

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

Medical Institute

Recommended MCSD

SYLLABUS
(STUDY GUIDE)

Subject

Faculty Surgery

Recommended for the direction of training (specialty)

31.05.01 General Medicine

Program (profile, specialization)

General Medicine

1. Aims and objectives of the discipline

The main aim of all practical classes is to teach students to diagnose basic diseases studied in the faculty surgery course.

The objectives of the faculty surgery course: To acquaint students with modern methods of diagnostics, differential diagnostics of the most common diseases of the organs in the abdominal cavity, variants of their course, treatment policies, providing medical care at home, in outpatient and inpatient settings. To teach students to make a plan for a patient examination (on organ systems). To teach students how to perform investigations of patients with the most common surgical diseases of the digestive organs, thyroid and mammary glands, liver, gall bladder and pancreas. To teach how to interpret the results of laboratory and instrumental methods of investigations. To teach students investigation principles in case of preliminary and final diagnosis and performance of differential diagnostics. To acquaint students with etiology, pathogenesis, course variants and basic clinical manifestations of the most common surgical diseases. To teach students principles of complex pathogenetic treatment, prognosis and prevention of diseases. To improve the acquired practical skills and master new ones (the list of practical skills is attached). To cultivate in students the basics of medical deontology and the ability to communicate with patients and their relatives.

2. Discipline place in the Main Educational Programme structure:

Discipline refers to the basic part of disciplines on the specialty 31.05.01 “GENERAL MEDICINE”.

Table 1 shows the preceding and following disciplines aimed to form the discipline competencies in accordance with the competencies matrix of the Educational Programme of Higher Education.

Table 1

The preceding and following disciplines aimed to form competencies

№	Code and competence name	Preceding disciplines	Following disciplines (groups of disciplines)
General Professional Competence			
1	GPC -1,4,5,6,7,10	Philosophy	Obstetrics and gynecology
2	GPC -1,4,5,6,7,10	General surgery, radiology and radiotherapy	Anesthesiology, resuscitation and intensive care medicine
3	GPC -1,4,5,6,7,10	Propaedeutics of internal diseases	Hospital therapy, endocrinology
4	GPC -1,4,5,6,7,10	Pathophysiology	Hospital surgery, pediatric surgery
5	GPC -1,4,5,6,7,10	Anatomic pathology	Emergency medicine
6	GPC -1,4,5,6,7,10	Human anatomy	Oncology, radiotherapy
7	GPC -1,4,5,6,7,10	Histology, cytology and embryology	Traumatology, orthopedics
Professional Competence			
1	PC -1,2,3,6 (6.3)	Philosophy	Obstetrics and gynecology
2	PC -1,2,3,6 (6.3)	General surgery, radiology and radiotherapy	Anesthesiology, resuscitation and intensive care medicine
3	PC -1,2,3,6 (6.3)	Propaedeutics of internal diseases	Hospital therapy, endocrinology
4	PC -1,2,3,6 (6.3)	Pathophysiology	Hospital surgery, pediatric surgery
5	PC -1,2,3,6 (6.3)	Anatomic pathology	Emergency medicine
6	PC -1,2,3,6 (6.3)	Human anatomy	Oncology, radiotherapy
7	PC -1,2,3,6 (6.3)	Histology, cytology and embryology	Traumatology, orthopedics

3. Requirements for the results of discipline mastering:

The process of discipline studying is directed to form the following competencies:
GPC -1,4,5,6,7,10 PC -1,2,3,6 (6.3).

Competence Code	Competence Name	Competence Achievement Indicator Code and Name
GPC-1	Being able to implement moral and legal norms, ethical and deontological principals in professional activity	GPC-1.1. Being able to abide by the ethical standards and legal regulations in professional activity. GPC-1.2. Being able to present professional information in the process of intercultural interaction observing the principles of ethics and deontology.
GPC-4	Being able to use medical devices provided for by the procedure for medical care, and conduct patient examinations in order to determine a diagnosis	GPC-4.1. Being able to use medical devices in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, care taking into account the medical care standards. GPC-4.2. Being able to assess the effectiveness and safety of medical devices. GPC-4.3. Mastering the technique of performing typical medical procedures using medical devices provided for by the procedures for medical care provision.
GPC-5	Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	GPC-5.1. Mastering the algorithm of clinical, laboratory and functional diagnosis when dealing with professional tasks. GPC-5.2. Being able to evaluate the results of clinical, laboratory and functional diagnosis when dealing with professional tasks. GPC-5.3. Being able to determine morpho-functional, physiological states and pathological processes of the human body.
GPC-6	Being able to organize patient care, provide primary health care, arrange work and make professional decisions in emergency conditions at the prehospital stage, in emergency situations, epidemics and in foci of mass destruction	GPC-6.1. Mastering the algorithm for providing first aid in emergency conditions, including in extreme conditions and foci of mass destruction. GPC-6.2. Being able to identify the conditions which require emergency medical care, including clinical signs of sudden cessation of blood circulation and respiration. GPC-6.3. Being able to provide emergency medical care to patients in conditions that pose a threat to the life of a patient, including clinical death (cessation of the vital bodily functions (blood circulation and (or) breathing)).
GPC-7	Being able to prescribe treatment and monitor its efficacy and safety безопасности	GPC-7.1. Mastering skills in the methods of general clinical examination, interpretation of laboratory results, instrumental diagnostic methods. GPC-7.2. Being aware of the algorithm for making a preliminary diagnosis with the subsequent referral of the patient to the relevant medical specialist.
GPC-10	Being able to understand the operation principles of modern IT and use them to solve professional tasks	GPC-10.1. Being able to use information technology in professional activity. GPC-10.2. Being able to observe the information security rules in professional activity. GPC-10.3. Being able to use information and communication technologies, including applied

		software for general and special purposes in dealing with professional tasks.
PC-1	Being able to provide emergency or urgent medical care to a patient	<p>PC1.1. Being able to assess the condition of a patient who needs emergency or urgent medical care.</p> <p>PC-1.2. Being able to recognize conditions that arise from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and which require emergency medical care.</p> <p>PC-1.3. Being able to provide emergency medical care to patients with sudden acute diseases, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life.</p> <p>PC-1.4. Being able to recognize conditions which pose a threat to the patient's life, including conditions of clinical death (cessation of the vital bodily functions (blood circulation and/or respiration) which require emergency medical care.</p> <p>PC-1.5. Being able to provide emergency medical care to patients in conditions which pose a threat to the patient's life, including clinical death (cessation of the vital bodily functions (blood circulation and/or respiration).</p> <p>PC-1.6. Being able to use drugs and medical devices when providing medical care in emergency or urgent forms.</p>
PC-2	Being able to examine a patient in order to determine a diagnosis	<p>PC-2.1. Mastering the skills to collect complaints, anamnesis of the patient's life and disease, as well as conduct a complete physical examination of the patient (examination, palpation, percussion, auscultation).</p> <p>PC-2.2. Being able to make a preliminary diagnosis and make up a plan of laboratory and instrumental examinations of a patient.</p> <p>PC-2.3. Being able to refer a patient to a laboratory examination in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the medical care standards.</p> <p>PC-2.4. Being able to refer a patient to an instrumental examination in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.5. Being able to refer a patient to consult with a medical specialist if there is a medical indication in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.6. Being able to refer a patient to be provided</p>

		<p>with specialized medical care in an inpatient setting or in a day hospital in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.7. Being able to carry out differential diagnosis with other diseases/conditions, including the urgent ones, as well as to make a diagnosis taking into account the current international statistical classification of diseases and problems related to health (ICD).</p>
PC-3	Способен к назначению лечения и контроль его эффективности и безопасности	<p>PC-3.1. Being able to develop a treatment plan for a disease or condition taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.2. Being able to prescribe medicinal drugs, medical devices and medical nutrition taking into account the diagnosis, age and clinical picture of the disease and in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.3. Being able to prescribe non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.4. Being able to assess the efficacy and safety of the use of drugs, medical devices, medical nutrition and other treatment methods.</p> <p>PC-3.5. Being able to provide palliative care in collaboration with medical specialists and other healthcare professionals.</p> <p>PC-3.6. Being able to organize personalized treatment for a patient, including pregnant women, elderly and senile patients; assess the efficacy and safety of treatment.</p>
PC-6	Being able to keep medical records and organize the activities of the nursing staff	PC-6.3. Being able to keep medical records, including in the electronic form.

At the end of the discipline studying, the student has to:

Know:

- The concept of "clinical diagnosis".

- Why is it necessary to know the scheme of the surgical patient's medical record?
- What allows you to determine the nature of the pathological process correctly?
- Basic signs of acute appendicitis.
- Complications of acute appendicitis.
- Indications to surgical and conservative treatment in acute appendicitis.
- Basic stages of appendectomy.
- Symptoms of uncomplicated abdominal wall hernia.
- Symptoms of complicated abdominal wall hernia.
- Indications to surgical treatment in abdominal hernia.
- Main stages of a surgical procedure in complicated and uncomplicated abdominal wall hernia.
- Methods of hernioplasty in different types of abdominal wall hernia.
- Causes of calculous cholecystitis development and its complications.
- Basic signs of acute cholecystitis and its complications.
- Special diagnostic methods to detect cholecystitis and its complications.
- Tactics of management in patients with acute cholecystitis.
- Basic stages of cholecystectomy.
- Types of surgeries for various complications of cholecystitis.
- Modern methods of surgical treatment in cholecystitis.
- What contributes to development of acute pancreatitis?
- Basic clinical signs of acute pancreatitis depending on its form.
- Special diagnostic methods used to reveal acute pancreatitis.
- Indications to surgical treatment in acute pancreatitis.
- Management of acute pancreatitis depending on its form.
- Forms of chronic pancreatitis.
- Special diagnostic methods for detection of chronic pancreatitis.
- Indications to surgical treatment in chronic pancreatitis.
- Basic types of surgeries in chronic pancreatitis.
- Main symptoms of liver diseases for which surgical treatment is indicated.
- Special methods of diagnostics in surgical liver diseases.
- Treatment principles in surgical liver diseases.
- Clinical signs of peripheral arterial diseases.
- Special diagnostic methods for detection of occlusions in lower limb arteries.
- The choice of treatment for patients with occlusive arterial diseases in the lower limbs.
- Clinical manifestations of varicosity.
- Indications to surgical treatment in patients with varicose veins of lower extremities.
- Methods of treatment in patients with varicose veins of lower extremities.
- Basic symptoms of acute thrombophlebitis in lower extremities.
- Indications to surgical treatment in acute thrombophlebitis of lower extremities.
- Basic clinical signs of esophagus diseases.
- Special diagnostic methods used to detect esophageal diseases.
- Principles of treatment in patients with esophageal cancer.
- Indications to surgical treatment of patients with cardiospasm.
- Treatment of esophagus diverticulum.
- Treatment of patients with esophageal burns.
- The method of using the Blackmore probe.
- Differential diagnostics of esophageal diseases.
- Methods of gastrostomy.
- Precancerous diseases of the stomach and their diagnostics.
- Stages of stomach cancer.
- Clinical presentation of stomach cancer.

- Treatment principles in patients with stomach cancer.
- Indications to conservative treatment in stomach cancer.
- Radical and palliative surgeries in stomach cancer.
- Clinical manifestations of benign diseases in the small and large intestines.
- Special diagnostic methods applied to detect benign diseases of the small and large intestines.
- Complications of small and large intestine diverticula.
- Surgical procedures in benign diseases of the small and large intestines.
- Main symptoms in cancer of the large intestine.
- Special diagnostic methods used to detect cancer of the large intestine.
- Indications to surgical treatment in large intestine cancer.
- Complications of large intestine cancer and their complications.
- Types of radical and palliative surgeries in large intestine cancer.
- Clinical signs of hemorrhoids, cancer and fissure of the rectum.
- Value of digital examination for diagnostics of rectal diseases.
- Rectoscope device and rectoromanoscopy stages.
- Methods of surgical management in hemorrhoids.
- Indications to surgical treatment in hemorrhoids.
- Types of radical and palliative surgeries in rectal cancer.
- Classifications of intestinal obstruction.
- Basic symptoms in bowel obstruction.
- Special diagnostic methods to detect acute intestinal obstruction.
- X-ray radiological signs of intestinal obstruction.
- Methods of conservative and surgical management in intestinal obstruction and indications for them.
- The value of siphon enema in the complex conservative treatment of intestinal obstruction.
- Causes of acute peritonitis development.
- Main clinical signs of acute peritonitis.
- Classifications of acute peritonitis.
- Special diagnostic methods for detection of acute peritonitis.
- Indications to surgical treatment in peritonitis.
- Methods of surgery completion in acute peritonitis.
- Management and care of the patients after the surgery performed for peritonitis.
- Physical examination and special diagnostic methods applied to reveal breast tumors.
- Technique for needle biopsy of breast tumor.
- Signs of various stages in breast cancer.
- Methods of surgical management in breast cancer.
- Preparing the patient for a surgery for benign tumor in breast.
- Diagnostics of thyroid diseases.
- Classification of goiter.
- Indications to surgical treatment of patients with goiter.
- Preparing the patient for a surgery for thyrotoxicosis.
- Complications after surgeries on the thyroid gland.
- What acute surgical diseases of the abdominal organs can occur with an atypical clinical picture and why?
- What will help in differential diagnostics of acute surgical diseases of the abdominal organs?
- Special investigation methods that will help in differential diagnostics of an acute surgical diseases of the abdominal organs.

Have abilities:

- To collect patient's complaints and analyze them to detect localization of pathological process.
- To apply main methods of physical examination to make disease diagnosis in a patient.
- To make a plan for a patient investigation to confirm disease diagnosis.
- To determine management tactics for a surgical disease.
- To assess the severity of the patient condition on clinical criteria (scales APACHE, SAPS).
- To reveal signs of acute appendicitis.
- To diagnose appendicitis in typical localization of appendix.
- To diagnose hernia of the abdominal wall.
- To diagnose complications of abdominal wall hernia.
- To choose management tactics in hernia of the abdominal wall correctly (to determine indications and contraindications for a surgery).
- To perform investigations in a patient to identify acute cholecystitis.
- To read ultrasonograms of the biliary system.
- To read radiographs of the biliary system.
- To identify complications of calculous cholecystitis.
- To choose tactics of management in patients with calculous cholecystitis.
- To reveal signs of acute pancreatitis.
- To determine the form of acute pancreatitis.
- To determine indications for surgical treatment in acute pancreatitis.
- To diagnose different forms of chronic pancreatitis.
- To diagnose liver cirrhosis, hepatic tumor, echinococcosis and portal hypertension.
- To use the Blackmore probe in bleeding from esophageal varicose veins.
- To detect basic clinical signs in arterial diseases on lower extremities.
- To read angiograms in arterial diseases on lower extremities.
- To diagnose varicosity and acute thrombophlebitis of lower extremities.
- To determine the state on the venous system on lower extremities.
- To read radiograms in different esophageal diseases.
- To reveal esophageal diseases on the basis of the patient's complains, the clinical presentation and the results of special diagnostic methods.
- To diagnose peptic ulcer disease of the stomach and the duodenum.
- To diagnose stomach and duodenum perforation.
- To determine management tactics in peptic ulcer disease of the stomach and the duodenum.
- To detect clinical signs of stomach cancer.
- To read radiographs in stomach cancer.
- To determine the tumor stage according to the results of patient's investigation.
- To make a plan for a patient investigation when colorectal cancer is suspected.
- To interpret the data of irrigoscopy in colorectal cancer.
- To diagnose rectal disease in time on the basis of clinical signs.
- To perform digital rectal examination.
- To prepare rectoscope for rectal examination.
- To care patients with colostomy.
- To diagnose acute intestinal obstruction timely.
- To perform siphon enema and assess its effect.
- To reveal signs of acute peritonitis.
- To determine the cause of acute peritonitis development.
- To apply methods of physical examination to diagnose breast diseases.
- To identify pathological process in the thyroid gland with help of physical examination.
- To reveal signs of thyrotoxicosis.

- To determine tactics of management in patients with goiter.
- To use knowledge in diagnostics of acute surgical diseases in the abdominal cavity for differential diagnostics of these diseases.

To have skills

- To collect patient's complaints and analyze them to detect localization of pathological process.
- To apply main methods of physical examination to make disease diagnosis in a patient.
- To make a plan for a patient investigation to confirm disease diagnosis.
- To determine management tactics for a surgical disease.
- To assess the severity of the patient condition on clinical criteria (scale APACHE, SAPS).
- To reveal signs of acute appendicitis.
- To diagnose appendicitis in typical localization of appendix.
- To diagnose hernia of the abdominal wall.
- To diagnose complications of abdominal wall hernia.
- To choose management tactics in hernia of the abdominal wall correctly (to determine indications and contraindications for a surgery).
- To perform investigations in a patient to identify acute cholecystitis.
- To read ultrasonograms of the biliary system.
- To read radiographs of the biliary system.
- To identify complications of calculous cholecystitis.
- To choose tactics of management in patients with calculous cholecystitis.
- To reveal signs of acute pancreatitis.
- To determine the form of acute pancreatitis.
- To determine indications for surgical treatment in acute pancreatitis.
- To diagnose different forms of chronic pancreatitis.
- To diagnose liver cirrhosis, hepatic tumor, echinococcosis and portal hypertension.
- To use the Blackmore probe in bleeding from esophageal varicose veins.
- To detect basic clinical signs in arterial diseases on lower extremities.
- To read angiograms in arterial diseases on lower extremities.
- To diagnose varicosity and acute thrombophlebitis of lower extremities.
- To determine the state on the venous system on lower extremities.
- To read radiograms in different esophageal diseases.
- To reveal esophageal diseases on the basis of the patient's complains, the clinical presentation and the results of special diagnostic methods.
- To diagnose peptic ulcer disease of the stomach and the duodenum.
- To diagnose stomach and duodenum perforation.
- To determine management tactics in peptic ulcer disease of the stomach and the duodenum.
- To detect clinical signs of stomach cancer.
- To read radiographs in stomach cancer.
- To determine the tumor stage according to the results of patient's investigation.
- To make a plan for a patient investigation when colorectal cancer is suspected.
- To interpret the data of irrigoscopy in colorectal cancer.
- To diagnose rectal disease in time on the basis of clinical signs.
- To perform digital rectal examination.
- To prepare rectoscope for rectal investigation.
- To care patients with colostomy.
- To diagnose acute intestinal obstruction timely.
- To perform siphon enema and assess its effect.
- To reveal signs of acute peritonitis.

- To determine the cause of acute peritonitis development.
- To apply methods of physical examination to diagnose breast diseases.
- To identify pathological process in the thyroid gland with help of physical examination.
- To reveal signs of thyrotoxicosis.
- To determine tactics of management in patients with goiter.
- To use knowledge in diagnostics of acute surgical diseases in the abdominal cavity for differential diagnostics of these diseases.

4. Discipline volume and types of learning activities

The duration of the course is 180 hours (5 credits).

Type of learning activities	Total hours	Semesters	
		7	8
Classes (total)	135	90	45
Including:	-	-	-
Lectures	-	-	-
Practical classes (PC)	135	90	45
Seminars (S)	-	-	-
Laboratory classes (LC)	-	-	-
Student self-directed learning (total)	45	18	27
Studying intensity, hours	180	108	72
credits	5	3	2

5. Discipline contents

5.1. The content of the discipline sections

№	Name of the discipline section	Content of the section
1.	Special issues	Appendicitis. Diagnostics, clinical presentation. Management. Hernia complications. General doctrine, classification. Management and complications. Cholecystitis. Diagnostics. Management. Complications. Acute pancreatitis. Chronic pancreatitis. Liver diseases. Mechanical jaundice. Etiology, pathogenesis. Diagnostics, Management. Artery diseases. Diseases of peripheral veins. Peptic ulcer disease of the stomach and the duodenum. Complications of peptic ulcer disease in stomach. Esophageal diseases. Stomach cancer. Intestinal diseases. Intestinal obstruction. Peritonitis. Diseases of the thyroid gland. Breast diseases.

5.2. Discipline sections and classes type

№	Name of discipline section	Lectures	Practic classes	laboratory classes	Student self-directed learning	Total hours
1.	Special issues	-	135	-	45	180

6. Laboratory workshop is not provided.

7. Practical classes (seminars) laboratory classes

№	№ of the discipline section	The subject matter of practical classes (seminars)	Studying intensity (hours)
1.	1	Patient curation.	4
2.	1	Appendicitis.	8
3.	1	Hernias.	8
4.	1	Cholecystitis.	8
5.	1	Mechanical jaundice.	8
6.	1	Acute pancreatitis.	8
7.	1	Chronic pancreatitis.	8
8.	1	Liver diseases.	8
9.	1	Diseases of the great vessels in the lower extremities.	8
10.	1	Peptic ulcer disease of the stomach and the duodenum.	8
11.	1	Stomach cancer.	8
12.	1	Small intestine diseases.	8
13.	1	Large intestine diseases.	7
14.	1	Rectal diseases.	7
15.	1	Intestinal obstruction.	7

16.	1	Peritonitis.	8
17.	1	Breast diseases.	8
18.	1	Diseases of the thyroid gland.	8

8. Material and technical support of the discipline

Personal computers, laptops, televisions, video recorders, DVD players, multimedia projectors, videos on surgery. Digital versions of lectures and seminars on surgery, videos of foreign surgical clinics, distributing materials in the form of tests, posters, methodical publications.

9. Information support of the discipline

a) software - licensed software.

Internet sites corresponding to selected topics of the discipline, resources of the University's electronic library.

b) database, information and referral systems and search systems.

1. TEIS - Telecommunication educational and information system.

<http://esystem.rudn.ru/>

2. Educational and scientific information center in the library of RUDN (Scientific library).

<http://lib.rudn.ru/>

3. Medical portal.

Meduniver contains a medical photoatlas, videos on various sections of medicine, medical electronic library.

<http://meduniver.com/>

4. Medical video portal.

The site contains video recordings of lectures from the leading Russian medical schools; surgical procedures with commentaries; speeches at scientific medical congresses and conferences; three-dimensional animated videos that demonstrate the function of various organs and systems; educational materials on fundamental sciences; catalog of medical sites; forum for exchange of views; information about medical institutions.

<http://www.med-edu.ru/>

5. Medline-Catalogue.

The founder of Medline is the U.S. National Library of Medicine (NLM). Medline is the largest open database of medical information in the world. There are over 75% of all the world's medical publications in the catalogue. Medline contains all the articles collected in the three main medical reference books: International Nursing Index, Index Medicus, Index to Dental Literature. <http://www.medline-catalog.ru/>

6. The biomedical journal Medline.ru.

The site contains original articles on various sections of medicine. <http://www.medline.ru>

10. Educational-and-methodological support of the discipline

a) basic literature

1. Oxford Handbook of Clinical Surgery

http://gynecology.sbm.ac.ir/uploads/4_5859289750657040624.pdf

2. Clinical Surgery SECOND EDITION

<http://www.anzjsurg.com/SpringboardWebApp/userfiles/anzjs/file/Clinical%20Surgery%202nd%20ed.pdf>

3. BASIC SURGICAL TECHNIQUES

<http://semmelweis.hu/mutettan/files/2017/02/BASIC-SURGICAL-TECHNIQUES.pdf>

11. Guidelines for organizing the study of the discipline:

It is required from the student to attend classes, to fulfil assignments of the discipline teacher, to get acquaintance with recommended literature, etc. During student certification, it is assessed the quality of work in classes, the preparation level for independent activities in the chosen field, the quality of the made assignments and the ability to self-directed study of educational material.

At practical classes and lectures it is carried out the analysis of related topics using multimedia technology (computer, projector).

Self-directed learning in extracurricular hours can take place both in the classrooms of the department and computer rooms, where the students can study material on presentations and also on computer tests prepared by the department's teachers.

Presentations on lesson's topics can be recorded on CDs or flash cards for student self-directed learning on a home computer.

Teaching aids in electronic form on selected topics are posted at the pages of the department and staff members of the faculty surgery department on the Educational Portal of RUDN University and also on local resources of the electronic library system of RUDN University.

One of the forms of self-directed learning is the preparation of summaries on various course sections and the presentation of reports at the scientific seminars of the department.

Extracurricular self-directed learning includes: material study on the textbook, teaching aids on paper and electronic media; report preparation on the chosen topic; preparation for knowledge assessment and tests.

Knowledge control

The current control of knowledge and success of the course mastering in full-time education is carried out in the form of an oral questioning or computer testing during practical classes.

Intermediate control of knowledge is carried out at least once a semester. This knowledge assessment is carried out in the form of an oral questioning. On intermediate control, the student should show his knowledge of the studied discipline sections, skills and abilities. It is also monitored for attendance of lectures and practical classes. Knowledge assessment is provided by simple "PASS/FAIL" system.

The student who has fully completed the discipline curriculum is permitted to pass the discipline final certification. The final certification is carried out in the form of an oral questioning.

To assess the educational activities of the students it is used point-rating system and ECTS grades.

The point-rating system is based on knowledge, acquired skills and abilities. The maximum number of points that a student can get during each semester is 100 points what corresponds to 100% of the course mastering. The student receives the basic points for successful studying, high knowledge and abilities, timely passed tests and an exam.

12. Fund of estimated means for students' knowledge assessment on the discipline (module) FACULTY SURGERY ML

No	Name of the section	Control form	Points	Competencies
1	Special issues	oral examination	100	GPC -1,4,5,6,7,10 PC -1,2,3,6 (6.3)

Positive grades, when the course is credited to the student, are grades A, B, C, D and E.

The student who received the grade **FX** on the discipline of the educational program, ought successfully complete the required minimum of tasks (learning works) established by the curriculum as scheduled and deliver the results to the teacher. If the quality of the tasks' implementation is found to be satisfactory, then the final grade FX is increased to E and the student is allowed to further studying.

If the quality of the tasks' implementation remains unsatisfactory, the final grade drops to F and the student is submitted for expulsion. In the case of grade F or FX, the student is presented for expulsion regardless of whether he has any debts on other disciplines.

The program is prepared in accordance with the requirements of the Educational Standards of Higher Education in RUDN/Federal State Educational Standard.

Developers:

Associate Professor
of the Department of Faculty Surgery

PhD, A.A. Barkhudarov

Assistant of the Department of Faculty Surgery

PhD, O.N. Cherepanova

Head of the Department of Faculty Surgery

DMSc, professor A.Ye. Klimov

Head of the Program

DMSc, professor I.V. Radysh