.
137. Methods of surgical interventions for ulcerative hemorrhage.
138. The choice of method of surgical intervention depending on the patient's condition, the intensity of bleeding, the degree of blood loss, the location of the ulcer.
139. Features of the technique of surgical interventions for ulcerative bleeding.
140. Complications in the early postoperative period during surgery for ulcerative hemorrhage.
141. Treatment of complications in the early postoperative period when performing surgery for ulcerative hemorrhage.



142. Features of management of patients with ulcerative bleeding in the early and late postoperative period.
143. Anatomical and physiological information about the small and large intestine.
144. Definition of the concept of intestinal obstruction.
145. Etiology of intestinal obstruction.
146. Modern issues of pathogenesis of intestinal obstruction.
147. Classification of intestinal obstruction.
148. Causes of dynamic intestinal obstruction.
149. Clinic of dynamic intestinal obstruction.
150. Treatment of dynamic (functional) intestinal obstruction.
151. Types of mechanical obstruction of the intestines.
152. Clinic of obstructive obstruction of the intestines.
153. Features of the clinic of strangulation intestinal obstruction.
154. Features of the clinic of torsion of individual organs of the digestive tract.
155. Features of intussusception clinic.
156. Types of intussusception.
157. Features of treatment tactics depending on the time of onset of the disease.
158. Joint disease.
159. Etiology of connective tissue disease.
160. Modern aspects of the pathogenesis of connective tissue disease.
161. Typical clinical picture of connective tissue disease.
162. Differential diagnosis of intestinal obstruction.
163. Differential diagnosis of certain types of intestinal obstruction.
164. Modern methods of diagnosing acute intestinal obstruction.
165. Radiological signs of acute intestinal obstruction.
166. Ultrasonographic signs of acute intestinal obstruction.
167. Modern treatment program for intestinal obstruction.
168. Preoperative preparation of patients with acute intestinal obstruction.
169. The choice of the nature of surgery for different types and levels of intestinal obstruction.
170. Postoperative treatment program.
171. Prevention and prognosis in patients with acute intestinal obstruction.
172. Anatomical and functional information about the parietal and visceral peritoneum.
173. Etiology and pathogenesis of acute peritonitis.
174. Classification of acute peritonitis.
175. Methods of examination of patients with acute peritonitis.
176. Clinical picture of local acute peritonitis.

177. Clinical picture of widespread peritonitis.
178. Differential diagnosis of acute peritonitis.
179. Diagnostic program in a patient with acute peritonitis.
180. Treatment tactics in a patient with acute local peritonitis.
181. Treatment tactics in a patient with acute widespread peritonitis.
182. Complications of acute peritonitis.
183. Features of the clinical picture of acute peritonitis in the presence of concomitant pathology.
184. Treatment tactics for acute peritonitis.
185. Features of preoperative preparation at acute peritonitis.
186. Methods of surgical interventions for peritonitis depending on the spread of the inflammatory process in the abdominal cavity.
187. Indications for minimally invasive methods of treatment of patients with acute peritonitis.
188. Stages of surgery for acute peritonitis.
189. Postoperative complications in acute peritonitis, their diagnosis, prevention and treatment.
190. Management of patients in the postoperative period.
191. Abdominal compartment syndrome. Definition, causes. Diagnosis and treatment tactics.
192. Relaparotomy and laparostomy in the treatment of widespread peritonitis.
193. Definition of the concept of hernia.
194. Causes of hernia.
195. General symptoms of hernias.
196. The value of the shape and size of the hernia for the disease.
197. Classification of external hernias of the abdominal wall.
198. Complications of hernias. Definition, diagnosis and treatment.
199. Hernia of the white line of the abdomen. Clinic, classification, diagnosis, differential diagnosis, treatment.
200. Umbilical hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
201. Oblique inguinal hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
202. Direct inguinal hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
203. Postoperative hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
204. Femoral hernias. Clinic, classification, diagnosis, differential diagnosis, treatment.
205. Squeezed hernias. A typical clinic. Clinical types of pinched hernias. Diagnosis, differential diagnosis.
206. Surgical tactics for pinched hernia.
207. Features of surgical intervention at the pinched hernia.
208. Signs of viability and non-viability of the intestine.

209. Inflammation of the hernia. Clinic. Differential diagnosis. Surgical tactics.
210. Damage (injury) of a hernia. Clinic. Surgical tactics.
211. Intestinal obstruction in the hernia. Surgical tactics.
212. Incurable hernia. Clinic, diagnostics, differential diagnosis. Treatment.
213. Modern principles and methods of surgical treatment of hernias.
214. Internal hernias. Clinic. Classification. Diagnosis.
215. Hernia of the esophageal orifice of the diaphragm. Clinic. Diagnosis. Differential diagnosis.
216. What are the causes of hernia of the esophageal orifice of the diaphragm?
217. What is the mechanism of development of hernia of the entrance of the diaphragm?
218. What are the types of hernia of the esophageal orifice of the diaphragm?
219. What complaints of patients are observed at a hernia of an esophageal opening of a diaphragm?
220. What are the objective manifestations of hernia of the esophageal orifice of the diaphragm?
221. What complications can occur with a hernia of the esophageal orifice of the diaphragm?
222. Diagnostic program for hernia of the esophageal orifice of the diaphragm.
223. With what diseases it is necessary to carry out differential diagnosis at a hernia of an esophageal opening of a diaphragm?
224. What is the conservative treatment of hernia of the esophageal orifice of the diaphragm?
225. What are the indications for surgical treatment of hernia of the esophageal orifice of the diaphragm?
226. The essence of surgical interventions for hernia of the esophageal orifice of the diaphragm.
227. Temporary incapacity for work and rehabilitation of patients with hernia of the esophageal orifice of the diaphragm.
228. Prevention and prognosis in patients with hernia of the esophageal orifice of the diaphragm.
229. Nonspecific ulcerative colitis. Clinic, classification, diagnosis, differential diagnosis, treatment.
230. Crohn's disease. Clinic, classification, diagnosis, differential diagnosis, treatment.
231. Etiology, pathogenesis, classification of diverticular disease of the colon.
232. Clinic, research methods, differential diagnosis of diverticular disease of the colon.
233. Complications of diverticular disease of the colon. Conservative and operative treatment.
234. Classification, diagnosis and treatment of polyps and polyposis of the colon.
235. Intestinal transplantation. Classification of diseases requiring bowel transplantation. Methods of intestinal transplantation.
236. Mechanical jaundice. Causes. Differential diagnosis. Therapeutic tactics.

237. Liver cysts. Classification. Diagnosis, treatment.
238. Cirrhosis and liver fibrosis. Portal hypertension syndrome. Classification. Complication. Diagnosis and treatment.
239. Liver transplantation. Indications and contraindications to liver transplantation. Donor selection methodology. Liver transplantation methods. Conditions for storage of donor liver and its transportation.
240. Etiology, pathogenesis and classification of chronic pancreatitis.
241. Clinical course and methods of diagnosis of chronic pancreatitis.
242. Differential diagnosis of chronic pancreatitis.
243. Conservative and surgical treatment of chronic pancreatitis.
244. Complications of chronic pancreatitis. Clinic. Diagnosis. Differential diagnostics. Treatment.
245. Cysts and fistulas of the pancreas. Classification. Clinic. Diagnosis.
246. Complications of pancreatic cysts (suppuration, perforation, bleeding, malignancy). Principles of surgical tactics.
247. Indications for pancreas transplantation and their justification. Methods of pancreas transplantation.
248. Diseases of the spleen. Diagnosis and treatment tactics.
249. Surgical tactics for complicated forms of infectious and parasitic diseases of the small intestine.
250. Acute and chronic hemorrhoids (etiology, pathogenesis, classification, clinic, research methods, differential diagnosis, conservative and operative treatment, types of operations).
251. Acute and chronic paraproctitis (etiology, pathogenesis, classification, clinic, research methods, differential diagnosis, treatment).
252. Anal fissure. Etiology, pathogenesis, classification. Diagnosis and treatment.
253. Epithelial coccygeal course. Diagnosis and treatment.
254. Diseases of the soft tissues of the perineum (omission syndrome, pyoderma, perianal dermatitis, warts). Diagnosis and treatment.
255. Teratomas of pararectal localization. Classification. Diagnosis and treatment.

**"0" version of the exam ticket**

**Petro Mohyla Black Sea National University**  
Educational qualification level - master  
Field of knowledge: 22 Health care  
specialty 222 Medicine

Course - "Surgery"

1. Differential diagnosis of chronic pancreatitis. ( maximum number of points - 20.)

2. Clinic, diagnosis (characteristic symptoms) of acute appendicitis ( maximum number of points - 20.)
3. Acute and chronic paraproctitis (etiology, pathogenesis, classification, clinic, research methods, differential diagnosis, treatment). ( maximum number of points - 20.)
4. Anatomical and functional information about the gallbladder and extrahepatic bile ducts. ( maximum number of points - 20.)

Head of the Department

Zak M. Yu.

## 5. Evaluation criteria and diagnostic tools for learning outcomes

### Control methods

- **Survey (testing of theoretical knowledge and practical skills).**
- **Test control.**
- **Writing a review of scientific literature (abstracts).**
- **Preparation of presentations.**

**Current control.** Testing in practical classes of theoretical knowledge and the acquisition of practical skills, as well as the results of independent work of students. Supervised by teachers according to the specific purpose of the curriculum. Assessment of the level of students' preparation is carried out by: interviewing students, solving and analyzing situational tasks and test tasks, monitoring the acquisition of practical skills.

**Intermediate control.** Checking the possibility of using students for the practical application of theoretical knowledge and practical skills on all topics studied, as well as the results of independent work of students. Carried out in the last lesson on the topic by passing practical skills, testing.

**Final control.** Students who have attended all lectures, classroom classes, full-time independent work and scored at least **70 points per semester in the semester** are allowed to take the final control (differential test) .

### Distribution of points received by students

The student can get a maximum of **120 points** for current learning activities. Accordingly, a positive assessment in each seminar can be **from 5.4 to 9.2 points**. A score below **5.4 points** means "unsatisfactory", the lesson is not credited and must be practiced in the prescribed manner .

In order to assess learning outcomes, the final control in the form of diff. offset. On the diff. The student can get a maximum of **80 points**. Diff. the test is considered passed if the student received at least **50 points**.

### Assessment of student performance

№	Block №	Number of pairs / uch. hours	The maximum amount of points per block	The maximum amount of points per lesson
1.	Block № 1.	20/ 40	120	<b>6.0</b>
2.	Block № 2.	22/ 44	120	<b>5.4</b>
3.	Block № 3.	20/ 40	120	<b>6.0</b>
4.	Block № 4.	20/ 40	120	<b>6.0</b>
5.	Block № 5.	21/ 42	120	<b>5.7</b>
6.	Block № 6.	20 / 40.5	120	<b>6.0</b>
7.	Exam (credit)		80	

### Criteria for assessing knowledge

**With a score of 10.5 - 12 points in the practical lesson and 71 - 80 points in the test (A on the ECTS scale and 5 on the national scale)** the student's response is evaluated if he demonstrates deep knowledge of emergency and urgent medical care, ability to apply theoretical material for practical analysis and has no inaccuracies.

**With a score of 8.4 - 10.4 points in the practical lesson and 61 - 70 points in the test (B and C on the ECTS scale and 4 on the national scale)** the answer is evaluated if it shows knowledge, ability to apply them in practice, but some fundamental inaccuracies are allowed.

**With a score of 6.4 - 8.3 points in the practical lesson and 50 - 60 points in the test (D and E on the ECTS scale and 3 on the national scale)** the student's answer is evaluated provided that he knows the main theoretical principles and can use them in practice .

## 6. Recommended sources of information

### 6.1. Basic:

1. General surgery / textbook / Authors: Khimich SD, Zheliba MD, Shidlovsky VO etc. All-Ukrainian specialized publishing house "Medicine" Year: 2018
2. Surgery vol. 1 , 2 ./ under the editorship of Kondratenko PG Shidlovsky VO et al., Zaslavsky Publishing House, 2017
3. SD Khimich, MD Zheliba. General Surgery. Medicine, 2019.- 534 p.
4. Khimich SD, Zheliba MD General surgery. Medicine, 2018. - 534 p.
5. EMERGENCY SURGERY Textbook for students of VI courses of medical faculties of medical universities Edited by Corresponding Member. NAMNU, Dr. honey. Sciences, Prof. V.V. Boyka, Corresponding Member. NAMNU, Dr. honey. Sciences, Prof. V.M. Forest Kharkiv 2019
6. Symptoms and syndromes in surgery: Textbook. way. for honey. University IV r.a. Recommended by the Ministry of Health / Ed. ID. Gericha, S.D. Chemical. - K., 2016.
7. Field VP Care for patients of surgical profile / VP Field, OY Khomko, SP Field, AS Palyanytsya. - Chernivtsi: Medical University, 2012. - 380 p.
8. Field VP Outpatient surgical manipulations / VP Field, IV Shkvarkovsky, MD Zheliba. - Chernivtsi: Medical University, 2013. - 252 p.
9. Ya. S. Bereznytsky, OA Viltsanyuk, MD Zheliba and others; Surgical diseases Edited by PD Fomin, Ya. S. Bereznytsky VSV "MEDICINE" 2017
10. Urgent conditions in surgery: a textbook (University I-III years.) / KM Bobak, AI Bobak, VV Kiretov and others; for order. L.M. Kovalchuk 2017
11. Sergey Dydykin, Ekaterina Blinova, Alexander Shcherbyuk Publishing house Modern surgical instruments GEOTAR-Media Year of publication 2016
12. Surgery Textbook Edited by P. Kondratenko Knowledge 2009

### 6.2. Additional:

1. M.D. Желіба, С.Д. Chemist , I.D. Gerich et al. C General Surgery: A Textbook for Med. University IV ditch. accredited. Approved by the Ministry of Education and Science 2010
2. Surgical diseases. (Edited by PG Kondratenko). - Kharkiv: "Facts", 2006. - P. 262-292.
3. Surgery. (Edited by MP Zakharash). - Vinnytsia: "New Book", 2014. - P. 291-332.
4. Surgical diseases. (Edited by MI Kuzin). - Moscow: "Medicine", 2006. - P. 693-712.
5. Acute surgical diseases of the abdominal cavity / Ed. I.Yu. Polyansky. - Chernivtsi, 1999. - P. 76-96.
6. Surgical manipulations (Edited by BO Milkova, VN Krutskyak). - Kiev: "In a schA school", 1985. - P. 33-35; 62; 76-77.
7. Petrov VP, Eryukhin IA Intestinal obstruction. - M. : "Medicine", 1989.- 283 p.

8. Faculty surgery. Edited by VO Shidlovsky and MP Zaharasha. Te p nopil. Ukrmedkniga. 2002
9. Faculty surgery. Edited by VO Shidlovsky and MP Zaharasha. Turn on the field. Ukrmedkniga. 2002
10. Digestive canal endoscopy. For order. V.J. Kimakovich and VI Nikishaeva - "Medicine of the World", 2008. - 208p.
11. Surgical diseases. (Edited by MI Kuzina.) - M.: "Medicine", 2009.
12. 50 lectures on surgery (Edited by VS Savelyev). - M.: "Medicine", 2002. - 408 p.
13. Neotlozhnaya Surgery abdominal cavity organs (ed. PG Kondr and Tank), 2013 r .