Ministry of Health of the Russian Federation

Federal State Budgetary Educational Institution
of Higher Education
North-Western State Medical University
named after I.I. Mechnikov
of the Ministry of Health of the Russian Federation

(North-Western State Medical University named after I.I. Mechnikov,
Ministry of Health of the Russian Federation)

COURSE SYLLABUS

«Faculty Surgery»

Specialty: 31.05.01 General Medicine

Specialization: Organization and provision of primary health care to the adult population in medical organizations

Language of instruction: Russian, English

2021

Подлинник электронного документа, подписанного ЭП,
хранится в системе электронного документооборота
ФГБОУ ВО СЗГМУ им. И.И.Мечникова Минздрава России
СВЕДЕНИЯ О СЕРТИФИКАТЕ ЭП
Сертификат 00CDEE3BD65A19B375D4FAEE2ABC26F298
Владелец Сайганов Сергей Анатольевич
Действителен с 03.12.2025 12:23:25 по 26.02.2027 12:23:25

This Syllabus for the course **Faculty Surgery** has been developed in accordance with the Federal State Educational Standard of Higher Education for the specialist degree program in the specialty 31.05.01 General Medicine (for international students), approved by Order No. 988 of the Ministry of Science and Higher Education of the Russian Federation dated August 12, 2020, 'On approval of the Federal State Educational Standard of Higher Education for the specialist degree program in the specialty 31.05.01 General Medicine.'

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The Course Syllabus was discussed at a meeting of the Department of Faculty Surgery named after I.I. Grekov on January 28, 2021, Minutes No. 1.

Head of the Department _____ / Zemlyanoy V.P./

Approved by the Methodological Commission for the specialty **31.05.01 General Medicine**

February 24, 2021

Chairperson _____ / I.G. Bakulin /

Reviewed by the Methodological Council and recommended for approval by the Academic Council
February 25, 2021

Chairperson _____ / S.A. Artyushkin

Date of recent update: _____

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Annex A1

1. Aim of the course

The aim of the course ***Faculty Surgery*** is to develop and deepen students' general professional competencies related to the recognition of major clinical syndromes in the typical presentation of surgical diseases, the principles of syndromic diagnosis, and the fundamentals of clinical examination and treatment of surgical patients, in accordance with the principles of evidence-based medicine.

In addition, the course aims to develop students' competencies in the organization and conduct of preventive examinations of surgical patients aimed at improving and maintaining public health.

2. Place of the course in the structure of the educational program

The course «Faculty Surgery» is part of the compulsory component of Block 1 Courses (Modules) of the main professional educational program in the specialty 31.05.01 General Medicine (specialist degree level), specialization Organization and provision of primary health care to the adult population in medical organizations.

The course is mandatory for study.

3. Planned learning outcomes of the course correlated with the planned learning outcomes of the educational program

Code and title of the competence	Code and title of the competence achievement indicator
General Professional Competencies GPC – 7 Able to prescribe treatment and monitor its effectiveness and safety**.**	**Indicator 1 GPC-7.1** Prescribes a therapeutic and protective regimen and determines the place and type of treatment taking into account the severity of the patient's condition.
	Indicator 2 GPC-7.2 Selects medicinal products, dosage forms, and routes of administration, and carries out rational substitution of medicinal products based on the patient's condition.
	Indicator 3 GPC-7.3 Predicts adverse drug reactions and implements measures for their prevention.
	Indicator 4 GPC-7.4 Monitors the effectiveness and safety of prescribed treatment at all stages of its implementation.
Professional Competencies PC-2 Able to conduct patient examinations to identify major pathological conditions, symptoms, disease syndromes, and nosological forms.	**Indicator 1 PC-2.1** Conducts patient interviewing and examination (collection of complaints, medical and life history, physical examination, palpation, percussion, and auscultation).
	Indicator 2 PC-2.2 Formulates a preliminary diagnosis, develops a diagnostic plan, and refers the patient for laboratory and/or instrumental examinations when medically indicated, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards.
	Indicator 3 PC-2.3 Refers the patient for consultation with medical specialists and/or for the provision of specialized medical care in inpatient or day-care (day hospital) settings when medically indicated, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards.
	Indicator 4 PC-2.4 Performs differential diagnosis with other diseases and/or

	conditions.
	Indicator 5 PC-2.5 Establishes a diagnosis in accordance with clinical classifications and the current International Statistical Classification of Diseases and Related Health Problems (ICD).
Professional Competencies PC-3 Able to manage and treat patients requiring medical care.	**Indicator 1 PC-3.1** Develops a treatment plan and prescribes non-pharmacological and pharmacological therapy for patients, taking into account the diagnosis, age, and clinical presentation, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards in the primary health care setting.
	Indicator 2 PC-3.2 Assesses the effectiveness and safety of the use of medicinal products, medical devices, therapeutic nutrition, and other treatment methods in the primary health care setting.
	Indicator 3 PC-3.3 Provides palliative medical care in collaboration with medical specialists, specialized medical organizations, and social services in the primary health care setting.
Professional Competencies PC-4 Able to carry out a set of measures for the preparation and conduct of various types of medical assessments.	**Indicator 1 PC-4.1** Conducts assessment of temporary disability.
	Indicator 2 PC-4.2 Determines indications for referral for medical and social assessment in the primary health care setting.
Professional Competencies PC-5 Able to determine the need for the use of natural therapeutic factors, pharmacological and non-pharmacological therapy, and other treatment methods in patients requiring medical rehabilitation and health resort treatment.	**Indicator 1 PC-5.1** Identifies and refers patients requiring medical rehabilitation to a medical specialist for the prescription and implementation of medical rehabilitation measures and/or health resort treatment, including within the framework of an individual rehabilitation program for persons with disabilities, in accordance with current regulations for the provision of medical care, clinical guidelines (treatment protocols), and medical care standards.

Code of the competence achievement indicator	Learning outcomes (Assessment criteria)	Assessment methods
Indicator 1 GPC-7.1	Knows the specific features of the therapeutic and protective regimen in a surgical hospital. Knows various types of treatment for surgical patients depending on the severity of their condition.	Control questions; Cases; Course work
	Able to determine the severity of a patient's condition. Able to prescribe a therapeutic and protective regimen. Able to determine the setting and type of treatment taking into account the severity of the patient's condition.	
	Has skills in prescribing a therapeutic and protective regimen for surgical patients. Has skills in determining the setting and type of treatment for a surgical patient based on the severity of the	

	condition.	
Indicator 2 GPC-7.2	Knows the clinical and pharmacological characteristics of the main groups of medicinal products. Knows the specific features of the use of medicinal products in the treatment of major pathological syndromes and emergency conditions in surgical patients.	Cases; Control questions; Course work
	Able to formulate indications for the selected treatment method, taking into account etiotropic and pathogenetic therapy. Able to justify pharmacotherapy for a specific surgical patient with major pathological syndromes and emergency conditions. Able to analyze the effects of medicinal products based on their pharmacological properties and their applicability in surgical patients. Able to use various dosage forms in the treatment of surgical patients, taking into account pharmacodynamic and pharmacokinetic characteristics.	
	Has skills in the use of medicinal products and their combinations in the treatment, rehabilitation, and prevention of surgical diseases.	
Indicator 3 GPC-7.3	Knows adverse drug reactions. Knows methods for the prevention of adverse drug reactions.	Control questions; Cases
	Able to prevent adverse drug reactions.	
	Has skills in predicting adverse drug reactions in surgical patients.	
Indicator 4 GPC-7.4	Knows the main therapeutic measures for acute diseases, conditions, and exacerbations of chronic diseases most commonly encountered in surgical practice that are not life-threatening.	Tests; Control questions; Cases; Course work
	Able to monitor the implementation of surgical treatment.	
	Has skills in carrying out basic therapeutic measures when providing surgical care to patients.	
Indicator 1 PC-2.1	Knows methods of collecting and analyzing patient complaints and medical and life history data. Knows methods of physical examination of a surgical patient: inspection, palpation, percussion, and auscultation.	Tests; Control questions; Cases; Course work
	Able to determine the clinical status of a surgical patient: collect history and conduct interviews with the patient and/or relatives. Able to perform an objective examination of a surgical patient. Able to analyze the collected information.	
	Has skills in collecting and analyzing complaints and medical history data of a surgical patient.	
Indicator 2 PC-2.2	Knows criteria for comprehensive assessment of the health status of a surgical patient. Knows diagnostic criteria for surgical diseases. Knows the procedure for examining a surgical patient in accordance with standards and clinical guidelines for medical care. Knows the main laboratory and functional diagnostic methods used in surgery.	Tests; Control questions; Cases; Course work
	Able to interpret interview and physical examination	

	findings in order to formulate a preliminary diagnosis. Able to develop a diagnostic examination plan for a surgical patient.	
	Has skills in formulating a preliminary diagnosis and developing a laboratory and instrumental examination plan when medically indicated, in accordance with current regulations, clinical guidelines, and medical care standards.	
Indicator 3 PC-2.3	Knows criteria for comprehensive assessment of a surgical patient's condition with the involvement of medical specialists. Knows standards and clinical guidelines for the provision of specialized medical care in inpatient or day-care settings.	Tests; Control questions; Cases; Course work
	Able to involve medical specialists for the provision of specialized medical care in inpatient or day-care (day hospital) settings when medically indicated, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards.	
	Has skills in joint (collegial) work with medical specialists to provide specialized medical care to a surgical patient in inpatient or day-care (day hospital) settings when medically indicated, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards.	
Indicator 4 PC-2.4	Knows the etiology and pathogenesis of the most common surgical diseases. Knows methods of differential diagnosis of surgical diseases with other diseases and/or conditions.	Tests; Control questions; Cases; Course work
	Able to apply a differential diagnostic approach when assessing the condition of a surgical patient.	
	Has skills in performing differential diagnosis of surgical diseases.	
Indicator 5 PC-2.5	Knows the basic concepts of general nosology (principles of classification of surgical diseases; disease nomenclature (ICD-10); forms and stages of disease development). Knows modern classifications of surgical diseases.	Tests; Control questions; Cases; Course work
	Able to synthesize patient information to determine pathology and its causes. Able to identify major pathological conditions, symptoms, disease syndromes, and nosological forms in accordance with clinical classifications and the ICD.	
	Has skills in establishing a diagnosis in accordance with clinical classifications and the ICD.	
Indicator 1 PC-3.1	Knows principles of patient management for various nosological forms. Knows treatment methods and indications for their use in surgery, taking into account age, diagnosis, and clinical presentation, in accordance with clinical guidelines and standards of care.	Tests; Control questions; Cases; Course work
	Able to determine patient management tactics. Able to develop a plan of surgical actions.	
	Has skills in determining patient management tactics in accordance with current regulations, clinical guidelines, and medical care standards in the primary health care setting.	

Indicator 2 PC-3.2	Knows basic therapeutic measures for the most common surgical conditions.	Tests; Control questions; Cases; Course work
	Able to assess the effectiveness and safety of surgical treatment, including the use of medicinal products, medical devices, therapeutic nutrition, and other treatment methods in the primary health care setting.	
	Has skills in organizing surgical care at key stages in accordance with medical care standards.	
Indicator 3 PC-3.3	Knows indications and methods for providing palliative care to surgical patients. Knows tactical aspects of providing palliative medical care in collaboration with specialists, specialized medical organizations, and social services.	Tests; Control questions; Course work
	Able to provide palliative surgical care.	
	Has skills in providing palliative care to surgical patients in interaction with medical specialists, specialized medical organizations, and social services in the primary health care setting.	
Indicator 1 PC-4.1	Knows criteria for assessing temporary disability in surgical patients. Knows rules for maintaining core medical documentation, including electronic records.	Control questions; Cases; Course work
	Able to assess temporary disability in surgical patients. Able to maintain medical documentation.	
	Has skills in assessing temporary disability and properly maintaining medical documentation, including electronic records.	
Indicator 2 PC-4.2	Knows the procedure for conducting medical and social assessment in the primary health care setting.	Control questions; Cases; Course work
	Able to determine indications for referral of surgical patients for medical and social assessment in the primary health care setting.	
	Has skills in determining indications for medical and social assessment in surgical patients.	
Indicator 1 PC-5.1	Knows the fundamentals of medical rehabilitation of surgical patients.	Control questions; Cases; Course work
	Able to determine the need for medical rehabilitation measures and/or health resort treatment for surgical patients in accordance with current regulations, clinical guidelines, and medical care standards.	
	Has skills in identifying and referring surgical patients requiring medical rehabilitation to a medical specialist for the prescription and implementation of medical rehabilitation measures and/or health resort treatment, including in the implementation of an individual rehabilitation program for persons with disabilities, in accordance with current regulations for the provision of medical care, clinical guidelines (treatment protocols), and medical care standards.	

4. Scope of the course and types of learning activities

Type of learning activity	Workload	Semesters	
		7	8
Contact hours (student–instructor interaction)	**124**	**48**	**76**

Classroom based work:	**120**	**48**	**72**
Lectures (L)	36	12	24
Practical classes (PC)	84	36	48
Self-study:	**92**	**24**	**68**
During the period of theoretical instruction	60	24	36
Preparation for the examination	32	–	32
Interim assessment: examination, including sitting the examination and group consultations	**4**	–	**4**
Total workload: Academic hours	**216**		
Credit units	**6**		

5. Content of the course structured by sections (topics), indicating the number of academic hours and types of classes

5.1. Content of course sections

№	Title of the course section	Annotated content of the course section	Competencies formed
1.	Acute surgical diseases of the abdominal organs	History of the Department of Faculty Surgery named after I.I. Grekov Semiotics of surgical diseases of the abdominal organs Mechanisms of abdominal pain Acute appendicitis Atypical forms of acute appendicitis Complications of acute appendicitis Cholelithiasis: chronic calculous cholecystitis Complications of cholelithiasis Obstructive jaundice: choledocholithiasis, cholangitis; differential diagnosis Acute pancreatitis Complications of acute pancreatitis Peptic ulcer disease of the stomach and duodenum: anatomy, etiopathogenesis, clinical presentation, diagnosis, surgical treatment Surgical complications of peptic ulcer disease: perforation, penetration, pyloroduodenal stenosis, bleeding	GPC-7 PC-2 PC-3 PC-4 PC-5

		Gastrointestinal bleeding: etiopathogenesis, differential diagnosis Acute intestinal obstruction Intestinal fistulas, colostomies, rehabilitation of colostomy patients Peritonitis	
2.	Differential diagnosis of acute surgical diseases of the abdominal organs with a typical clinical course	Acute abdomen: differential diagnosis	GPC-7 PC-2 PC-3 PC-4 PC-5
3.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Hernias of the anterior abdominal wall: etiopathogenesis, clinical presentation, diagnosis, treatment, complications Diseases of the diaphragm Surgical diseases of the esophagus Chronic pancreatitis Surgical diseases of the liver Portal hypertension syndrome Surgical diseases of the colon Surgical diseases of the rectum	GPC-7 PC-2 PC-3 PC-4 PC-5
4.	Abdominal trauma	Abdominal trauma	GPC-7 PC-2 PC-3 PC-4 PC-5
5.	Procedures in the practice of an abdominal surgeon	Procedures in the practice of an abdominal surgeon	GPC-7 PC-2 PC-3 PC-4 PC-5

5.2. Lecture plan (Semester 7)

№	Title of the course section	Lecture topics	Active learning methods	Workload (academic hours)
1.	Acute surgical diseases of the abdominal organs	Lec. 1 History of the Department of Faculty Surgery named after I.I. Grekov Acute appendicitis	Interactive lecture	2
2.	Acute surgical diseases of the abdominal organs	Lec. 2 Atypical forms and complications of acute appendicitis	Interactive lecture	2

№	Title of the course section	Lecture topics	Active learning methods	Workload (academic hours)
3.	Acute surgical diseases of the abdominal organs	Lec. 3 Cholelithiasis: chronic calculous cholecystitis	Interactive lecture	2
4.	Acute surgical diseases of the abdominal organs	Lec. 4 Complications of cholelithiasis Obstructive jaundice syndrome	Interactive lecture	2
5.	Acute surgical diseases of the abdominal organs	Lec. 5 Acute pancreatitis	Interactive lecture	2
6.	Acute surgical diseases of the abdominal organs	Lec. 6 Complications of acute pancreatitis	Interactive lecture	2
		Total:		12

Lecture plan (Semester 8)

№	Title of the course section	Lecture topics	Active learning methods	Workload (academic hours)
1.	Acute surgical diseases of the abdominal organs	Lec. 1 Surgical complication of peptic ulcer disease: perforation, penetration, pyloroduodenal stenosis	Interactive lecture	2
2.	Acute surgical diseases of the abdominal organs	Lec. 2 Gastrointestinal bleeding	Interactive lecture	2
3.	Acute surgical diseases of the abdominal organs	Lec. 3 Acute intestinal obstruction	Interactive lecture	2
4.	Differential diagnosis of acute surgical diseases of the abdominal organs with a typical clinical course	Lec. 4 Peritonitis. Acute abdomen	Interactive lecture	2
5.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec. 5 Hernias of the anterior abdominal wall	Interactive lecture	2
6.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec. 6 Diseases of the diaphragm	Interactive lecture	2
7.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec. 7 Surgical diseases of the esophagus	Interactive lecture	2

№	Title of the course section	Lecture topics	Active learning methods	Workload (academic hours)
8.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec. 8 Surgical diseases of the colon	Interactive lecture	2
9.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec. 9 Surgical diseases of the rectum	Interactive lecture	2
10.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec.10 Chronic pancreatitis	Interactive lecture	2
11.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec.11 Surgical diseases of the liver	Interactive lecture	2
12.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	Lec.12 Portal hypertension syndrome	Interactive lecture	2
			Total:	24

5.3. Practical classes plan (Semester 7)

№	Title of the course section	Practical class topic	Active learning methods	Assessment	Workload (academic hours)
1.	Acute surgical diseases of the abdominal organs	PC 1 History of the Department of Faculty Surgery named after I.I. Grekov Semiotics of surgical diseases of the abdominal organs Mechanisms of abdominal pain	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
2.	Acute surgical diseases of the abdominal organs	PC 2 Acute appendicitis: etiopathogenesis, classification, clinical	Group discussion; Simulation-based	Tests Control questions Cases Course work	4

		presentation, diagnosis, treatment	training; Case analysis;		
3.	Acute surgical diseases of the abdominal organs	PC 3 Atypical forms of acute appendicitis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
4.	Acute surgical diseases of the abdominal organs	PC 4 Complications of acute appendicitis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
5.	Acute surgical diseases of the abdominal organs	PC 5 Cholelithiasis: chronic calculous cholecystitis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
6.	Acute surgical diseases of the abdominal organs	PC 6 Acute cholecystitis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
7.	Acute surgical diseases of the abdominal organs	PC 7 Obstructive jaundice: choledocholithiasis, cholangitis; differential diagnosis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
8.	Acute surgical diseases of the abdominal organs	PC 8 Acute pancreatitis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
9.	Acute surgical diseases of the abdominal organs	PC 9 Complications of acute pancreatitis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
Total:					36

Practical classes plan (Semester 8)

№	Title of the course	Practical class topic	Active	Assessment	Workload

	section		learning methods		(academic hours)
1.	Acute surgical diseases of the abdominal organs	PC 1 Peptic ulcer disease of the stomach and duodenum: anatomy, etiopathogenesis, clinical presentation, diagnosis, surgical treatment	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
2.	Acute surgical diseases of the abdominal organs	PC 2 Surgical complications of peptic ulcer disease: perforation, penetration	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
3.	Acute surgical diseases of the abdominal organs	PC 3 Surgical complications of peptic ulcer disease: pyloroduodenal stenosis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	4
4.	Acute surgical diseases of the abdominal organs	PC 4 Gastrointestinal bleeding: differential diagnosis	Group discussion; Simulation-based training; Case analysis s	Tests Control questions Cases Course work	2
5.	Acute surgical diseases of the abdominal organs	PC 5 Surgical complications of peptic ulcer disease: bleeding	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
6.	Acute surgical diseases of the abdominal organs	PC 6 Acute small bowel obstruction	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
7.	Acute surgical diseases of the abdominal organs	PC 7 Acute large bowel obstruction	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
8.	Acute surgical diseases of the abdominal organs	PC 8 Intestinal fistulas, colostomies, rehabilitation of colostomy patients	Group discussion; Simulation-based training; Case	Tests Control questions Cases Course work	2

			analysis		
9.	Acute surgical diseases of the abdominal organs	PC 9 Peritonitis Written test	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
10.	Differential diagnosis of acute surgical diseases of the abdominal organs with a typical clinical course	PC 10 Acute abdomen: differential diagnosis	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
11.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 11 Hernias of the anterior abdominal wall: etiopathogenesis, clinical presentation, diagnosis, treatment	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
12.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 12 Hernias of the anterior abdominal wall: complications	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
13.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 13 Diseases of the diaphragm	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
14.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 14 Surgical diseases of the esophagus	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
15.	Surgical diseases of the anterior	PC 15 Chronic pancreatitis	Group discussion;	Tests Control	2

	abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course		Simulation-based training; Case analysis	questions Cases Course work	
16.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 16 Surgical diseases of the liver	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
17.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 17 Portal hypertension syndrome	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
18.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 18 Surgical diseases of the colon	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
19.	Surgical diseases of the anterior abdominal wall, diaphragm, esophagus, abdominal organs, and retroperitoneal space with a typical clinical course	PC 19 Surgical diseases of the rectum Written test	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
20.	Procedures in the practice of an abdominal surgeon	PC 20 Procedures in the practice of an abdominal surgeon	Group discussion; Simulation-based training; Case analysis	Control questions	2

21.	Abdominal trauma	PC 21 Abdominal trauma Written test	Group discussion; Simulation-based training; Case analysis	Tests Control questions Cases Course work	2
Total:					48

5.4. Seminars are not included in the course

5.5. Laboratory classes are not included in the course

5.6. Self-study

№	Title of the course section	Types of self-study	Assessment	Workload (academic hours)
1.	Acute surgical diseases of the abdominal organs	Preparation for classroom-based work (review of course materials based on lecture notes and recommended academic literature); preparation and writing of course work; independent study of selected topics.	Oral interview Solving cases Completing tests Preparation of course work	36
2.	Surgical diseases of the anterior abdominal wall	Preparation for classroom-based work (review of course materials based on lecture notes and recommended academic literature); preparation and writing of course work; independent study of selected topics.	Oral interview, solving cases, completing tests, preparation of course work	14
3.	Differential diagnosis of acute surgical diseases abdominal organs with a typical clinical course	Preparation for classroom-based work (review of course materials based on lecture notes and recommended academic literature); preparation and writing of course work; independent study of selected topics.	Oral interview, solving cases, completing tests, preparation of course work	6
4.	Procedures in the practice of an abdominal surgeon	Preparation for classroom-based work (review of course materials based on lecture notes and recommended academic literature); preparation and writing of course work; independent study of selected topics.	Oral interview, solving cases, completing tests, preparation of course work	2

5.	Abdominal trauma	Preparation for classroom-based work (review of course materials based on lecture notes and recommended academic literature); preparation and writing of course work; independent study of selected topics.	Oral interview, solving cases, completing tests, preparation of course work	2
			Total:	60
			Examination preparation	32

5.6.1. Independent study of selected topics

Title	Methodological support	Assessment
Mallory–Weiss syndrome: etiology, clinical presentation, diagnosis, treatment.	Surgical Diseases: Textbook / edited by M.I. Kuzin. — Moscow, 2015. — 784 p.	Oral interview, solving cases, completing tests, preparation of course work
Polypoid gastritis: clinical presentation, diagnosis, rate of malignant transformation, role of gastroscopic examinations in уточнение diagnosis.		
Diseases of the operated stomach: classification of post-gastrectomy diseases; non-healing ulcers; ulcer recurrence; peptic ulcers of the jejunum; gastrocolic fistula; afferent loop syndrome; reflux gastritis; reflux esophagitis; dumping syndrome, etc.; causes, clinical manifestations, diagnostic methods, indications for surgical treatment, methods of reconstructive surgery, prevention of complications.		
Pancreatic cysts: classification, clinical presentation, diagnosis, principles of surgical treatment, external and internal cyst drainage.		
Extra- and intracorporeal detoxification in acute pancreatitis.		
Strangulated hernia: definition; mechanisms of fecal and elastic strangulation; pathoanatomical changes in the strangulated organ (strangulation groove, changes in the strangulated intestine and afferent loop, ischemic necrosis); types of strangulation; clinical presentation, diagnosis, differential diagnosis, treatment, features of surgical technique; management in cases of spontaneous and forced reduction of a strangulated hernia.		
Incisional hernias: causes, clinical presentation, diagnosis, surgical methods, methods of preoperative preparation, prevention.		
Chemical burns and cicatricial strictures of the esophagus: pathogenesis; clinical presentation of the acute period; first aid and principles of treatment in the acute period; early and late bougienage; clinical presentation of cicatricial esophageal stricture; diagnosis; treatment by bougienage; surgical treatment.		

Foreign bodies of the esophagus: clinical presentation, diagnosis, treatment.		

5.6.2. Course work topics

1. Modern methods for diagnosing surgical diseases.
2. Abdominal pain: integration of diseases manifesting as abdominal pain, characteristics of pain syndrome in various intra- and extra-abdominal pathologies. Development of a diagnostic and treatment algorithm for differential diagnosis.
3. Pseudoperitoneal syndrome: clinical manifestation of peritonitis in extra-abdominal diseases, characteristics of symptoms, diagnostic and differential diagnostic methods.
4. Jaundice syndrome: starting points for differential diagnosis, characteristics of etiopathogenesis, clinical and biochemical manifestations of various types of jaundice, surgical treatment.
5. Gastrointestinal bleeding: diseases accompanied by gastrointestinal bleeding, characteristics of the clinical manifestations of these diseases, differential diagnostic and treatment algorithm, conservative and surgical treatment methods.
6. Minimally invasive methods of treatment of surgical diseases of abdominal organs.

6. Methodological guidelines for students on mastering the course

Ongoing assessment

Ongoing assessment of students' knowledge is carried out at every class. For this purpose, tests are used for each topic studied, as well as interactive discussion methods focused on the most significant aspects of practical and theoretical importance. Practical classes also include assignments followed by mandatory discussion of the current level of students' knowledge. During classes, students' awareness and understanding are assessed based on the discussion of several topics.

Time management

An important condition for successful mastery of the course is the development of a well-organized system of work that allows students to distribute their academic workload evenly in accordance with the educational schedule. Drawing up a work plan for the semester, month, week, and day can be of great assistance in this process. Having such a plan helps to allocate free time effectively for study and to work more efficiently.

It is recommended to plan tasks for the following day in advance, preferably in the evening. At the end of each day, it is advisable to review the work completed: carefully check whether all planned tasks have been accomplished, identify any deviations from the plan, and analyze their causes. Self-monitoring is a necessary condition for successful learning. If any tasks remain incomplete, time should be allocated to complete them without reducing the overall weekly workload.

Assignments for practical classes, as well as tasks assigned for self-study, are recommended to be completed immediately after the corresponding lecture topic. This approach способствует better understanding of the material, allows timely identification and elimination of knowledge gaps, helps systematize previously studied material, and facilitates the acquisition of new knowledge and skills.

The university education system is based on a rational combination of different types of learning activities, primarily lectures and practical classes, each of which has its own specific features

Preparation for lectures

An introduction to the subject begins in the very first lecture, where you're required not only to pay attention but also to independently take notes. When working with lecture notes, it's important to keep in mind that some lectures provide answers to specific questions on the topic, while others merely reveal the connections between phenomena, helping the student understand the underlying developments of the subject, both historically and in the present.

Lecture note-taking is a complex form of classroom work that requires intensive mental activity on the part of the student. Notes are most useful when the most essential points are captured and written down by the student themselves. Don't try to transcribe the entire lecture verbatim. This kind of "note-taking" does more harm than good. It's best to first understand the main idea the lecturer is presenting and then write it down. It's best to keep notes on a single page or leave margins where you can later, when working independently, make additional notes and highlight unclear passages.

It's best to divide lecture notes into points, using indented lines. This will be greatly facilitated by the lecture outline questions provided to the instructor. Pay attention to the lecturer's emphasis and conclusions, noting the most important points in the lecture material with comments like "important," "remember well," and so on. You can also do this using colored markers or pens, underlining terms and definitions.

It's a good idea to develop your own system of abbreviations, acronyms, and symbols. However, when further working with the notes, it's best to replace the symbols with common words to facilitate rapid visual comprehension.

When working on lecture notes, it's always essential to use not only the textbook but also any additional literature recommended by the lecturer. This serious, meticulous work with the lecture material will allow for a deep understanding of the theoretical material.

Preparation for practical classes

Careful consideration and study of the plan's topics is based on working through the current lecture material, followed by studying the required and additional literature recommended for the topic. All new concepts on the topic being studied must be memorized and entered into a glossary, which should be maintained from the very beginning of the course.

The result of this work should be demonstrated in the ability to freely answer theoretical questions during the practical course, speak and participate in group discussions on the topic being studied, and correctly complete practical assignments and tests.

In preparation for practical classes, special attention must be paid to independent study of the recommended literature. Even with comprehensive lecture notes, it is impossible to cover all the material due to the limited number of classroom hours. Therefore, independent study of textbooks, teaching aids, scientific and reference literature, periodicals, and the internet is the most effective method of acquiring additional knowledge. It significantly accelerates the process of acquiring information, promotes a deeper understanding of the material being studied, and fosters a correct approach to a specific problem.

Recommendations for working with literature

It's advisable to begin working with literature by studying general works on the topic, as well as textbooks and teaching aids. Next, it's recommended to move on to analyzing monographs and articles that examine specific aspects of the issues covered in the course, as well as official materials and unpublished documents (research papers, dissertations), which may address the key issues of the problem being studied.

Working with sources should begin with skimming, i.e., skimming the text, highlighting its structural units. During skimming, bookmarks are used to mark pages that require closer examination.

Depending on the results of skimming, a further method for working with the source is selected. If the solution to the task requires studying certain text fragments, a selective reading method is used. If the book does not have a detailed table of contents, the student's attention

should be drawn to the subject and name indices. Selected passages or the entire text (if it is entirely relevant to the topic) require thoughtful, unhurried reading with a "mental processing" of the material. This type of reading involves identifying: 1) the main points of the text; 2) the main arguments; 3) the conclusions. Particular attention should be paid to whether the thesis follows from the arguments.

It is also necessary to analyze which of the author's statements are problematic or hypothetical, and to identify hidden questions.

Understandably, the ability to work with text in this way does not come immediately. The best way to learn to identify the main points of a text, grasp the problematic nature of statements, and evaluate the author's position is comparative reading, during which you become familiar with different opinions on the same issue, compare the weight and evidence of the arguments of both sides, and conclude which position is more persuasive. If the literature contains different points of view on a given issue due to the complexity of past events and legal phenomena, they cannot be dismissed without further investigation. If there are discrepancies between authors, it is necessary to identify the rationale behind each, which will allow for a deeper understanding of the subject matter and a more critical assessment of the issues under study. When familiarizing yourself with the authors' distinct positions, you should identify their similarities in judgments, arguments, and conclusions, then compare them and apply the most compelling one.

The next step in working with literary sources is creating notes outlining the main points and arguments. You can make notes on separate sheets of paper, which can then be easily organized by specific topics within the course. Another method is to keep thematic notebooks on a single topic. Large, specialized monographic works are best summarized in separate notebooks. It's important to remember that notes are written on one side of the paper, with margins and sufficient line spacing for corrections and remarks (these rules are followed for ease of editing). If the notes contain quotations, the source (author, title, publication information, page number) must be cited. This information can later be used when writing the text of the paper or other assignment.

7. Assessment materials

Assessment materials for the course used for ongoing assessment and interim assessment of students include examples of assessment methods (Annex A to the Course Syllabus), as well as the assessment procedure and evaluation criteria.

8. List of academic literature and Internet resources required for mastering the course

8.1. Academic Literature

1. Surgical Diseases: Textbook / edited by M.I. Kuzin. — Moscow, 2015. — 784 p.
2. General Surgery: Textbook / edited by V.K. Gostishchev. — Moscow, 2006. — 832 p.
3. Operative Surgery and Topographic Anatomy: Textbook / edited by V.V. Kovanov. — Moscow, 2001. — 408 p.
4. Operative Surgery: Textbook (in 3 volumes) / edited by N.I. Littmann. — Moscow, 1986.
5. Lectures on Abdominal Surgery for the Faculty of Preventive Medicine / S.M. Lazarev, B.P. Filenko, Kh.A. Gamzatov, A.S. Ivanov, A.N. Barsukov et al. — Saint Petersburg: St. Petersburg State Medical Academy named after I.I. Mechnikov, 2011.
6. Surgical Infections: A Guide / edited by I.A. Eryukhin, B.R. Gelfand, S.A. Shlyapnikov. — Saint Petersburg: Piter, 2003. — 864 p.
7. Kuzin, M.I. Surgical Diseases: Textbook / M.I. Kuzin, N.M. Kuzin, V.A. Kubyshkin et al. — 5th ed., revised and expanded. — Moscow: GEOTAR-Media, 2022. — 1024 p. — ISBN 978-5-9704-7014-5. — Electronic resource. — Available at: https://www.studentlibrary.ru/book/ISBN9785970470145.html

8. Merzlikin, N.V. Surgical Diseases: in 2 volumes. Vol. 1: Textbook / N.V. Merzlikin, N.A. Brazhnikova, B.I. Alperovich, V.F. Tskhai. — Moscow: GEOTAR-Media, 2021. — 360 p. — ISBN 978-5-9704-5852-5. — Electronic resource. — Available at: https://www.studentlibrary.ru/book/ISBN9785970458525.html
9. Course of Faculty (Analytical) Surgery in Pictures, Tables, and Diagrams / M.A. Lagoon, B.S. Kharitonov; edited by Prof. S.V. Vertyankin. — Moscow: GEOTAR-Media, 2017. — 436 p. — ISBN 978-5-9704-3927-2. — Electronic resource. — Available at: https://www.studentlibrary.ru/book/ISBN9785970439272.html

8.2. Internet resources

Name	Available at
'Kniga Fond' Electronic Library System	http://www.knigafund.ru
Electronic Library System of the I.M. Sechenov First Moscow State Medical University	http://www.scsml.rssi.ru
Scientific Electronic Library (eLibrary)	http://www.elibrary.ru
ARBICON. Medical Portal	http://arbicon.ru
Full-text access on the ScienceDirect platform from Elsevier	http://www.sciencedirect.com
PubMed medical search engine	http://www.ncbi.nlm.nih.gov/pubmed
Russian Medicine Database of the Central Scientific Medical Library	http://www.scsml.rssi.ru
Union Catalog of Medical Periodicals and Analytical Works	http://ucm.sibtechcenter.ru
N.I. Pirogov Journal	http://www.pirogov-center.ru/about/structure/magazine/
Russian Society of Surgeons	http://surgeons.ru/ http://www.emedicine.com http://www.medport.ru http://www.medlinks.ru
Journal of Medical Internet Research	http://www.jmir.org
Information and Educational System for Practicing Physicians	http://www.rosmedlib.ru
Russian Medical Portal	http://www.rosmedportal.com
World Health Organization	http://www.who.int
University Information System RUSSIA (individual registration)	https://uisrussia.msu.ru/
WHO publications in Russian	http://www.who.int/publications/list/ru/
International medical guidelines	https://www.guidelines.gov/
PubMed - Worldwide database of articles in medical journals	https://www.ncbi.nlm.nih.gov/
Central Research Institute of Dentistry and Maxillofacial Surgery of the Ministry of Health of the Russian Federation	http://www.cniis.ru/
Federal Electronic Medical Library	http://feml.scsml.rssi.ru/feml/
Consilium-Medicum	http://con-med.ru/
MDTube: Medical Video Portal	http://mdtube.ru/
Russian Medical Journal (RMJ)	https://www.rmj.ru/
EastView Medicine and Healthcare in Russia	https://dlib.eastview.com/

MediaSfera Publishing House journals	https://www.mediasphera.ru/
	https://rd.springer.com/
Springer Link platform (journals and books 2005-2017)	https://www.nature.com/
Nature platform	https://materials.springer.com/
Springer Materials database	https://experiments.springernature.com/springer-protocols-closure
Springer Protocols database	https://zbmath.org/
zbMath database	https://nano.nature.com/
Nano database	http://web.b.ebscohost.com/ehost/
MEDLINE Complete EBSCOhost Web	https://www.cambridge.org/core
Cambridge University Press (journals)	https://www.sciencedirect.com/
ScienceDirect (journals since 2014, books by list)	https://apps.webofknowledge.com/
Web of Science (abstracts and Scientometric electronic databases)	https://www.scopus.com/search/form.uri?display=basic
Scopus (the world's largest unified abstract database)	http://archive.neicon.ru/xmlui/
NEICON – search through scientific journal archives	http://archive.neicon.ru/xmlui/handle/123456789/1391849
Annual Reviews (archive of the publisher's journals from 1936 to 2006)	http://archive.neicon.ru/xmlui/handle/123456789/905824
Cambridge Journals (access to the archive of scientific journals up to 2011)	http://archive.neicon.ru/xmlui/handle/123456789/1417890
Oxford University Press (archive depth – up to and including 1995)	http://archive.neicon.ru/xmlui/handle/123456789/1947637
Nature journal Digital archive (archive of the journal Nature: archive depth – from 1869 to 1995)	http://archive.neicon.ru/xmlui/handle/123456789/4752274/browse?type=source
Royal Society of Chemistry (archive depth – from 1841 to 2007)	http://archive.neicon.ru/xmlui/handle/123456789/2757634
Sage Publications (1800-1998)	http://archive.neicon.ru/xmlui/handle/123456789/2490906
The American Association for the Advancement of Science (AAAS) Science Classic (digital archive of Science journal articles: archive depth – from 1880 to 1996)	http://archive.neicon.ru/xmlui/handle/123456789/156399

9. List of information technologies used for mastering the discipline, including a list of software, professional databases and information reference systems

9.1 List of information technologies applied in the course delivery:

№	Title of the course section	Information technologies
1.	History of surgery Acute surgical diseases of the abdominal organs	course materials in the Electronic Information and Educational Environment of the North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federationhttps://moodle.szgmu.ru/course/index.php?categoryid=35
2.	Surgical diseases of the anterior abdominal wall	course materials in the Electronic Information and Educational Environment of the North-Western State

		Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federationhttps://moodle.szgmu.ru/course/index.php?categoryid=35
3.	Differential diagnosis of acute surgical diseases abdominal organs with a typical clinical course	course materials in the Electronic Information and Educational Environment of the North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federationhttps://moodle.szgmu.ru/course/index.php?categoryid=35
4.	Procedures in the practice of an abdominal surgeon	course materials in the Electronic Information and Educational Environment of the North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federationhttps://moodle.szgmu.ru/course/index.php?categoryid=35
5.	Abdominal trauma	course materials in the Electronic Information and Educational Environment of the North-Western State Medical University named after I.I. Mechnikov of the Ministry of Health of the Russian Federationhttps://moodle.szgmu.ru/course/index.php?categoryid=35

9.2 List of software used for course delivery*:*

№	Software name	License term	Documents confirming the right to use software products
Licensed software			
1.	ESET NOD 32	1 year	State contract № 07/2020
2.	MS Windows 8 MS Windows 8.1 MS Windows 10 MS Windows Server 2012 Datacenter - 2 Proc MS Windows Server 2012 R2 Datacenter - 2 Proc MS Windows Server 2016 Datacenter Core	Unlimited	State contract № 30/2013-O; State contract № 399/2013-OA; State contract № 07/2017-ЭА.
3.	MS Office 2010 MS Office 2013	Unlimited	State contract № 30/2013-OA; State contract № 399/2013-OA.
4.	Academic LabVIEW Premium Suite (1 User)	Unlimited	State contract № 02/2015
Licensed domestically produced software			
1.	Antiplagiat	1 year	State contract № 2409
2.	«WEBINAR» version 3.0	1 year	Contract № 347/2020-M
3.	« E-learning environment 3KL»	1 year	Contract № 348/2020-M
4.	TrueConf Enterprise	1 year	Contract № 396/2020-ЭА
Freely distributed software			

1.	Google Chrome	Unlimited	Open License Agreement GNU GeneralPublicLicense
2.	NVDA	Unlimited	Open License Agreement GNU GeneralPublicLicense
Freely distributed software of domestic production			
1.	Moodle	Unlimited	Open License Agreement GNU GeneralPublicLicense

9.3 List of professional databases and information reference systems:

№	Software name	License term	Documents confirming the right to use software products	Accessibility for students with disabilities and individuals with limited health capabilities
1.	Consultant Plus	1 year	Договор № 655/2020-ЭА	-
2.	ELS «Konsultant studenta»	1 year	Contract № 307/2020-ЭА	http://www.studmedlib.ru/
3.	EMD «Konsultant vracha»	1 year	Contract № 281/2020-ЭА	http://www.rosmedlib.ru/
4.	ELS «ibooks.ru»	1 year	Contract № 06/2020	https://ibooks.ru
5.	ELS «IPRBooks»	1 year	Contract № 08/2020-ЗК	http://www.iprbookshop.ru/special
6.	ELS «Bookup»	1 year	Contract № 05/2020	https://www.books-up.ru/
7.	ELS «Lan' Publishing»	1 year	Contract № 395/2020-ЭА	https://e.lanbook.com/

10. Material and Technical Support for the Course

Classrooms for lecture-type classes, group and individual consultations, ongoing academic performance monitoring, and midterm assessments, equipped with the necessary equipment and technical teaching aids: Federal State Budgetary Educational Institution of Higher Education I.I. Mechnikov North-Western State Medical University, Piskarevsky Prospekt, 47, St. Petersburg, 195267, Piskarevsky Prospekt, 47, Lit. R, Room 12, Lit. L, Room 9, Lit. O, Room 3. Equipment: classroom board, teacher's desk/chair, student tables/chairs. Technical teaching aids: multimedia projector, teacher's laptop, system unit, monitor. Special technical teaching aids: Roger Pen (Roger pen-shaped personal wireless transmitter), Roger MyLink (Roger Pen system signal receiver) (for students with hearing impairments); IntelliKeys (wired keyboard with Russian Braille and a matte black finish), (St. Petersburg, Piskarevsky Prospekt, 47, Lit. R (Bldg. 9), Rooms 18 and 19, Mechnikov North-Western State Medical University, Ministry of Healthcare of the Russian Federation).

Classrooms for seminar-type classes, group and individual consultations, ongoing progress monitoring, and midterm assessments, equipped with the necessary equipment and technical teaching aids, Mechnikov North-Western State Medical University, 195267, St. Petersburg, Piskarevsky Prospekt, 47, Lit. R, Rooms 4, 23, 28, 29, 32, 128, and 130. Equipment: Classroom board, teacher's desk/chair, student desks/chairs.

Teaching aids: multimedia projector, teacher's laptop, system unit, monitor.

Specialized teaching aids: Roger Pen (Roger Pen-shaped wireless transmitter), Roger MyLink (Roger Pen receiver) (for students with hearing impairments); IntelliKeys (wired keyboard with Russian Braille and a matte black finish). (St. Petersburg, Piskarevsky Prospekt, 47, Lit R (Bldg. 9), Rooms 18 and 19, Mechnikov North-Western State Medical University, Ministry of Health of the Russian Federation).

Student study spaces equipped with computers and internet access and access to the University's online information and educational environment are located at 47 Piskarevsky Prospekt, Building AE (Building 32), St. Petersburg,

Room 1, Building R (Building 9), Rooms 18 and 19, North-Western State Medical University named after I.I. Mechnikov, Ministry of Healthcare of the Russian Federation.

Annex A

Ministry of Health of the Russian Federation

Federal State Budgetary Educational Institution
of Higher Education
North-Western State Medical University
named after I.I. Mechnikov
of the Ministry of Health of the Russian Federation

(North-Western State Medical University named after I.I. Mechnikov,
Ministry of Health of the Russian Federation)

ASSESSMENT MATERIALS

(for ongoing assessment and interim assessment of students)

Specialty: 31.05.01 General Medicine

Specialization: Organization and provision of primary health care to the adult population in medical organizations

Language of instruction: Russian, English

Saint Petersburg – 2021

1. List of planned learning outcomes

Code of the competence achievement indicator	Learning outcomes (Assessment criteria)	Assessment methods
Indicator 1 GPC-7.1	Knows the specific features of the therapeutic and protective regimen in a surgical hospital. Knows various types of treatment for surgical patients depending on the severity of their condition.	Control questions; Cases; Course work
	Able to determine the severity of a patient's condition. Able to prescribe a therapeutic and protective regimen. Able to determine the setting and type of treatment taking into account the severity of the patient's condition.	
	Has skills in prescribing a therapeutic and protective regimen for surgical patients. Has skills in determining the setting and type of treatment for a surgical patient based on the severity of the condition.	
Indicator 2 GPC-7.2	Knows the clinical and pharmacological characteristics of the main groups of medicinal products. Knows the specific features of the use of medicinal products in the treatment of major pathological syndromes and emergency conditions in surgical patients.	Cases; Control questions; Course work
	Able to formulate indications for the selected treatment method, taking into account etiotropic and pathogenetic therapy. Able to justify pharmacotherapy for a specific surgical patient with major pathological syndromes and emergency conditions. Able to analyze the effects of medicinal products based on their pharmacological properties and their applicability in surgical patients. Able to use various dosage forms in the treatment of surgical patients, taking into account pharmacodynamic and pharmacokinetic characteristics.	
	Has skills in the use of medicinal products and their combinations in the treatment, rehabilitation, and prevention of surgical diseases.	
Indicator 3 GPC-7.3	Knows adverse drug reactions. Knows methods for the prevention of adverse drug reactions.	Control questions; Cases
	Able to prevent adverse drug reactions.	
	Has skills in predicting adverse drug reactions in surgical patients.	
Indicator 4 GPC-7.4	Knows the main therapeutic measures for acute diseases, conditions, and exacerbations of chronic diseases most commonly encountered in surgical practice that are not life-threatening.	Tests; Control questions; Cases; Course work
	Able to monitor the implementation of surgical treatment.	
	Has skills in carrying out basic therapeutic measures when providing surgical care to patients.	
Indicator 1 PC-2.1	Knows methods of collecting and analyzing patient complaints and medical and life history data. Knows methods of physical examination of a surgical patient: inspection, palpation, percussion, and	Tests; Control questions; Cases; Course work

	auscultation.	
	Able to determine the clinical status of a surgical patient: collect history and conduct interviews with the patient and/or relatives. Able to perform an objective examination of a surgical patient. Able to analyze the collected information.	
	Has skills in collecting and analyzing complaints and medical history data of a surgical patient.	
Indicator 2 PC-2.2	Knows criteria for comprehensive assessment of the health status of a surgical patient. Knows diagnostic criteria for surgical diseases. Knows the procedure for examining a surgical patient in accordance with standards and clinical guidelines for medical care. Knows the main laboratory and functional diagnostic methods used in surgery.	Tests; Control questions; Cases; Course work
	Able to interpret interview and physical examination findings in order to formulate a preliminary diagnosis. Able to develop a diagnostic examination plan for a surgical patient.	
	Has skills in formulating a preliminary diagnosis and developing a laboratory and instrumental examination plan when medically indicated, in accordance with current regulations, clinical guidelines, and medical care standards.	
Indicator 3 PC-2.3	Knows criteria for comprehensive assessment of a surgical patient's condition with the involvement of medical specialists. Knows standards and clinical guidelines for the provision of specialized medical care in inpatient or day-care settings.	Tests; Control questions; Cases; Course work
	Able to involve medical specialists for the provision of specialized medical care in inpatient or day-care (day hospital) settings when medically indicated, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards.	
	Has skills in joint (collegial) work with medical specialists to provide specialized medical care to a surgical patient in inpatient or day-care (day hospital) settings when medically indicated, in accordance with current regulations for the provision of medical care, clinical guidelines, and medical care standards.	
Indicator 4 PC-2.4	Knows the etiology and pathogenesis of the most common surgical diseases. Knows methods of differential diagnosis of surgical diseases with other diseases and/or conditions.	Tests; Control questions; Cases; Course work
	Able to apply a differential diagnostic approach when assessing the condition of a surgical patient.	
	Has skills in performing differential diagnosis of surgical diseases.	
Indicator 5 PC-2.5	Knows the basic concepts of general nosology (principles of classification of surgical diseases; disease nomenclature (ICD-10); forms and stages of disease development). Knows modern classifications of surgical diseases.	Tests; Control questions; Cases; Course work
	Able to synthesize patient information to determine pathology and its causes.	

	Able to identify major pathological conditions, symptoms, disease syndromes, and nosological forms in accordance with clinical classifications and the ICD.	
	Has skills in establishing a diagnosis in accordance with clinical classifications and the ICD.	
Indicator 1 PC-3.1	Knows principles of patient management for various nosological forms. Knows treatment methods and indications for their use in surgery, taking into account age, diagnosis, and clinical presentation, in accordance with clinical guidelines and standards of care.	Tests; Control questions; Cases; Course work
	Able to determine patient management tactics. Able to develop a plan of surgical actions.	
	Has skills in determining patient management tactics in accordance with current regulations, clinical guidelines, and medical care standards in the primary health care setting.	
Indicator 2 PC-3.2	Knows basic therapeutic measures for the most common surgical conditions.	Tests; Control questions; Cases; Course work
	Able to assess the effectiveness and safety of surgical treatment, including the use of medicinal products, medical devices, therapeutic nutrition, and other treatment methods in the primary health care setting.	
	Has skills in organizing surgical care at key stages in accordance with medical care standards.	
Indicator 3 PC-3.3	Knows indications and methods for providing palliative care to surgical patients. Knows tactical aspects of providing palliative medical care in collaboration with specialists, specialized medical organizations, and social services.	Tests; Control questions; Course work
	Able to provide palliative surgical care.	
	Has skills in providing palliative care to surgical patients in interaction with medical specialists, specialized medical organizations, and social services in the primary health care setting.	
Indicator 1 PC-4.1	Knows criteria for assessing temporary disability in surgical patients. Knows rules for maintaining core medical documentation, including electronic records.	Control questions; Cases; Course work
	Able to assess temporary disability in surgical patients. Able to maintain medical documentation.	
	Has skills in assessing temporary disability and properly maintaining medical documentation, including electronic records.	
Indicator 2 PC-4.2	Knows the procedure for conducting medical and social assessment in the primary health care setting.	Control questions; Cases; Course work
	Able to determine indications for referral of surgical patients for medical and social assessment in the primary health care setting.	
	Has skills in determining indications for medical and social assessment in surgical patients.	
Indicator 1 PC-5.1	Knows the fundamentals of medical rehabilitation of surgical patients.	Control questions; Cases; Course work
	Able to determine the need for medical rehabilitation measures and/or health resort treatment for surgical patients in accordance with current regulations, clinical	

	guidelines, and medical care standards.	
	Has skills in identifying and referring surgical patients requiring medical rehabilitation to a medical specialist for the prescription and implementation of medical rehabilitation measures and/or health resort treatment, including in the implementation of an individual rehabilitation program for persons with disabilities, in accordance with current regulations for the provision of medical care, clinical guidelines (treatment protocols), and medical care standards.	

2. Examples of assessment methods and evaluation criteria for conducting ongoing assessment

2.1. Examples of input test

Acute appendicitis: anatomical variants of the vermiform appendix.
Acute appendicitis: classification.
Appendicular abscess: definition, clinical presentation.
Peritonitis: etiopathogenesis.
Hernias of the anterior abdominal wall: definition

Evaluation criteria, Pass/Fail grading system

Grade	Description
«pass»	Full understanding of the problem; all assignment requirements met.
«fail»	Lack of understanding of the problem; many assignment requirements not met; no response.

2.2. Test examples

Indicator 1 GPC-7.1, Indicator 2 GPC-7.2, Indicator 3 GPC-7.3, Indicator 4 GPC-7.4.
Question Title: Question 1
For appendicitis complicated by diffuse peritonitis, surgery is required through:
1) an incision in the right iliac fossa
2) a lower midline laparotomy
3) a pararectal approach
4) a transrectal approach

Question Title: Question 2
Leaving tampons in the abdominal cavity after appendectomy is indicated for:
1) uncontrolled capillary bleeding
2) gangrenous-perforated appendicitis
3) local peritonitis
4) diffuse peritonitis

Question Title: Question 3
Emergency surgery for omentobursitis is performed in the following cases:
1) enzymatic omentobursitis
2) omental cyst
3) purulent omentobursitis

4) adhesive omentobursitis

Question Title: Question 4
In acute hemorrhagic pancreatitis, laparoscopy may reveal the following in the abdominal cavity:
1) hemorrhagic effusion
2) purulent exudate
3) fibrin deposition on the peritoneum
4) bile exudate

Question Title: Question 5
A patient with jaundice due to gallstones requires:
1) emergency surgery
2) delayed surgery
3) planned surgery
4) no surgery

Indicator 1 PC-2.1, Indicator 2 PC-2.2
Question Title: Question 1
In the first hours of gastric bleeding, the following may occur:
1) Melena
2) Muscle defense symptom
3) Coffee-ground vomiting
4) Bradycardia

Question Title: Question 2
When detecting the appendix in the pelvis, the following is detected:
1) Blood in the stool
2) Severe pain in the anterior rectal wall during rectal examination
3) Temperature reaction symptom
4) Pasternatsky's sign

Question Title: Question 3
Paralytic intestinal obstruction is characterized by:
1) Abdominal asymmetry
2) Loose stools
3) Cramping abdominal pain
4) Uniform abdominal distension

Question Title: Question 4
Factors leading to the development of acute intestinal obstruction Obstruction includes all of the following except:
1) overload of the digestive tract with abundant coarse food
2) changes in intestinal motility with a predominance of spasm
3) changes in intestinal motility with a predominance of paresis
4) situs viscerus inversus

Question Title: Question 5
The following are not typical of hepatic colic:
1) pain in the right hypochondrium radiating to the back
2) phrenicus symptom
3) severe muscle tension and tenderness in the right hypochondrium

4) Murphy's symptom

Indicator 3 PC-2.3
Question Title: Question 1
Symptom characteristic of acute pancreatitis:
1) Ortner's sign
2) Mayo-Robson's sign
3) Courvoisier's sign
4) Sitkovsky's sign

Question Title: Question 2
The following are not used to differentiate between right-sided lower lobe pneumonia and appendicitis:
1) Thermography
2) Laparoscopy
3) Chest X-ray
4) White blood cell count

Question Title: Question 3
First aid method for gastrointestinal bleeding:
1) Place the patient in Fowler's position
2) Emergency hospitalization in a surgical hospital
3) Hospitalization only in case of massive bleeding
4) Cold compresses to the abdomen

Indicator 4 PC-2.4
Question Title: Question 1
When making a differential diagnosis between acute cholecystitis and acute appendicitis with a high appendix, the following instrumental examination methods are most informative:
1) plain abdominal radiography, abdominal ultrasound
2) plain abdominal radiography, abdominal ultrasound, oral cholecystography
3) abdominal ultrasound, laparoscopy
4) laparocentesis, laparoscopy

Question Title: Question 2
The most common causes of acute biliary hypertension include:
1) tumors of the hepatopancreatoduodenal region
2) stenosis of the major duodenal papilla
3) choledocholithiasis as a complication of cholelithiasis
4) duodenal hypertension

Indicator 5 PC-2.5
Question Title: Question 1
The inability to detect abdominal aortic pulsation in the epigastrium in acute pancreatitis is called the symptom:
1) Mayo-Robson
2) Mondor
3) Voskresensky
4) Cullen

Question Title: Question 2
Sklyarov's symptom in acute intestinal obstruction is characterized by:
1) asymmetrical distension of the lateral abdominal regions, "oblique abdomen"
2) a "splashing sound" detected in a limited area or throughout the abdomen
3) a clearly demarcated, distended intestinal loop, detectable by abdominal palpation
4) an "empty" ileocecal region

Question Title: Question 3
The most severe disturbances in water, electrolyte, and protein metabolism occur in:
1) adhesive intestinal obstruction
2) obstructive intestinal obstruction
3) strangulation intestinal obstruction
4) paralytic form of dynamic intestinal obstruction

Indicator 1 PC-3.1
Question Title: Question 1
A patient suffering from a bleeding gastric ulcer has recovered from shock after treatment, but conservative measures are unable to achieve reliable hemostasis. In this case, the following is required:
1) laparotomy, gastric resection
2) gastrostomy placement
3) continue conservative therapy, including the Meielengracht diet
4) laparotomy, gastrojejunostomy placement, and occlusion of the bleeding vessel

Question Title: Question 2
The choice of surgical procedure for a perforated gastric ulcer depends on:
1) the time since perforation
2) the degree of inflammatory changes in the peritoneum
3) the location of the perforation
4) all of the above

Indicator 2 PC-3.2
Question Title: Question 1
Surgery for sigmoid volvulus can be completed with any of the following surgical techniques except:
1) detorsion
2) sigmopexy
3) sigmoid resection
4) bringing the necrotic sigmoid colon into the wound with anastomosis between the adductor and abductor limbs

Question Title: Question 2
During surgery for indurative chronic pancreatitis, pancreatic cancer was detected; the gland is mobile and there are no metastases. Select a radical procedure:
1) pancreatic resection
2) gastropancreatoduodenectomy
3) cystojejunostomy
4) gastrojejunostomy

Indicator 3 PC-3.3

Question Title: Question 1
The goals of palliative care include:
1) adequate pain relief and relief of other physical symptoms
2) euthanasia
3) psychotherapy consultation
4) hospitalization of patients in specialized social care facilities

Question Title: Question 2
Non-drug palliative care methods for dyspnea include:
1) patient immobilization
2) fluid management
3) psychological counseling
4) optimization of physical activity and energy expenditure

Question Title: Question 3
A prescription for tramadol is valid for:
5 days
10 days
15 days
3 weeks

Indicator 1 PC-4.1. Indicator 2 PC-4.2. Indicator 1 PC-5.1.
Question Title: Question 1
Chemotherapy for esophageal cancer:
1) highly effective
2) can be used with the same success as radiation therapy
3) ineffective
4) not used

Question Title: Question 2
For midthoracic esophageal cancer with signs of spread, the surgery of choice is:
1) gastrostomy
2) gastroenterostomy
3) esophageal resection with simultaneous gastroplasty
4) Dobromyslov-Torek esophageal extirpation

Evaluation criteria, test assessment scale

Grade		Description
«excellent»	5	completed in full – 90%-100%
«good»	4	not completed in full – 80%-89%
«satisfactory»	3	completed with deviation – 70%-79%
«unsatisfactory»	2	Partially completed – 69% or less correct answers

2.3. Examples of cases

Indicator 1 GPC-7.1, Indicator 2 GPC-7.2.
Case №1
A 40-year-old patient has been suffering from chronic hemorrhoids for 6 years. Two days ago, after consuming alcohol and spicy foods, he developed a sharp pain in the anus, which intensified with coughing and movement. A rectal examination revealed an enlarged, bluish hemorrhoid at 7 o'clock in the anus, which was extremely painful to palpation.

1. What is the preliminary diagnosis?
2. What is the etiopathogenesis of the disease?
3. What are diagnostic measures?
4. What is differential diagnosis?
5. Conservative or surgical treatment?

Case №2

A 42-year-old patient with a long-standing history of constipation experiences stabbing pain in the anus during defecation, radiating to the perineum. After defecation, there is minor bleeding in the form of streaks on the surface of the stool. Rectal examination reveals a longitudinal wound in the area of the posterior commissure, 1.0 cm long, with dense edges and a granulation-covered base.

1. What is the preliminary diagnosis?
2. What are the contributing factors to the development of this condition?
3. What other conditions should be considered in the differential diagnosis?
4. What is the patient's examination plan?
5. What is the treatment plan for this patient?

Indicator 3 GPC-7.3, Indicator 4 GPC-7.4.

Case №1

An 18-year-old patient complains of intense, sharp pain in the perineum, which intensifies with straining and defecation, a fever of 39.2°C (102.5°F), and chills. Examination of the anal area reveals hyperemia of the skin to the right of the anus, swelling and bulging of the tissue, and sharp tenderness and fluctuation upon palpation.

1. What is the preliminary diagnosis?
2. What are the contributing factors to the development of this condition?
3. What is the classification of this condition?
4. What is differential diagnosis?
5. What is the treatment strategy?

Case №2

A 28-year-old female patient underwent gynecological surgery three years ago. Since then, she has had five attacks of cramping abdominal pain, which were relatively easily relieved by conservative measures and were considered a manifestation of adhesive disease. The most recent attack was more abrupt in onset and significantly more severe, characterized by the appearance of severe, cramping pain in the lower abdomen, accompanied by repeated vomiting. The patient is restless and changes position. Objectively: general condition is severe; pulse rate is 100 beats per minute, blood pressure is 90/60 mmHg; tongue is dry, coated with a white coating, and a non-peristaltic intestinal loop is outlined against a background of abdominal distension to the left of the umbilicus.

1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. What is the cause of the disease in this patient?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 1 PC-2.1

Case №1

A 40-year-old patient with a long-standing history of gastric ulcer disease reported that his abdominal pain had become less intense over the past two days, while increasing weakness and dizziness developed. In the morning, upon rising from bed, he lost consciousness for a few

seconds. He presented to the doctor on his own. Upon examination, his pulse was 100 beats per minute. The patient was pale. There was slight tenderness in the epigastric region. There were no symptoms of peritoneal irritation.
1. List the complications of gastric ulcer disease.
2. What is the preliminary diagnosis?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №2
A 60-year-old patient was admitted to the clinic complaining of pain in the right abdomen, weakness, poor appetite, intermittent fever, and occasional pus and blood in the stool. The patient's medical history indicates a 3-4 month history of weakness and malaise. An examination at the outpatient clinic revealed anemia. Physical examination revealed decreased turgor, tenderness, and a rumbling sound in the right iliac region upon palpation. Peritoneal symptoms are absent.
1. What is the preliminary diagnosis?
2. What is the etiopathogenesis of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 2 PC-2.2
Case №1
A 20-year-old patient became ill approximately 6 hours ago with severe epigastric pain, which later localized to the right iliac fossa. His body temperature is 37.6°C. His tongue is dry, his abdomen is not distended, and palpation reveals marked tenderness in the right iliac fossa, with muscle tension and a markedly positive Shchetkin-Blumberg sign. Blood tests show a white blood cell count of $14{,}5x10^9$/L.
1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 3 PC-2.3
Case №1
A patient was admitted to the surgical department complaining of significant abdominal distension and shortness of breath. On examination, the abdomen is enlarged, with marked venous dilation on the anterior abdominal wall. Percussion reveals free fluid in the abdominal cavity.
1. What is the classification of portal hypertension syndrome?
2. What is the preliminary diagnosis?
3. What is the patient's comprehensive examination plan to clarify the diagnosis and assess the severity of the patient's condition?
4. What is the treatment strategy?
5. What are the indications and technique for laparocentesis?

Indicator 4 PC-2.4
Case №1

A 45-year-old patient presented with complaints of nodules in the anus and perianal itching. He had been suffering from intermittent bleeding from the anus after defecation for eight years. In recent years, he has noticed hemorrhoidal prolapse with slight straining, coughing, and sneezing, and he experiences almost constant perianal itching.
1. What is the preliminary diagnosis?
2. What is etiopathogenesis of the disease?
3. What are diagnostic measures?
4. What is differential diagnosis?
5. What is the treatment strategy?

Indicator 5 PC-2.5
Case №1
A 46-year-old patient, admitted to the hospital 6 hours after suffering a strangulated inguinal hernia, experienced spontaneous reduction. The surgeon decided to perform inguinal hernia repair with inguinal canal plasty. During the operation, a full examination of the abdominal organs was not possible through the herniotomy approach; the small bowel loops adjacent to the hernial sac neck were intact, and there was no abdominal effusion. The following day, the patient complained of abdominal distension and pain, and his temperature rose to 38.2°C, which was considered a reaction to the surgery. Peritoneal symptoms developed by the end of the first day.
1. What is the classification of peritonitis?
2. What is the cause of peritonitis?
3. What tactical error did the surgeon make?
4. What are the methods of postoperative abdominal debridement?
5. What is the treatment strategy?

Case №2
A 26-year-old patient was referred to the clinic for a strangulated femoral hernia. During surgery, a Richter strangulation of the small intestine was discovered.
1. What are the types of strangulation?
2. What are the symptoms of a strangulated hernia?
3. What are the characteristics of this hernia?
4. What are the signs of intestinal nonviability?
5. What is the treatment strategy?

Indicator 1 PC-3.1, Indicator 2 PC-3.2, Indicator 3 PC-3.3.
Case №1
During surgery for an inguinal hernia in a 16-year-old patient, a hernial sac measuring 6 x 6 x 8 cm was discovered. Upon opening, the contents were revealed to be a strand of omentum and a testicle.
1. What is the definition of hernia? What are the components of a hernia?
2. What is the pathogenesis of hernia formation (predisposing/producing factors)?
3. What is the clinical classification of hernias?
4. What is the type of hernia?
5. What is the scope of the surgical intervention?

Case №2
A 29-year-old patient underwent surgery for acute appendicitis on the second day after onset. During surgery, a phlegmonous appendix and turbid effusion were found in the iliac fossa. The surgeon removed the appendix only. On the sixth postoperative day, the patient developed a fever, moderate rectal pain, and painful urination. A rectal examination revealed a dense and painful bulge in the rectal wall. Blood tests revealed leukocytosis up to $13{,}4x10^9$/L, and a temperature of 37.8°C.

1. What is the classification of complications of acute appendicitis?
2. What is the preliminary diagnosis?
3. What is the cause of this complication in this patient?
4. What is the patient's examination plan to clarify the diagnosis?
5. What is the treatment strategy?

Indicator 1 PC-4.1. Indicator 2 PC-4.2. Indicator 1 PC-5.1.
Case №1
A 50-year-old patient with a history of constipation for the past month developed severe pain after defecation and itching in the perianal area. A rectal examination revealed no abnormalities. Anoscopy and rectoscopy, which were only performed after a novocaine block, revealed a superficial wound measuring 1.0 x 0.8 cm covered with a fibrin film on the posterior wall of the anal canal.
1. What is the preliminary diagnosis?
2. What are the contributing factors to the development of this condition?
3. What other conditions should be considered in the differential diagnosis?
4. What is the patient's examination plan?
5. What is the treatment strategy?

Case №2
A 34-year-old patient developed chills, rectal pain, tenesmus, and frequent urination seven days after surgery for phlegmonous-gangrenous appendicitis. A rectal examination revealed a pelvic infiltrate. Three days after treatment, which included warm chamomile enemas and antibiotics, the patient's condition improved. A repeat rectal examination revealed softening of the infiltrate. The temperature became hectic.
1. What is the classification of complications of acute appendicitis?
2. What is the preliminary diagnosis?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?
Evaluation criteria, Case assessment scale

Grade		Description
«excellent»	5	Demonstrates a complete understanding of the problem. All task requirements are met.
«good»	4	Demonstrates a significant understanding of the problem. All task requirements are met.
«satisfactory»	3	Demonstrates a partial understanding of the problem. Most task requirements are met.
«unsatisfactory»	2	Demonstrates a lack of understanding of the problem. Many task requirements are not met. No answer. No attempt was made to solve the problem.

2.4. Sample course work topics
Indicator 1 GPC-7.1
Specific features of the therapeutic and protective regimen in a surgical hospital.
Scales for assessing the severity of a surgical patient’s condition**.**

Indicator 2 GPC-7.2
Principles of conservative treatment of acute pancreatitis with consideration of the clinical and pharmacological characteristics of the main groups of medications used.
Pharmacotherapy in a patient with pyloroduodenal stenosis.

Indicator 4 GPC-7.4
Hernias of the anterior abdominal wall: selection of the treatment approach.
Conventional and minimally invasive methods for the treatment of biliary system diseases.

Indicator 1 PC-2.1
Procedure for examination of a surgical patient.
Abdominal pain: integration of diseases presenting with abdominal pain; features of pain syndromes in various intra-abdominal and extra-abdominal pathologies; development of diagnostic and therapeutic algorithms for differential diagnosis.

Indicator 2 PC-2.2
Pseudo-peritoneal syndrome: clinical manifestations of peritonitis in extra-abdominal diseases; features of symptoms; methods of diagnosis and differential diagnosis.
Jaundice syndrome: key points for differential diagnosis; features of etiopathogenesis; clinical and biochemical manifestations of various types of jaundice; surgical treatment.

Indicator 3 PC-2.3
Gastrointestinal bleeding: diseases accompanied by gastrointestinal bleeding; features of their clinical manifestations; diagnostic and therapeutic algorithms; conservative and surgical treatment methods.
Minimally invasive methods for the treatment of surgical diseases of the abdominal organs.

Indicator 2 PC-2.4
Differential diagnosis of acute appendicitis and gynecological diseases.
Benign tumors of the colon and polyposis: etiology and pathogenesis.

Indicator 3 PC-2.3
Mallory–Weiss syndrome: etiology, clinical presentation, diagnosis, treatment.
Hernias of the anterior abdominal wall and selection of the treatment approach.

Indicator 1 PC-3.1
Conventional and minimally invasive methods for the treatment of biliary system diseases.
Modern advances in gastrointestinal surgery.

Indicator 2 PC-3.2
Diseases of the operated stomach: causes, clinical manifestations, diagnostic methods, indications for surgical treatment, methods of reconstructive surgery.
Extra- and intracorporeal detoxification in acute pancreatitis.

Indicator 3 PC-3.3
History of the development of palliative care for surgical patients in Russia.
Palliative surgery for gastric cancer.

Indicator 1 PC-4.1
Criteria for assessing temporary disability in surgical patients with various nosological categories.
Primary medical documentation in a surgical inpatient department and procedures for its completion.

Indicator 2 PC-4.2
Medical and social expertise of surgical patients: procedures.

Principles of medical and social expertise in malignant neoplasms of the colon at the present stage.

Indicator 1 PC-5.1
Basic principles of rehabilitation measures in patients after pancreatic surgery.
Health resort treatment as part of rehabilitation in patients after surgery in the hepatopancreatoduodenal zone.

Evaluation criteria, course work assessment scale

Grade		Description
«excellent»	5	All requirements for writing and presenting the course work have been met: the problem has been identified and its relevance substantiated, various points of view on the issue have been briefly analyzed, the author's position has been logically presented, conclusions have been formulated, the topic has been fully covered, the length has been maintained, the formatting requirements have been met, and additional questions have been answered correctly.
«good»	4	The main requirements for the abstract and its defense have been met, but some shortcomings have been made. Specifically, there are inaccuracies in the presentation of the material; there is a lack of logical consistency in the judgments; the abstract is not within the length of the course work; there are omissions in the formatting; additional questions during the defense were answered incompletely.
«satisfactory»	3	There are significant deviations from the abstracting requirements; in particular: the topic is only partially covered; factual errors have been made in the abstract content or in the answers to additional questions; the presentation lacks the conclusion.
«unsatisfactory»	2	The course work topic has not been fully covered, a significant misunderstanding of the problem has been revealed, or the abstract has not been submitted at all

2.5. Sample control questions
Indicator 1 GPC-7.1
Therapeutic and protective regimen of a surgical hospital.
Criteria for assessing the severity of a surgical patient’s condition.

Indicator 2 GPC-7.2, Indicator 3 GPC-7.3
Acute pancreatitis: principles of conservative treatment.
Abdominal pain syndrome: treatment.

Indicator 4 GPC-7.4
Acute appendicitis: selection of surgical tactics (surgical approaches and techniques), management of the postoperative period.
Hiatal hernia: axial hernia — principles of conservative and surgical treatment; surgical methods for the treatment of gastroesophageal reflux.

Indicator 1 PC-2.1
Femoral hernias: clinical symptoms and diagnosis.

Acute small bowel obstruction: clinical presentation and diagnosis.

Indicator 2 PC-2.2
Diverticula of the colon: definition, clinical presentation, diagnosis, indications for surgical treatment, types of surgical procedures.
Cholangitis: definition, clinical presentation, diagnosis.

Indicator 3 PC-2.3
Acute appendicitis: differential diagnosis with right-sided pneumonia, pleurisy, acute myocardial infarction, and hemorrhagic vasculitis (Henoch–Schönlein disease).
Differential diagnosis of esophageal diseases (cardiospasm, achalasia of the cardia, diffuse esophageal spasm, esophageal cancer); paradoxical dysphagia.

Indicator 4 PC-2.4
Hepatic echinococcosis: etiopathogenesis, classification, clinical presentation, diagnosis.
Cholelithiasis: definition, etiopathogenesis.

Indicator 5 PC-2.5
Acute appendicitis: typical clinical presentation and symptoms (Kocher, Voskresensky, Rovsing, Sitkovsky, Bartomier–Michelson, Obraztsov, psoas sign, Shchetkin–Blumberg sign).
Acute pancreatitis: classification.

Indicator 1 PC-3.1, Indicator 2 PC-3.2, Indicator 3 PC-3.3
Perforated gastric and duodenal ulcer: surgical tactics.
Inguinal hernias: surgical treatment methods, types of hernioplasty, postoperative management.

Indicator 1 PC-4.1, Indicator 2 PC-4.2
Portal hypertension syndrome: principles of ascites treatment, indications for laparocentesis.
Gastrointestinal bleeding: conservative treatment and assessment of its effectiveness.

Indicator 1 PC-5.3
Provision of palliative care to a patient with obstructive jaundice.
Organizational structure of a hospice.

Evaluation criteria, control question assessment scale

Grade		**Description**
«excellent»	5	Knows all the course material, understands it well, and has firmly mastered it. Provides correct, informed, and confident answers to questions (within the syllabus). Uses correct language in oral responses and makes no mistakes**.**
«good»	4	Knows all required course material, understands it well, and has firmly mastered it. Answers questions (within the syllabus) without difficulty. Uses literary language in oral responses and does not make serious errors.
«satisfactory»	3	Knows the basic curriculum material. Difficulty answering questions (within the curriculum). In oral responses, makes errors in presenting the material and in structuring the speech.
«unsatisfactory»	2	Unversed in most of the course material, typically only responds to the teacher's leading questions with uncertainty. Frequent errors in oral responses.

3. Ongoing assessment

Ongoing assessment includes oral interview, solving cases, testing, and presentation of course work.

4. Examples of assessment methods and evaluation criteria for conducting interim assessment

4.1. Sample list of control questions for examination preparation

Indicator 1 GPC-7.1, Indicator 2 GPC-7.2
Main types of medical care provided to patients with gastrointestinal bleeding in a surgical inpatient setting.
Criteria for assessing the severity of a surgical patient's condition with peritonitis.

Indicator 3 GPC-7.3
Specific features of the use of medications in patients with acute cholangitis.
Gastrointestinal bleeding: conservative treatment (groups of medications, pharmacodynamics, pharmacokinetics, indications).

Indicator 4 GPC-7.4
Chronic pancreatitis: indications for surgical treatment, types of surgical procedures.
Portal hypertension syndrome: principles of ascites treatment, indications for laparocentesis.

Indicator 1 PC-2.1
Gastrointestinal bleeding: diagnostic algorithm and differential diagnosis.
Cholelithiasis: chronic calculous cholecystitis (clinical presentation, diagnosis).

Indicator 2 PC-2.2
Choledocholithiasis: definition, clinical presentation, diagnosis.
Acute pancreatitis: laboratory and instrumental diagnostics; differential diagnosis.

Indicator 3 PC-2.3
Acute pancreatitis: differential diagnosis with acute appendicitis and perforated gastric ulcer.
Acute appendicitis: differential diagnosis with renal colic, cystitis, and pyelonephritis.

Indicator 4 PC-2.4
Differential diagnosis of diseases of the colon (tumors, diverticulosis, polyposis, inflammatory diseases); diagnostic algorithm.
Differential diagnosis of jaundice of various etiologies (parenchymal, hemolytic, and obstructive).

Indicator 5 PC-2.5
Acute appendicitis: classification.
Diaphragmatic hernias: classification**.**

Indicator 1 PC-3.1, Indicator 2 PC-3.2, Indicator 3 PC-3.3
Strangulated hernias: surgeon's tactics in spontaneous reduction, treatment methods, prevention of strangulation.
Peritonitis: diagnosis and principles of conservative and surgical treatment.

Indicator 1 PC-4.1, Indicator 2 PC-4.2
Acute appendicitis: selection of surgical tactics (surgical approaches and techniques), postoperative management.

Peptic ulcer disease of the stomach: indications for elective surgical treatment, types of surgical interventions.

Indicator 1 PC-5.1
Provision of palliative care to patients with neoplastic diseases of the hepatopancreatoduodenal zone.
Principles of providing palliative care to surgical patients.

Evaluation criteria, control question assessment scale

Grade		Description
«excellent»	5	Knows all the course material, understands it well, and has firmly mastered it. Provides correct, informed, and confident answers to questions (within the syllabus). Uses correct language in oral responses and makes no mistakes**.**
«good»	4	Knows all required course material, understands it well, and has firmly mastered it. Answers questions (within the syllabus) without difficulty. Uses literary language in oral responses and does not make serious errors.
«satisfactory»	3	Knows the basic curriculum material. Difficulty answering questions (within the curriculum). In oral responses, makes errors in presenting the material and in structuring the speech.
«unsatisfactory»	2	Unversed in most of the course material, typically only responds to the teacher's leading questions with uncertainty. Frequent errors in oral responses.

4.2. Sample list of cases:

Indicator 1 GPC-7.1, Indicator 2 GPC-7.2

Case №1
A 30-year-old patient complains of purulent discharge in the perineum, which has been bothering him for a year. On examination, a fistula with a small amount of purulent discharge and maceration of the surrounding skin is present in the perineal skin. Palpation reveals a dense mass in the subcutaneous tissue.
1. What is the preliminary diagnosis?
2. What is the classification of the disease based on the fistula's course?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the recommended conservative treatment, taking into account the clinical and pharmacological characteristics of the medications?
5. What types of surgeries are available for this patient?

Case №2
A 45-year-old patient was admitted to the clinic with a diagnosis of gastrointestinal bleeding. The day before admission, he had suddenly experienced profuse hematemesis. In the emergency room, he had profuse, tarry stools. The patient's medical history revealed liver cirrhosis. Objective data: general condition - moderate; pulse - 100 beats/min, rhythmic, satisfactory volume; blood pressure = 90/50 mmHg; Hb = 50 g/L. An emergency barium swallow revealed varicose veins of the esophagus and cardiac region of the stomach. After the fluoroscopy, the patient again experienced hematemesis.
1. What is the mechanism of portal hypertension syndrome?
2. What is the diagnosis of esophageal varices?
3. What is the preliminary diagnosis?
4. What is the surgical approach? Use of the Sengstaken-Blakemore obturator?

5. What are the specifics of prescribing medications based on the severity of the patient's bleeding?

Case №3

Six hours after a large meal, the patient developed unbearable epigastric pain radiating to the hypochondrium and iliac regions, vomiting bile, and loss of flatus. Physical examination revealed abdominal distension, decreased percussion sound in the sloping areas of the abdomen, tenderness at the Mayo-Robson point, and a positive Shchetkin-Blumberg sign. Upon admission to the clinic, the following were noted: low blood pressure, thready pulse, cold, clammy sweat on the face, and a low-grade fever. Leukocytosis was 23.0 x 10^9/L.

1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 3 GPC-7.3, Indicator 4 GPC-7.4.

Case №1

A 40-year-old patient presented with a complaint of acute pain in the left groin area that had begun approximately 3 hours earlier. No fever was noted. On examination, an ovoid, dense, elastic mass measuring 5 x 6 x 4 cm and painful was detected in the left groin area, located above the inguinal ligament.

1. What is the preliminary diagnosis?
2. What are the distinguishing features of the disease that led to this diagnosis?
3. What other conditions should be considered in the differential diagnosis?
4. What is the patient's examination plan?
5. What surgery is indicated for this patient, and what are the steps involved?

Case №2

A patient with a three-year history of inguinoscrotal hernia was brought to the emergency room. He had been at home for 24 hours, attempting unsuccessfully to reduce the hernia. His condition worsened, and he decided to seek surgical treatment. During preparation for surgery, the hernia spontaneously reduced. The patient felt completely healthy and was sent home. Five hours later, he was brought back with signs of peritonitis.

1. Are there complications of anterior abdominal wall hernias?
2. What was physician's tactical error?
3. What are the possible course of the disease during hernia reduction?
4. What are signs of bowel nonviability?
5. What is the doctor's approach?

Case №3

The patient was admitted 6 hours after the sudden onset of the illness with acute, persistent pain in the right hypochondrium. The pain radiated to the lumbar region and right scapula. Physical examination: the tongue is dry, coated with a dirty yellow coating; pulse rate is increased to 120 beats per minute; body temperature is 38.7°C. Palpation reveals sharp tenderness and tension in the abdominal wall muscles in the upper abdomen, with no intestinal peristalsis. Percussion of the abdomen reveals a shortened percussion sound in sloping areas; Ortner's and Shchetkin-Blumberg's signs are positive. Blood tests reveal leukocytosis - 25.0 x 10^9/L.

1. What is the preliminary diagnosis?
2. What is the etiopathogenesis of this disease?
3. Describe the method for performing the Ortner's and Shchetkin-Blumberg's signs – what diseases are these signs?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 1 PC-2.1.

Case №1

A 30-year-old patient complains of purulent discharge in the perineum for a year. On examination, a fistula with moderate purulent discharge and maceration of the surrounding skin is present in the perineal skin. Palpation reveals a dense mass in the subcutaneous tissue.
1. What is the preliminary diagnosis?
2. What is the classification of the disease based on the fistula's course?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the recommended conservative treatment?
5. What types of surgeries are available for this patient?

Case №2

A 42-year-old patient with a long-standing history of constipation experiences stabbing pain in the anus during defecation, radiating to the perineum. After defecation, there is minor bleeding in the form of streaks on the surface of the stool. Rectal examination reveals a longitudinal wound in the area of the posterior commissure, 1.0 cm long, with dense edges and a granulation-covered base.
1. What is the preliminary diagnosis?
2. What are the contributing factors to the development of this condition?
3. What other conditions should be considered in the differential diagnosis?
4. What is the patient's examination plan?
5. What is the treatment plan for this patient?

Case №3

A 30-year-old patient developed abdominal distension, dull, distending abdominal pain, and repeated vomiting on the fifth day after surgery for acute appendicitis. Objectively: general condition is relatively satisfactory; pulse is 120 beats per minute; tongue is dry, abdomen is tender, tense on the right side; Shchetkin-Blumberg sign is positive. Flatus is not being passed, no stool. Blood test: white blood cells increased from 9.0 x 10^9/L to 16.0 x 10^9/L. Abdominal ultrasound revealed a small amount of fluid in the pelvis and behind the liver.
1. What is the classification of complications of acute appendicitis?
2. What is the preliminary diagnosis?
3. Develop a plan for examining the patient to clarify the diagnosis.
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 2 PC-2.2.

Case №1

A 56-year-old female patient presented with acute calculous cholecystitis on the second day after the onset of the attack. Her general condition upon admission was moderate. Temperature was 38.1°C, pulse was 92 bpm. Abdominal tenderness was limited to the right hypochondrium, where moderate protective muscle tension and a positive Shchetkin-Blumberg sign were

observed. The patient received conservative treatment. One and a half days after hospitalization, her condition suddenly worsened: severe abdominal pain, anxiety, pale skin, shortness of breath, and vomiting developed. Her temperature rose to 40.0°C, and her pulse was 120 bpm. The abdomen is distended, there is diffuse tenderness throughout the abdomen, and a positive Shchetkin-Blumberg sign. Blood test results show an increase in white blood cells from 9.0 x 10^9/L to 25.0 x 10^9/L.

1. What is the preliminary diagnosis?
2. What is the etiopathogenesis of the disease?
3. What are the symptoms characteristic of acute cholecystitis?
4. What are the possible complications of acute cholecystitis?
5. What is the treatment strategy?

Case №2

A young woman suddenly developed severe pain in the lower right abdomen. The pain is constant and radiates to the rectum. The patient's general condition is satisfactory, with a temperature of 38.8°C and a pulse of 100 beats per minute. The tongue is moist. The abdomen is not distended and is involved in breathing. Palpation reveals tension and sharp tenderness in the right iliac region. The Shchetkin-Blumberg sign is positive. Leukocytosis is 14.0 x 10^9/L.

1. What is the preliminary diagnosis?
2. What is the patient's examination plan to clarify the diagnosis?
3. What is the differential diagnosis?
4. Describe the method for performing the Shchetkin-Blumberg sign – what disease is it a sign of?
5. What is the treatment strategy?

Case №3

A 40-year-old man was admitted to the emergency room of the emergency department three hours after the onset of illness with complaints of repeated vomiting of blood. After heavy alcohol consumption, he began vomiting repeatedly, first food and then blood. Physical examination: the patient's general condition is moderate; the skin is pale and sweaty, pulse is 100 beats per minute, and blood pressure is 90/60 mmHg. The abdomen is not distended, soft, and painless to palpation in all areas. The liver protrudes 3 cm from the costal margin. Rectal examination reveals normal-colored stool. Blood tests reveal hemoglobin of 90 g/L, red blood cells of 3.0 x 10^{12}/L, and hematocrit of 36%.

1. What is the preliminary diagnosis?
2. What is the etiopathogenesis of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 3 PC-2.3.

Case №1

Six hours after a large meal, the patient developed unbearable epigastric pain radiating to the hypochondrium and iliac regions, vomiting bile, and loss of flatus. Physical examination revealed abdominal distension, decreased percussion sound in the sloping areas of the abdomen, tenderness at the Mayo-Robson point, and a positive Shchetkin-Blumberg sign. Upon admission to the clinic, the following were noted: low blood pressure, thready pulse, cold, clammy sweat on the face, and a low-grade fever. Leukocytosis was 23.0 x 10^9/L.

1. What is the preliminary diagnosis?
2. What is the classification of this disease?

3. Develop a comprehensive examination plan for this patient to clarify the diagnosis and determine the severity of his condition.
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №2
A 40-year-old patient presented with a complaint of acute pain in the left groin area that had begun approximately three hours earlier. No fever was noted. On examination, a tender, ovoid, dense, elastic mass, measuring 5x6x4 cm, was found in the left groin area, located above the inguinal ligament.
1. What is the preliminary diagnosis?
2. What are the distinguishing features of the disease that led to the diagnosis?
3. What other conditions should be considered for differential diagnosis with the help of medical specialists?
4. What is the patient's examination plan?
5. What surgery is indicated for this patient, and what are the stages of its implementation?

Case №3
Six hours after a large meal, the patient developed unbearable epigastric pain radiating to the hypochondrium and iliac regions, vomiting bile, and loss of flatus. Physical examination revealed abdominal distension, decreased percussion sound in the sloping areas of the abdomen, tenderness at the Mayo-Robson point, and a positive Shchetkin-Blumberg sign. Upon admission to the clinic, the following were noted: low blood pressure, thready pulse, cold, clammy sweat on the face, and a low-grade fever. Leukocytosis was 23.0 x 10^9/L.
1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. Develop a comprehensive examination plan for this patient to clarify the diagnosis and determine the severity of his condition.
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 4 PC-2.4.

Case №1
A 69-year-old patient was admitted to the hospital complaining of dull pain in the right iliac fossa and a low-grade fever. He had become ill four days earlier, when he noted the onset of acute epigastric pain, nausea, and a fever. By the third day, the pain had subsided and had migrated to the right iliac fossa, where examination revealed a painful, immobile, elastic mass. There were no symptoms of peritoneal irritation. His body temperature was 37.0°C; his blood test showed a white blood cell count of 7.7 x 10^9/L.
1. What is the classification of complications of acute appendicitis?
2. What is the preliminary diagnosis?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №2
A 39-year-old patient, who has suffered from a gastric ulcer for many years, recently developed a feeling of heaviness in the epigastric region, which disappears after vomiting, which the patient often induces himself. Vomiting is profuse, bringing relief, and the vomit contains traces of food eaten the previous day. The patient has lost significant weight. Skin turgor is decreased, and subcutaneous fat is absent. Through the thinned abdominal wall, the patient can visually detect a

pear-shaped protrusion; peristalsis appears in response to massage. A ‘splashing sound’ is also detected.
1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №3
A 45-year-old patient presented with complaints of sharp anal pain that had developed three days previously and was aggravated by walking and defecation. He had previously noted occasional small, bright red rectal bleeding. His general condition was satisfactory; pulse rate was 80 beats per minute, and temperature was 36.5°C. Examination of the anal area and digital examination revealed hyperemic perianal skin around the entire circumference of the anus. Large hemorrhoids, up to 2 cm in diameter, were prominent and purple-blue in color. They were tense, dense, and painful upon palpation.
1. What is the preliminary diagnosis?
2. What is the etiopathogenesis of the disease?
3. What are the diagnostic measures?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Indicator 5 PC-2.5.

Case №1
Three hours prior to admission, the patient developed a stabbing pain in the epigastric region. This pain subsided after some time. However, the patient reports a sharp pain in the right iliac region. Objectively: general condition is severe, pulse is 120 beats/min, rhythmic; tongue is dry; abdomen is tense, painful in the right iliac region; Shchetkin-Blumberg sign is positive in the right side of the abdomen; liver dullness is absent. Blood test results show leukocytes of 10.2 x 10^9/L.
1. What are the symptoms characteristic of hollow organ perforation?
2. What are the periods of the clinical course of the disease?
3. What is the preliminary diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №2
A 62-year-old patient complains of a nagging pain in the perineum and mucus discharge from the rectum. A digital rectal examination revealed several lesions ranging in diameter from 0.5 to 3.0 cm with a clearly defined stalk in the ampullary region. These lesions move along with the intestinal mucosa.
1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №3
A 56-year-old female patient developed severe abdominal pain of a girdle-like nature, abdominal distension, and scleral icterus three days after surgery for acute cholecystitis. Her body

temperature is 37.4°C. Physical examination reveals a soft abdomen, tenderness in the upper abdomen, and a positive Mayo-Robson sign.
1. What is the preliminary diagnosis?
2. What is the classification of this disease?
3. What is the patient's examination plan to clarify the diagnosis?
4. What is the differential diagnosis?

Indicator 1 PC-3.1, Indicator 2 PC-3.2, Indicator 3 PC-3.3.

Case №1
A 37-year-old patient complains of a dull ache in the groin area during prolonged walking and physical activity. On examination, an ovoid, soft, elastic mass measuring 6 x 5 x 6 cm is detected in the groin area, originating from the external opening of the inguinal canal. The diameter of the opening is 1.5 cm. Elements of the spermatic cord are palpated medially to the mass.
1. What is the preliminary diagnosis?
2. List the distinguishing features of the disease that led to the diagnosis?
3. What diseases should be considered in the differential diagnosis?
4. Develop a plan for the patient's examination.
5. What types of surgical treatment are available for this condition?

Case №2
A 44-year-old patient complains of intermittent rectal bleeding at the end of bowel movements, which has been observed for 7 years. The patient's condition is satisfactory. The skin is pale. Abdominal examination reveals no abnormalities. Examination of the anal area and digital examination reveal no masses. Anoscopy reveals hemorrhoids with edematous and hyperemic mucosa above the anorectal line at the 3, 7, and 11 o'clock positions. Blood tests reveal hemoglobin of 10 g/L.
1. What is the clinical classification of hemorrhoids?
2. What is the preliminary diagnosis?
3. What are the additional diagnostic methods?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №3
A 74-year-old patient presented with complaints of a herniation above the inguinal ligament. The current condition began approximately 4 years ago, when the patient noticed a small herniation in the same location after physical activity. On examination, the herniation disappears in a horizontal position, increases with straining, but does not descend into the scrotum. The external inguinal ring allows passage of 3 fingers, and the cough impulse is positive. For 9 years, the patient has suffered from difficulty urinating, which doctors attribute to prostate enlargement.
1. What is the pathogenesis of hernia formation (predisposing/producing factors)?
2. What is the clinical classification of hernias?
3. What is the cause of the condition in this patient?
4. What is the preliminary diagnosis?
5. What is the treatment strategy?

Indicator 1 PC-4.1, Indicator 2 PC-4.2, Indicator 1 PC-5.1.

Case №1
A 58-year-old patient with severe jaundice, itchy skin, and discolored stools was diagnosed. Physical examination revealed an enlarged, painless gallbladder.

1. List the types of jaundice.
2. What is the preliminary diagnosis?
3. What is the diagnostic workup?
4. What is the differential diagnosis?
5. What is the treatment strategy?

Case №2

A 46-year-old female patient presented to the clinic with complaints of a tumor-like formation in the projection of a postoperative scar in the midline of the abdomen. Her medical history: 3 years ago, she underwent surgery for destructive cholecystitis complicated by peritonitis; the wound healed by secondary intention. Objectively: there is a postoperative scar in the midline of the abdomen from the xiphoid process to the umbilicus. In the center of the scar is a tumor-like formation approximately 15.0 cm in diameter, elastic in consistency, easily retractable into the abdominal cavity.

1. What is the pathogenesis of hernia formation (predisposing/producing factors)?
2. What is the clinical classification of hernias?
3. What is the cause of the disease in this patient?
4. What is the preliminary diagnosis?
5. What are the types of surgical treatment?

Case №3

A patient undergoing surgery for acute appendicitis developed a temperature of 38.5°C on the third day, and pain developed in the surgical wound area. Objectively: the tongue is clean and moist; the abdomen is soft, tender to palpation only in the wound area; the Shchetkin-Blumberg sign is negative. The blood shows leukocytosis up to 15.0 x 10^9/L.

1. What is the classification of complications of acute appendicitis?
2. What is the preliminary diagnosis?
3. Develop a plan for examining the patient to clarify the diagnosis.
4. What is the differential diagnosis?
5. What is the treatment strategy?

Evaluation criteria, case assessment scale

Grade		**Description**
«excellent»	5	The explanation of the case solution is detailed, consistent, and accurate; includes theoretical justification; includes the required schematic diagrams and visual demonstrations; terminology is used correctly and fluently. Answers to additional questions are correct and clear.
«good»	4	The explanation of the case solution is detailed, but not sufficiently logical; contains isolated minor errors in details; includes some difficulties in theoretical justification, schematic diagrams, and visual demonstrations. Answers to additional questions are correct, but not sufficiently clear.
«satisfactory»	3	The explanation of the case solution is insufficiently complete and inconsistent; contains errors and weak theoretical justification; shows significant difficulties and errors in schematic diagrams and visual demonstrations. Answers to additional questions are insufficiently clear and include errors in details.
«unsatisfactory»	2	The explanation of the case solution is incomplete and inconsistent; contains major errors; lacks theoretical justification; does not demonstrate the ability to provide schematic diagrams and visual demonstrations, or includes

		numerous errors. Answers to additional questions are incorrect or absent.

5. Procedure for conducting interim assessment

Interim assessment for the course is conducted in the form of an examination.
The examination includes: oral interview (control questions) and solving cases.