Khanty-Mansiysk Autonomous Okrug-Ugra
"Surgut State University"

Approved by
Deputy Rector for Academic Affairs

_____ E.V. Konovalova

"15" June 2023, Record No. 5

General surgery

Syllabus

Department **Surgical diseases**

Curriculum s310501-ЛечДелоИн-23-3.plx
Specialty 31.05.01 General Medicine

Qualification **General Practitioner**

Form of education **Full-time**

Total (in credits) **6**

Total academic hours 216
including:
Contact 144
Self-study 45
Control hours 27

Control:
Exam 6th term

Course outline in terms

Academic year (Term)	5 (3.1)		6 (3.2)		Total	
Weeks	17 2/6		16 4/6			
Types of classes	Cur	Syl	Cur	Syl	Cur	Syl
Lectures	16	16	16	16	32	32
Practical	56	56	56	56	112	112
Contact	72	72	72	72	144	144
Self-study	36	36	9	9	45	45
Control			27	27	27	27
Total	108	108	108	108	216	216

The Syllabus is compiled by:

Doctor of Medicine, Professor, Darvin V.V. _____
Senior lecturer, Yakovlev D.S. _____

The Syllabus

General surgery

Developed in accordance with Federal State Educational Standard:

Federal State Educational Standard of higher education in the specialty 31.05.01 General medicine (Order of the Ministry of Education and Science of the Russian Federation on August 12, 2020 No. 988)

Based on the Curriculum:

31.05.01 GENERAL MEDICINE
Specialization: General Medicine

Approved by the Academic Council of Surgut State University, “15” June 2023, Record No. 5

The Syllabus was approved by the Department

Surgical diseases

Head of Department, Doctor of Medicine, Professor, Darvin V.V. _____

1. COURSE OBJECTIVES	
1.1	The aim of the General Surgery course in higher medical schools is to study the main pathological states in surgery, necessary surgical skills for the examination of patients.

2. COURSE OVERVIEW	
Course code (in curriculum):	Б1.О.04
2.1	**Assumed background:**
2.1.1	Human anatomy
2.1.2	Biochemistry
2.1.3	Normal physiology
2.2	**Post-requisite courses and practice:**
2.2.1	Disaster Medicine
2.2.2	Anesthesiology, intensive care, intensive care
2.2.3	Oncology, radiation therapy
2.2.4	Otorhinolaryngology

3. COMPETENCES UPON COMPLETION OF THE COURSE (MODULE)
PC-1.1: Demonstrates knowledge in etiology, pathogenesis, diagnostic criteria (clinical - subjective, physical, laboratory, instrumental, identifes the patient's common pathological conditions, symptoms, disease syndromes and diagnoses nosological forms according to the International Statistical Classification of Diseases and Related Health Problems, X - XI revisions
PC-1.2: Carries out diagnostics, evaluates the prognosis (short-, medium- and long-term course) of the disease, identifies acute complications and complications of chronic diseases
PC-3.1: Examines the patient (handle the patient's complaints, anamnesis, physical data based on the examination results, determines the necessary examination plan, evaluates the parameters of laboratory, instrumental, pathological and anatomical and other methods in order to diagnose diseases, assesses the prognosis (short-, medium- , long-term) of its course and outcomes
PC-3.2: Makes an inital and clinical diagnosis in accordance with the International Statistical Classification of Diseases and Health Problems X - XI revisions and current clinical classifications
PC-3.3: Carries out early and differential diagnostics of diseases
PC-3.4: Provides routing and management of patients based on the current legislation (standards, procedures for the provision of medical care, Clinical guidelines)
PC-5.1: Demonstrates knowledge of the mechanisms and methods applied in pharmacotherapy, medical nutrition, medical devices and methods of non-drug treatment, palliative and personalized medical care
PC-5.2: Provides various categories of patients with outpatient treatment, treatment in hospitals and high-tech medical care (HMC) centers applying drugs, medical devices and medical nutrition, according to clinical pattern and current procedures, standards of medical care, Clinical guidelines (treatment protocols)
PC-8.2: Keeps medical records, including the electronic format

By the end of the course students must:

3.1	**Know:**
3.1.1	-Hygienic aspects of nutrition, hygiene of medical organizations, hygienic problems of health care for the working population
3.1.2	-Etiology, pathogenesis and prevention measures of the most common diseases; modern classification of diseases
3.1.3	-The clinical picture, features of the course and possible complications of the most common diseases occurring in a typical form in different age groups.
3.1.4	-Diagnostic methods, diagnostic capabilities of methods of direct examination of the patient of therapeutic, surgical and infectious profile, modern methods of clinical, laboratory, instrumental examination of patients (including endoscopic, X-ray methods, ultrasound diagnostics)
3.1.5	-Criteria for the diagnosis of various diseases
3.1.6	-Clinical manifestations of major surgical syndromes.
3.1.7	-Types and methods of modern general anesthesia (mask, endotracheal, intravenous), methods and methods of prevention of postoperative pulmonary complications, features of management of comatose patients, intensive therapy for patients who have suffered critical conditions.
3.1.8	-Features of first aid and resuscitation measures for victims of auto-road injuries, drowning, electrical trauma, strangulation asphyxia, methods of restoring the patency of the upper respiratory tract
3.1.9	-Clinical symptoms of damage to the musculoskeletal system, chest, abdominal cavity, pelvic cavity, head and skull cavity; methodology for determining the area of the burn surface, features of applying contour bandages in burn disease and cold injury.
3.2	**Be able to:**
3.2.1	-Determine the patient's status: collect anamnesis, conduct a patient survey (examination, palpation, auscultation, blood pressure measurement, etc.) assess the patient's condition to make a decision about the need to provide him with medical care, conduct an initial examination of systems and organs

3.2.2	- Set priorities for solving the patient's problems: critical (terminal) condition, with chronic vomiting, a condition with an infectious disease, disability, geriatric problems, the condition of mentally ill patients
3.2.3	- Outline the scope of additional studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a reliable result.
3.2.4	-Determine by X-ray the presence of a fracture and dislocation, free gas in the abdominal cavity, hydro-pneumothorax
3.2.5	- Choose an individual type of assistance for the treatment of the patient in accordance with the situation: primary care, ambulance, hospitalization.
3.2.6	- Formulate clinical diagnosis
3.2.7	-Develop a plan of therapeutic (surgical) actions, taking into account the course of the disease and its treatment.
3.2.8	-Formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents, justify pharmacotherapy in a particular patient with major pathological syndromes and urgent conditions, determine the route of administration, regimen and dose of medications, evaluate the effectiveness and safety of the treatment
3.2.9	-Examine patients with various traumatic injuries, with purulent-septic complications, identify life-threatening bleeding disorders, apply transport tires, bandage and kerchief bandages, inject medications through drains and microirrigators, assess the suitability of blood and its preparations for transfusion, monitor hemodynamics and respiration.
3.2.10	-Carry out resuscitation measures in the event of clinical death
3.2.11	- Treat the hands before surgery and surgical manipulations, , the surgical field, put on a sterile surgical mask, put on or change sterile gloves, a sterile dressing gown independently and with the help of an operating nurse.
3.3	**Have skills of:**
3.3.1	- Demonstrating methods of general clinical examination.
3.3.2	- Interpretation of the results of laboratory, instrumental diagnostic methods
3.3.3	- Making detailed clinical diagnosis based using algorithm
3.3.4	- Making a preliminary diagnosis with the subsequent referral of the patient to the appropriate specialist doctor.
3.3.5	- Providing first aid in urgent and life-threatening conditions using main medical diagnostic and therapeutic measures.

4. STRUCTURE AND CONTENTS OF THE COURSE (MODULE)

Class Code	Topics /Class type	Term / Academic year	Academic hours	Competences	Literature	Interactive
1.1	Introduction to the surgical clinic. Organization of the work of the surgical department, the operating unit, the reception department.	5	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
1.2	Introduction to the surgical clinic. Organization of the work of the surgical department, the operating unit, the reception department.	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
2.1	Asepsis. Methods of sterilization. Preparation of the surgeon's hands for surgery.	5	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
2.2	Modern principles and methods of antiseptics. Types of antiseptics. Hospital infection. The problem of AIDS in surgery.	5	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test

2.3	Asepsis, prevention of contact and implantation infection. Principles of asepsis, organization of work and structure of the operating unit. Sterilization of surgical clothing, surgical gloves, suture material, surgical instruments. Stezilization, UFO, ionizing, ultrasonic radiation. Preparation of the surgeon's hands for surgery.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
2.4	Asepsis, prevention of contact and implantation infection. Principles of asepsis, organization of work and structure of the operating unit. Sterilization of surgical clothing, surgical gloves, suture material, surgical instruments. Stezilization, UFO, ionizing, ultrasonic radiation. Preparation of the surgeon's hands for surgery. Cleaning of the	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
2.5	Antiseptics and aseptics. Modern principles and methods of antiseptics. Mechanical, physical, chemical and biological antiseptics. Hospital infection, its prevention. Order No. 720.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
3.1	Injuries. Dysmurgia. Thermal lesions. Electrical injuries. Cold injury.	5	2	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
3.2	Wounds, features of the course of the wound process. Primary surgical treatment of wounds.	5	2	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
3.3	The concept of traumatism. Characteristics of external factors. Classification of injuries. Dislocations.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
3.4	Bone fractures. Clinic, diagnostics. Methods of treatment. Desmurgy, types of dressing material, bandaging technique. Types of bandages. Transport and medical immobilization.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
3.5	Thermal lesions. Burns. Methods for determining the area of the lesion. Burn shock. Radiation damage. Features of radiation burns. Burn disease. Electrical injuries.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
3.6	Cold lesions- frostbite. The concept of "pre -reactive" and "reactive period". General hypothermia. Basic principles of treatment.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test

3.7	Wounds, features of the course of the wound process, phases of the flow. Wound infection. Primary surgical treatment of wounds (PHO). The main modern principles of treatment of purulent wounds (adequate wide opening and drainage of a purulent wound,	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
3.8	Injuries. Desmurgy. Thermal lesions. Electrical injuries. Cold injury.	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
3.9	Wounds, features of the course of the wound process. Primary surgical treatment of wounds.	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
4.1	Infection in surgery. Wound infection. Purulent diseases of soft tissues. Osteomyelitis.	5	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
4.2	Acute specific purulent infection in surgery. Anaerobic infection. A common purulent infection is sepsis. Terminology. Theory of sepsis. Classification, etiology, pathogenesis, clinic, diagnosis. Basic principles of treatment.	5	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
4.3	Infection in surgery. Wound infection. Purulent diseases of the skin, subcutaneous tissue, tendons, (carbuncle, abscess, phlegmon). Purulent diseases of the glandular organs (mastitis, mumps).	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
4.4	Purulent diseases of the hand. Panaricius. Pandactyl. Modern principles of treatment.	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
4.5	Acute and chronic osteomyelitis. Classification, features of the clinical course of hematogenic and posttraumatic osteomyelitis. Modern principles of local and general treatment. Atypical forms of chronic osteomyelitis.	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
4.6	A common purulent infection is sepsis. Terminology. Theory of sepsis. Classification, etiology, pathogenesis, clinic, diagnosis. Basic principles of treatment.	5	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test

4.7	Necrosis, gangrene. Bedsores. Fistulas. Acute and chronic arterial patency disorders. The main types of necrosis. General principles of treatment.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
4.8	Infection in surgery. Wound infection. Purulent diseases of soft tissues. Osteomyelitis.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
4.9	Acute specific purulent infection in surgery. Anaerobic infection. A common purulent infection is sepsis. Terminology. Theory of sepsis. Classification, etiology, pathogenesis, clinic, diagnosis. Basic principles of treatment.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
5.1	Modern principles of radiation diagnostics of surgical diseases of the abdominal cavity, chest.Current principles of radiation diagnostics of diseases of the bone and joint system. Methods of interventional radiology in surgery.	5	2	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
5.2	Modern principles of radiation diagnostics of surgical diseases of the abdominal cavity, chest.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
5.3	Modern principles of radiation diagnostics of diseases of the bone and joint system. Methods of interventional radiology in surgery.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
5.4	Radiation diagnostics of emergency conditions. Properties of X-rays. Physics, dosimetry. Methods of X-ray studies	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
5.5	Modern principles of radiation diagnostics of surgical diseases of the abdominal cavity, chest.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
5.6	Modern principles of radiation diagnostics of diseases of the bone and joint system. Methods of interventional radiology in surgery.	5	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test

6.1	Shock. Etiology, pathogenesis, main types of shocks. Basic principles of treatment. Resuscitation. The concept of terminal states. Classification, clinical picture. Cardiopulmonary resuscitation. Indications, technique of execution. The concept of "brain death",	6	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
6.2	Resuscitation. The concept of terminal states. Classification, clinical picture. Cardiopulmonary resuscitation. Indications, technique of execution. The concept of "brain death", diagnostic criteria.Anesthesiology. History of anesthesia. Theory of anesthesia. Types of general anesthesia. Modern combined anesthesia. Local anesthesia, types of local anesthesia. The main types of regional anesthesia. Blockades, rules for their implementation, criteria for	6	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
6.3	Shock. Etiology, pathogenesis, classification. Basic principles of treatment. Resuscitation. Classification, clinical picture. Cardiopulmonary resuscitation. Indications, technique of execution. The concept of "brain death",	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
6.4	Terminal states.Criteria, classification. A complex of therapeutic and diagnostic measures depending on the stage.	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
6.5	Anesthesiology. History of anesthesia. Local anesthesia, types of local anesthesia. The main types of regional anesthesia. Blockades, rules for their implementation, criteria for the effectiveness of anesthesia or blockades.	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
6.6	Shock. Etiology, pathogenesis, classification. Basic principles of treatment.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
6.7	Resuscitation. The concept of terminal states. Classification, clinical picture. Cardiopulmonary resuscitation. Indications, technique of execution. The concept of "brain death", diagnostic criteria.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
7.1	Surgical operations. Classification, the main types of surgical interventions, their stages. The concept of pre- and postoperative period. The concept of premedication, its purpose and objectives.	6	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test

7.2	Surgical operations. Classification, the main types of surgical interventions, their stages. The concept of pre- and postoperative period. The concept of premedication, its purpose and objectives.	6	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
7.3	Surgical operations. Classification, the main types of surgical interventions, their stages. The concept of pre- and postoperative period. The concept of premedication, its purpose and objectives.	6	1	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.1	Bleeding. Classification, local and general clinical symptoms. Degrees of blood loss. Haemorrhagic shock. Methods of temporary and final stopping of bleeding. Regulation of the RASK system. Complex hemostatic therapy. Basic questions	6	2	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.2	General principles of infusion-transfusion therapy in surgery. Classification of infusion-transfusion media. Transfusion of blood and blood substitutes. Determination of blood by the ABO system and Rh factor.	6	2	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.3	Bleeding. Classification, local and general clinical symptoms. Degrees of blood loss. Haemorrhagic shock. Methods of temporary and final stopping of bleeding. Regulation of the RASK system. Complex hemostatic therapy. Basic questions	6	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.4	General principles of infusion-transfusion therapy in surgery. The concept of water- electrolyte balance. Classification of infusion-transfusion media. Methods of conducting and monitoring the effectiveness of therapy.	6	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.5	Determination of the blood group of the blood by the ABO system and the Rh factor. The technique of conducting individual tests for the compatibility of donor and recipient blood according to ABO and Rh factor. Ottenberg's rule for blood transfusion and blood substitutes.	6	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.6	Transfusion of blood and blood substitutes. Organization of the donation service in Russia. Absolute and relative indications for blood transfusion and blood substitutes. Techniques and types of blood transfusions.	6	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test
8.7	Blood transfusion media and blood preparations: erythromass, thrombomass, plasma, correction of the hemostasis system. Complications of blood transfusion, their prevention.	6	4	PC-1 PC-3 PC-5 PC-8	L1.1 L2.1 L3.1	Oral quiz, test

8.8	Bleeding. Classification, local and general clinical symptoms. Degrees of blood loss. Haemorrhagic shock. Methods of temporary and final stopping of bleeding. Regulation of the RASK system. Complex hemostatic therapy. Basic questions	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
8.9	Transfusion of blood and blood substitutes. Organization of the donation service in Russia. Absolute and relative indications for blood transfusion and blood substitutes. Techniques and types of blood transfusions.Blood transfusion media and blood preparations: erythromass, thrombomass, plasma, correction of the hemostasis system.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
8.10	Determination of the blood group of the blood by the ABO system and the Rh factor. The technique of conducting individual tests for the compatibility of donor and recipient blood according to ABO and Rh factor. Ottenberg's rule for blood transfusion and blood substitutes.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
9.1	Tumors. Definition. The concept of benign and malignant tumors. Etiology- theory of carcinogenesis, classification of tumors, international TNM system, stages of the disease. Diagnosis, basic principles of treatment.	6	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
9.2	Tumors. Definition. The concept of benign and malignant tumors. Etiology - theory of carcinogenesis, classification of tumors, international TNM system, concept and criteria of disease stages.	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
9.3	Tumors. Diagnosis, general principles of treatment. Types of specialized treatment (radiation. chemotherapy). Surgical treatment options. Possible complications of diseases. The concept of a "clinical group", criteria for the distribution of cancer patients in a particular group. Rehabilitation of cancer	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
9.4	Tumors. Definition. The concept of benign and malignant tumors. Etiology- theory of carcinogenesis, classification of tumors, international TNM system, stages of the disease. Diagnosis, basic principles of treatment.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
10.1	Fundamentals of surgery for parasitic diseases. Classification, clinic, diagnostics, surgical tactics.	6	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test

10.2	Fundamentals of surgery for parasitic diseases. Classification, clinic, diagnostics, surgical tactics.	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
10.3	Fundamentals of surgery for parasitic diseases. Classification, clinic, diagnostics, surgical tactics.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
11.1	Transplantology. The history of the development of transplantology. The concept of a donor-recipient. Classification of transplants. Kidney, heart, liver transplantation - indications, technique of execution.	6	2	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
11.2	Transplantology. The history of the development of transplantology. The concept of a donor-recipient.	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
11.3	Classification of transplants. Kidney, heart, liver transplantation - indications, technique of execution.	6	4	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
11.4	Transplantology. The history of the development of transplantology. The concept of a donor-recipient. Classification of transplants. Kidney, heart, liver transplantation - indications, technique of execution.	6	1	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test
12.1	Exam	6	27	PC-1 PC-3 PC-5 PC-8	1.1 2.1 3.1	Oral quiz, test, case study.

5. ASSESSMENT TOOLS

5.1. Assessment tools for midterm assessment

Presented by a single document

5.2. Assessment tools for diagnostic testing

Presented by a single document

6. COURSE (MODULE) RESOURCES

6.1. Recommended literature

6.1.1. Core

	Authors	Title	Publish., year	Quantity
L1.1	Gostishchev V. K.	General Surgery: textbook	Moscow: GEOTAR -Media, 2021	12

6.1.2. Supplementary

	Authors	Title	Publish., year	Quantity
L2.1	Nikolaev A. V.	Topographic Anatomy and Operative Surgery: textbook	Moscow: GEOTAR -Media, 2019	12

6.1.3. Guidance paper				
	Authors	Title	Publish., year	Quantity
Л3.1	Badretdinova, A. I., Klimenko, A. S., Kostsova, N. G., Tigai, Zh. G., Dogotar, O. A., Akhuba, L. G., Sopetik, V. S., Adilkhanov, A.V., Ostaev, A. O.	Fundamentals of care for surgical patients = Nursing care in surgery: textbook	Moscow: Peoples' Friendship University of Russia, 2019, electronic resource	1

6.3.1 Software	
6.3.1.1	Operational system Microsoft, applied programs pack Microsoft Office

6.3.2. Information Referral systems	
6.3.2.1	www.consultant.ru/
6.3.2.2	www.garant.ru/

7. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE (MODULE)	
7.1	The lecture-type classroom is equipped with a multimedia projector, a screen, a laptop, a stationary chalk board, standard educational furniture: tables, chairs.
7.2	Practical classes, group and individual consultations, ongoing monitoring and intermediate certification are conducted in the classrooms of the Department of Hospital Surgery of SurSU on the basis of the surgical building of the Surgut District Clinical Hospital. The classroom is equipped with a portable projector (1 pc), a laptop (1 pc)., standard educational furniture: tables, chairs. A set of thematic slides: angiographic picture in surgical pathology (No. 49-96). Part IV. Angiographic picture in surgical pathology (No. 49-96). Anaerobic non-clodistrial peritonitis. Part I (No. 1-24) Care for children with surgical diseases (Uh.). Part I-VI. Sports injuries (S.T.) (No. 1-24). Methods of treatment of bone fractures (No. 8-Blockade of nerve trunks and plexuses (Bl. ner. stv.). Part I 1. Blockades of the nerve trunks of the upper limb (No. 1-24). Part II of the blockade of the nerve trunks of the lower extremity (No. 1-24). Part III. Blockade of nerve trunks on the trunk (No. 1-24) Sectoral resection of the breast (No. 26-29). Skin incisions during radical mastectomy (No. 30-32). Benign and malignant tumors of the stomach (No. 68-72). Part IV Benign and malignant tumors of the stomach (No. 73- 89). Fundamentals of desmurgy (dressing technique) (Os. des.). Part I- III. In addition to technical equipment, the classrooms have at their disposal medical equipment: Equipment: tonometer, stethoscope, phonendoscope, thermometer, Sega-780 electronic scales, Sega-220 height meter, anti-shock kit, kit and styling for emergency preventive and therapeutic measures, electrocardiograph, bactericidal irradiator, anesthesia breathing apparatus, artificial lung ventilation apparatus, infusomat, postoperative suction device, defibrillator with synchronization function, mobile operating table multifunctional electro-mechanical-hydraulic complete set for general surgery AXIS 303E. Mobile Single-dome Surgical Lamp Series Medilux-S-Single D 600mm Mediland Medilux-S-Single D, HICOVAC 700CH B 700CN Surgical Aspirator; surgical, shadowless MediLux-Sindle, microsurgical instruments, universal system of wound expanders with attachment to the operating table, apparatus for monitoring basic functional parameters, respiratory mixture analyzer, electroencephalograph, gastroduodenoscope, duodenoscope (with lateral optics), colonoscope (pediatric), fibrobronchoscope (pediatric), halogen flash light source for endoscopy, endoscopic television system, endoscopic table, endoscopy trolley, endoscope washing machine, ultrasonic cleaner, endoscopic suction pump, videoendoscopic complex, videoduodenoscope, videogastroscope, endoscopic suction device, enteroscope, low-energy laser installation, electrosurgical unit, operating videogastroscope, pediatric videogastroscope, operating videocolonoscope, pediatric videocolonoscope, diagnostic videocolonoscope, argon plasma coagulator, endoscopic mucosal resection kit, balloon dilator; Electrocoagulator surgical Mega Power. Laparoscopic stand, KARL STORZ KARL STORZ. Medical vacuum suction ATMOS Record 55 Record 55, Electrosurgical energy platform Force Triad Valleylab Force Triad Doppler device for transanal hemorrhoidal dearterization THD EVOLUTION THD EVOLUTION Endovideoscopic surgical stand with a set of additional instruments and optics. Headliner, pr-l: Rudolf Reister Rudolf Reister. Pulse oximeter Critikare mod. 503 TX 503 TX Gynecological chair procedural Medi-Matic OPX115 515 SCHMITZ Medi-Matic OPX115 515. Tools and consumables in an amount that allows students to master the skills and abilities provided for by professional activity.

7.3	Simulation and training accreditation center of MI SurGU. Classrooms of the MI simulation center equipped with phantom and simulation equipment, laboratory tools and consumables in sufficient quantity. The BenQ multimedia projector. A mannequin for practicing practical CPR skills ResusciBaby. A mannequin for practicing practical CPR skills ResusciJunior. The NursingKid dummy – (a 7-year-old child with a variable physiology for practicing therapeutic and diagnostic measures). Zoll defibrillator. Simulator "Head for intubation". Simulator for carrying out n / a, I / m injections. Simulator for intravenous injections. The Nursingkid simulator. Nursingbaby. Tonometer, phonendoscope. Electrocardiograph electrodes.AMBU bag with a set of face masks. Oxygen mask. Intubation kit. A set of intubation tubes. The infusion system. A set of syringes Syringes 2.0ml 5.0ml 10.0ml. Cubital catheters. Fixing patch. Imitators of medicines. Aspirator. Laryngeal mask. Air compressor. Vacuum aspirator. Lineomat. Artificial lung ventilation device. Gastric tube. Nasogastric probe. Simulator for enema setting. Esmarch's mug. Dressings. Medical trays. Virtual simulators: 1. LAP MENTOR, SIMBIONIX is a virtual simulation platform for the development of manual skills in endoscopic surgery: practicing suturing techniques and performing laparoscopic operations: appendectomy, hysterectomy, cholecystectomy, ectopic pregnancy, postoperative scar hernia, nephroectomy. 2. LAP MENTOR EXPRESS, SIMBIONIX is a portable virtual simulation platform for the development of manual skills in endoscopic surgery: practicing suturing techniques and performing laparoscopic operations: hysterectomy, cholecystectomy, nephrectomy. 3. GI BRONCH MENTOR, SIMBIONIX is an endoscopic simulator for teaching methods of diagnostic and therapeutic gastroscopy, colonoscopy with a module for bronchoscopy with the possibility of practicing routine flexible bronchoscopy, transbronchial needle aspiration under ultrasound control, bronchoalveolar lavage and bronchial biopsy.4. Laparoscopic simulator, 1.8 Full HD Professor Kelling (Czech Republic) A universal device for teaching the skills necessary for laparoscopic surgery, equipped with its own camera and monitor, sixteen ports allow positioning instruments in different directions, including modeling of unipolar technologies. A flexible fastening system in the working area of the simulator allows you to fix various educational objects from special simulators for tissue and organ models to actual biological samples. 5. Operating table Startech 3008C LLC "STARTEK", Russia. 6. The operating table consists of 5 X-ray transparent sections with a removable, separate foot section, manual adjustment of the angles of inclination of the sections, the height of the built-in kidney roller and height adjustment using a foot hydraulic drive.
7.4	Medical furniture.
7.5	Library of laboratory and instrumental research results.
7.6	Roles for standardized patients.
7.7	Library of situational tasks.
7.8	Library of clinical scenarios.
7.9	Library of evaluation sheets.