

**FEDERAL STATE BUDGETARY  
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION  
«AMUR STATE MEDICAL ACADEMY»  
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION**

AGREED

Vice –Rector for Academic Affairs

 N.V. Loskutova

April 17, 2025

Decision of the CCMC

April 17, 2025

Protocol No.7


APPROVED

By decision of the Academic Council of the  
FSBEI HE Amur SMA of the Ministry of  
Health of the Russian Federation

April 22, 2025

Protocol No.15

Acting Rector of the FSBEI HE Amur  
SMA of the Ministry of Health of the  
Russian Federation

 I.V. Zhukovets

April 22, 2025



**EDUCATIONAL PROGRAM**

**discipline « Current issues of emergency abdominal surgery in the elderly»**

**Specialty: 31. 05.01 General Medicine**

**Course: 4**

**Semester: 7**

**Total hours: 72 hrs.**

**Total credits: 2 credit units**

**Lectures: 14 hrs.**

**Practical classes: 34 hrs.**

**Self-sustained work of students: 24 hrs.**

**Control form: credit-test, 7 semester**

**Blagoveshchensk, 2025**

The educational program of the discipline «Current issues of emergency abdominal surgery in the elderly» is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by the order of the Ministry of Education and Science of Russia dated 08.12.2020 No. 988 (registered with the Ministry of Justice of Russia on 08.26.2020 No. 59493), BPEP HE (2021).

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APPROVED at the meeting of the Department of Surgery with a Course in Urology  
Protocol No. 7 dated March 21, 2025

Head of Department, Holder of an Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Associate Professor N.P. Volodchenko

Conclusion of the Expert Commission for the Review of the Educational Programs:  
Protocol No. 2 date March 21, 2025

Expert of the expert commission,  
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APPROVED at the meeting of the CMC No. 4:  
Protocol No. 6 dated March 21, 2025  
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AGREED: Dean of the Faculty of Medicine,  
Ph.D. of Medical Sciences, Associate Professor N.G. Brush  
April 17, 2025

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## I. EXPLANATORY NOTE

### 1.1. Characteristics of the discipline

In the Russian Federation, almost a fifth (18%) of the country's total population, about 30 million people, are people of retirement age, of which about 3.2 million are people over 80 years old. There are currently 231 thousand pensioners living in the Amur Region, which is more than 20% of the total population.

The course of many diseases in elderly and senile patients has its own characteristic features.

Many common emergency diseases of the abdominal organs occur in elderly patients latently, without clear clinical symptoms, while being accompanied by a tendency to develop serious complications. In this case, patients rarely have only one surgical disease - much more often a combination of three, four, and sometimes more diseases is detected, which creates additional difficulties in treatment and worsens the prognosis for recovery. Of particular importance are such emergency surgical diseases as gastrointestinal bleeding, mechanical jaundice, complicated colon cancer, acute pancreatitis, thrombosis of the mesenteric vessels, closed injuries of the abdominal cavity.

In clinical examination of patients, the main importance is the correct interpretation of the symptoms of certain surgical diseases, rational use of additional research methods, and the choice of optimal treatment tactics. Given the growing number of elderly people and the need to provide timely, comprehensive care to the elderly, this problem is very relevant.

### 1.2. Purpose and objectives of the discipline.

**The purpose of teaching the course:** to expand students' knowledge, skills, and competencies regarding emergency (urgent) conditions in abdominal surgery in the elderly.

**Learning objectives of the discipline:**

- to give students an idea of the peculiarities of the course of surgical pathology in elderly people;
- to inform students about modern trends and achievements in providing emergency care to elderly people with emergency abdominal pathology;
- to give students an idea of minimally invasive technologies in providing assistance to elderly patients with acute surgical pathology;
- to train students in the basic (manual and instrumental) methods of examining an elderly surgical patient;
- education of students, guided by the principles of ethics and deontology; instilling highly moral standards of behavior in students at the bedside of elderly patients.

### 1.3. The place of the discipline in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education - a specialist in the specialty 05.31.02 General Medicine (2020), the discipline "Current issues of emergency abdominal surgery in the elderly" refers to the disciplines of Block 1, an optional part, an elective discipline. The total workload is 2 credit units (72 hours), taught in the 7th semester in the 4th year. Form of control - credit with a grade.

To study the academic discipline, knowledge, skills and abilities are required, formed by programs in anatomy, histology, physiology, pathological anatomy, microbiology, and general surgery.

### 1.4. Requirements for students

To study a discipline, knowledge, skills and abilities formed by previous disciplines are necessary.

<p><b>Normal anatomy, topographic and operative surgery</b></p>
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<p><b>Knowledge:</b> about the structural features, functions and topographic relationships of human organs and</p>
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<p>systems</p> <p><b>Skills:</b> apply knowledge when examining patients with surgical pathology, choosing a surgical technique</p> <p><b>Skills:</b> perform manipulations taking into account human anatomy</p>
<p><b>Histology.</b></p> <p><b>Knowledge:</b> knowledge of the structure of tissues and cells of the body, tissue regeneration processes taking into account a person's age</p> <p><b>Skills:</b> select a method of wound treatment, taking into account the mechanism of the wound process.</p> <p><b>Skills:</b> conduct treatment taking into account the peculiarities of tissue structure</p>
<p><b>Pathological anatomy</b></p> <p><b>Knowledge:</b> knowledge of pathological changes in organs and tissues of various surgical diseases in patients of different ages</p> <p><b>Skills:</b> select adequate treatment taking into account the nature of pathological changes in tissues.</p> <p><b>Skills:</b> conduct treatment taking into account the course of pathological processes in tissues and organs</p>
<p><b>Latin</b></p> <p><b>Knowledge:</b> Basic medical and pharmaceutical terminology in Latin</p> <p><b>Skills:</b> be able to apply knowledge for communication and obtaining information about medical literature, medical documentation ( II - III level).</p> <p><b>Skills:</b> Use language skills when prescribing treatment</p>
<p><b>Propaedeutics of internal diseases</b></p> <p><b>Knowledge:</b> necessary for examination of surgical patients.</p> <p><b>Skills:</b> for making a diagnosis and developing treatment tactics</p> <p><b>Skills:</b> use knowledge of the subject in diagnosing surgical pathology</p>
<p><b>Physics</b></p> <p><b>Knowledge:</b> use of information computer systems in medicine and healthcare; principles of operation and design of equipment used in medicine, fundamentals of physical and mathematical laws reflected in medicine ( II - III level).</p> <p><b>Skills:</b> be able to use educational, scientific, popular science literature, the Internet for professional activities, work with equipment taking into account safety regulations</p> <p><b>Skills:</b> using the Internet when choosing diagnostic and treatment methods for surgical patients</p>
<p><b>Biochemistry</b></p> <p><b>Knowledge:</b> structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation; the role of cell membranes and their transport systems in metabolism ( II - III levels ).</p> <p><b>Skills:</b> be able to analyze biochemical processes in the development of surgical pathology.</p> <p><b>Skills:</b> use knowledge to assess the course of the pathological process and choose a treatment method</p>
<p><b>Microbiology</b></p> <p><b>Knowledge:</b> knowledge of pathogens causing purulent processes.</p> <p><b>Skills:</b> choose an adequate treatment strategy for purulent processes</p> <p><b>Skills:</b> assess the nature of the pathogen to select an adequate treatment method and predict the course of the pathological process.</p>
<p><b>Pharmacology</b></p> <p><b>Knowledge:</b> medicines used in surgery, anesthesiology and resuscitation, their mechanism of action</p> <p><b>Skills:</b> choosing the optimal method of treating surgical pathology</p> <p><b>Skills :</b> to create adequate treatment regimens for surgical pathology, taking into account the mechanism of action of drugs.</p>



## 1.6. Requirements for the results of mastering the discipline

The process of mastering the discipline is aimed at developing the following competencies:

No · n/n	Code and name of competence	Code and name of the indicator of achievement of competence	As a result of studying the academic discipline, the student must:		
			Know	Be able to	To own
<b>Universal competencies</b>					
1	<b>UK-1</b> Capable of carrying out a critical analysis of problematic situations based on a systems approach and developing an action strategy	<b>ID UK-1.1 .</b> Analyzes a problem situation based on a systems approach. <b>ID UK-1.2.</b> Identifies gaps in information needed to solve problem situations and design processes to eliminate them. <b>ID UK-1.5 .</b> Critically evaluates the reliability of information sources.	- a problematic situation in your professional field; - a strategy for solving problem situations based on a systemic and interdisciplinary approach; - know reliable sources of information.	- analyze a problem situation based on a systems approach; - apply systems analysis to resolve problematic situations in the professional sphere; -use reliable sources of information to assess the situation.	- skills for critically evaluating modern concepts of a philosophical and social nature in their subject area; -methods for problematic eliminating situations; - the ability to assess the reliability of information sources.
<b>General professional competencies</b>					
2	<b>OPK-1 .</b> Able to implement moral and legal norms, ethical and deontological principles in professional activities	<b>ID OPK-1.1.</b> Carries out professional activities in accordance with ethical standards and moral principles. <b>ID OPK-1.2.</b> Organizes professional activities, guided by legislation in the field of healthcare, knowledge of medical ethics and deontology. <b>ID OPK-1.3.</b> Has the skills of presenting an	- ethical standards and moral principles in the performance of their professional activities; -organization of professional activities taking into account the principles of ethics and deontology; - principles of conducting discussions and round tables.	- apply the principles of ethics and deontology in their professional activities; - organize your professional activities taking into account moral and ethical principles and deontology; - conduct discussions.	- skills of expressing an independent point of view, analysis and logical thinking, public speaking, moral and ethical argumentation; - has organizational skills, guided by legislation in the field of healthcare, knowledge of medical ethics and deontology; - conducting discussions and round tables,

		independent point of view, analysis and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and round tables, principles of medical deontology and medical ethics.			principles of medical deontology and medical ethics.
3	<b>OPK-4.</b> Capable of using medical devices provided for by the procedure for providing medical care, as well as conducting patient examinations to establish a diagnosis	<b>ID OPK-4.1.</b> Uses modern medical technologies, specialized equipment and medical products, disinfectants, drugs, including immunobiological and other substances and their combinations when solving professional problems from the standpoint of evidence-based medicine. <b>ID OPK-4.2.</b> Knows the indications and contraindications for the use of instrumental, functional and laboratory examination methods, possible complications during examination, emergency care and their prevention. <b>ID OPK-4.3 .</b> Interprets the results of the most common methods of instrumental, laboratory and functional diagnostics, thermometry to identify pathological processes. <b>ID OPK-4.4.</b>	- modern medical technologies, specialized equipment and medical products, disinfectants, drugs, including immunobiological and other substances and their combinations in solving professional problems from the standpoint of evidence-based medicine; - know the indications and contraindications for the use of instrumental, functional and laboratory examination methods, possible complications during the examination, emergency care and their prevention; - know various examination methods; - methods of general clinical examination of patients of different ages; -modern classification of diseases.	- evaluate the results of the most common methods of instrumental, laboratory and functional diagnostics, thermometry to identify pathological processes; - select research methods for various surgical pathologies; - be able to select information about the effectiveness of various research methods; the ability to select survey methods; - select adequate examination methods; -form a diagnosis.	- methods of general clinical examination of patients of different ages in order to establish a diagnosis; - has a working knowledge of the algorithm for examining and treating patients with various surgical pathologies; - the ability to select research methods in patients of different ages, taking into account the underlying and concomitant pathology; - the ability to prescribe an adequate examination; - has information about the effectiveness of various research methods; - formulate a preliminary diagnosis and clinical diagnosis according to the ICD.

		<p>Proficient in methods of general clinical examination of patients of various ages.</p> <p><b>ID OPK-4.5.</b> Formulates a preliminary diagnosis and clinical diagnosis according to ICD.</p>			
4	<p><b>OPK-5 .</b> Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems</p>	<p><b>ID OPK-5.1.</b> Knows the functional systems of the human body, their regulation and self-regulation when interacting with the external environment in normal conditions and during pathological processes.</p> <p><b>ID OPK-5.2.</b> Knows the etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, and the basic concepts of nosology.</p> <p><b>ID OPK-5.3 .</b> Knows the indicators of the morphofunctional and physiological state of a healthy person and can measure/determine them.</p> <p><b>ID OPK-5.6 .</b> Interprets the results of biopsy and surgical material studies to solve professional problems, taking into account professional standards</p> <p><b>ID OPK-5.8 .</b> Formulates a diagnosis in accordance with the identified</p>	<ul style="list-style-type: none"> <li>- functional systems of the human body, their regulation and self-regulation during interaction with the external environment in normal conditions and during pathological processes;</li> <li>-etiology, pathogenesis, morphogenesis, pathomorphosis of disease development;</li> <li>- the main indicators of the morphofunctional, physiological state of a healthy person;</li> <li>- knows the morphological changes in tissues in various pathologies;</li> <li>- knows the specifics of forming a diagnosis taking into account the identified morphological changes in tissues.</li> </ul>	<ul style="list-style-type: none"> <li>- analyze macroscopic and microscopic changes in normal and pathologically altered tissues and organs;</li> <li>- to assess the course of the pathological process;</li> <li>- knows how to assess morphological changes in surgical pathology;</li> <li>- is able to apply the identified changes in tissues to make a diagnosis.</li> </ul>	<ul style="list-style-type: none"> <li>- the ability to use indicators of morphofunctional, physiological state and pathological process to examine the human body in order to establish a diagnosis, prescribe treatment and monitor its effectiveness and safety;</li> <li>- has knowledge of the characteristics of the course of the pathological process based on the etiology of the disease;</li> <li>-has the ability to evaluate indicators.</li> <li>- has the ability to use identified morphological changes in tissues;</li> <li>- is able to form a diagnosis taking into account the results of morphological studies.</li> </ul>

		pathological changes according to the ICD.			
5	<b>OPK-7.</b> Able to prescribe treatment and monitor its effectiveness and safety	<b>ID OPK-7.1</b> Selects a drug based on the totality of its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient and inpatient settings. <b>ID OPK-7.2.</b> Selects the optimal minimum of the most effective means, using convenient methods of their use and the financial capabilities of the patient to purchase medications. <b>ID OPK-7.3 .</b> Explains the main and side effects of drugs, the effects of their combined use and interaction with food, taking into account the morphofunctional characteristics, physiological states and pathological processes in the human body	- knows medicines by the totality of their pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient and inpatient settings; - knows the optimal minimum of the most effective means, using convenient methods of their use and the patient's financial capabilities for purchasing medications; - knows the main and side effects of drugs.	- choose the optimal minimum of the most effective means, using their convenient applications; - use the most effective means for treatment; - knows how to avoid complications from drug treatment.	- the ability to evaluate the effectiveness and safety of drug therapy using a combination of clinical, laboratory, instrumental and other diagnostic methods; - has a command of the algorithm for drug treatment of surgical patients; - has the ability to avoid the side effects of drugs, the effects of their combined use and interaction with food, taking into account the nature of the surgical pathology.
<b>Professional competencies</b>					
6	<b>PC-1.</b> Ability to collect and analyze complaints, life history, and patient disease history in order to establish a diagnosis	<b>ID PC-1.1.</b> Collect complaints, medical history, and life history from a patient with a disease and/or condition in the “therapy” profile (or his/her	- know the basic principles of communication with elderly patients;  - know the main complaints in various surgical diseases	- be able to establish contact with elderly surgical patients;  - be able to identify primary and secondary complaints when communicating with an	have the ability to communicate with elderly surgical patients;  - has the ability to identify characteristic complaints

	and/or condition in the “therapy” profile	legal representative) <b>ID PC-1.2.</b> Interpret and analyze information received from a patient with a disease and (or) condition in the profile "therapy" (or his legal representative)	in elderly people; - know the medical history; - know information about the patient's medical history, including data on past illnesses, injuries and surgeries, hereditary, professional and epidemiological history.	elderly patient; - be able to identify factors that contribute to the development of surgical pathology in the elderly; - be able to use the information obtained about the patient's life history.	in surgical diseases in elderly people;
7	<b>PC-2.</b> Ability to conduct a physical examination of a patient, analyze the results of additional examination methods in order to establish a diagnosis and/or condition in the “therapy” profile	<b>ID PC-2.1.</b> Conduct a physical examination of the patient (inspection, palpation, percussion, auscultation) and interpret its results <b>ID PC-2.2.</b> Justify the need and scope of laboratory and instrumental examinations of a patient with a disease and (or) condition in the “therapy” profile	- know the methods of physical examination of the patient; - know the algorithm for examining a patient; - know the results of the patient's examination; - know the principles of early diagnosis of diseases, taking into account the current international statistical classification of diseases and related health problems (ICD).	- be able to identify factors that contribute to the development of surgical pathology in elderly patients; - be able to use the information obtained about the patient's life history. - be able to conduct physical examination of the patient (inspection, palpation, percussion, auscultation) and interpret its results; - be able to select the necessary examination algorithm for elderly people; - be able to analyze the results of the examination and plan the	have the ability to communicate with surgical patients of different ages; - have the ability to identify characteristic complaints in surgical diseases in elderly people; -have the ability to assess the cause and dynamics of the pathological process; - have information about the patient's medical history for the purpose of making a diagnosis.

				scope of additional research; - be able to apply the principles of early diagnosis of diseases, taking into account the current international statistical	
8	<b>PC-3.</b> Ability to determine medical indications for hospitalization, indications for providing emergency, medical care	<b>ID PC-3.1.</b> Determine medical indications for emergency, including emergency specialized, medical care <b>ID PC-3.2</b> . Determine medical indications for referring a patient for medical care in inpatient or day hospital settings providing specialized medical care in the "therapy" profile in case of diagnostic difficulties and in the absence of the possibility of conducting additional examinations in an outpatient setting	- know the medical indications for providing emergency, including emergency, specialized medical care  - know the medical indications for referring a patient for medical care in inpatient or day hospital settings providing specialized medical care in the field of "therapy" in case of difficulties in diagnosis and in the absence of the possibility of conducting additional examinations in an outpatient setting	- be able to determine indications for providing emergency, including emergency specialized, medical care  - be able to determine the indications for referring a patient for medical care in inpatient settings or day hospital settings providing specialized medical care in the “therapy” profile in case of difficulties in diagnosis and in the absence of the possibility of conducting additional examinations in an outpatient setting	- have the ability to determine indications for providing emergency, including emergency specialized, medical care to elderly people;  - have the ability to determine the indications for referring a patient for medical care in inpatient settings or day hospital settings providing specialized medical care in the “therapy” profile in case of difficulties in diagnosis and in the absence of the possibility of conducting additional examinations in outpatient settings

9	<p><b>PC-4.</b> Ability to prescribe treatment to patients with diseases and (or) conditions in the profile of "therapy"</p>	<p><b>ID PC-4.1.</b> To draw up and justify a treatment plan for a patient with a disease and (or) condition in the "therapy" profile, taking into account the diagnosis, age of the patient, clinical picture of the disease and (or) condition in accordance with the procedures for providing medical care, clinical recommendations, taking into account the standards of medical care</p> <p><b>ID PC-4.2.</b> . To prescribe medicinal products, medical devices taking into account the clinical picture of the disease and (or) the condition in the profile "therapy" and the effectiveness and safety of risk factors for its development in accordance with the procedures for the provision of medical care, clinical recommendations taking into account the standards of medical care and</p>	<ul style="list-style-type: none"> <li>- know the schemes treatment in accordance with clinical recommendations (treatment protocols), procedures for providing medical care and taking into account standards of medical care;</li> <li>- know non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care;</li> <li>- know the scope of palliative care elderly people</li> </ul>	<ul style="list-style-type: none"> <li>- be able to prescribe diet therapy, drug therapy taking into account the diagnosis and clinical picture of the disease, as well as taking into account the recommendations of medical specialists;</li> <li>- be able to prescribe non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care;</li> <li>- be able to provide palliative medical care in collaboration with medical specialists and other medical workers.</li> </ul>	<ul style="list-style-type: none"> <li>- possess <b>the</b> ability to analyze the action of drugs based on the totality of their pharmacological effects on the body, depending on the nature of the pathology;</li> <li>- have the ability to prescribe non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care;</li> </ul>
10	<p><b>PC-11.</b> Ability to maintain medical records and control the</p>	<p><b>ID PC-11.1.</b> Fill out medical documentation, including in the form of an electronic</p>	<ul style="list-style-type: none"> <li>- know medical documentation, including in</li> </ul>	<ul style="list-style-type: none"> <li>be able to work with medical documentation, including in</li> </ul>	<ul style="list-style-type: none"> <li>- have the ability to work with medical</li> </ul>

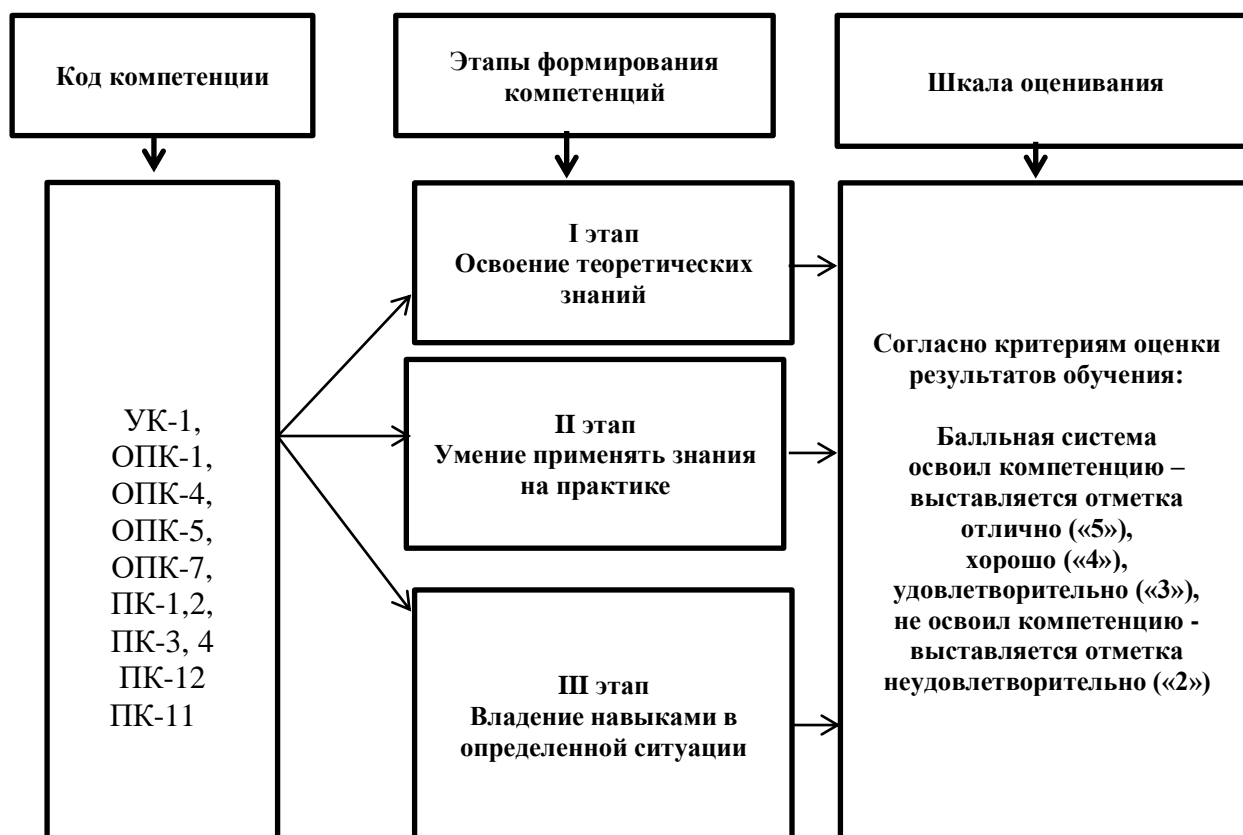
	quality of their maintenance	document, monitor the quality of its maintenance <b>ID PC-11.2.</b> Use in work personal data of patients and information constituting a medical secret <b>ID PC-11.3.</b> Use in professional activities medical information systems and the information and telecommunications network "Internet".	electronic form; - knows the principles of working with personal data of patients and information constituting a medical secret; - knows medical information systems and the information and telecommunications network "Internet" -	electronic form; - knows how to work with patients' personal data and information constituting a medical secret; - knows how to draw up documentation when referring patients for hospitalization, consultation	documentation, including in electronic form; - have the ability to work with personal data of patients and information constituting a medical secret; -have the ability to prepare documentation when referring patients for hospitalization, consultation, spa treatment, medical and social examination.
11	<b>PC-12</b> . Ability to provide medical care in emergency and urgent situations	<b>ID. PC 12.1.</b> Recognize conditions requiring emergency medical care, including clinical signs of sudden cessation of blood circulation and (or) respiration, requiring emergency and urgent medical care. <b>ID PC -12.2.</b> Provide emergency medical care to patients in conditions that pose a threat to the life of patients, including clinical death (cessation of vital functions of the human body (blood circulation and (or) respiration). <b>ID PC-12.3.</b> Use drugs and medical devices	<b>know</b> the conditions that require emergency medical care, including clinical signs of sudden cessation of blood circulation and/or breathing, requiring emergency and urgent medical care. - know the principles of providing medical care to patients in conditions that pose a threat to the life of patients, including clinical death (cessation of vital functions of the human body (circulation and (or) respiration).	- be able to recognize conditions that require emergency medical care, including clinical signs of sudden cessation of blood circulation and/or breathing, requiring emergency and urgent medical care.  - be able to apply the principles of providing medical care to patients in conditions that pose a threat to the life of patients, including clinical death (cessation of vital functions of the human body (circulation and (or) respiration).	have the ability to adequately assess conditions requiring emergency medical care, including clinical signs of sudden cessation of blood circulation and/or breathing, requiring emergency and urgent medical care.  - to master the principles of providing medical care to patients in conditions that pose a threat to the life of patients, including clinical death (cessation of vital functions of the

		when providing emergency and urgent medical care to patients. <b>ID PC-12.4.</b> Perform basic cardiopulmonary resuscitation	- know the principles of cardiopulmonary resuscitation		human body (circulation and (or) respiration).  - master the technique of performing basic cardiopulmonary resuscitation
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## Code of the competence being formed

Name of the discipline	Code of the competence being formed
Current issues of emergency abdominal surgery in the elderly	UK-1, OPK-1, OPK-4, OPK-5, OPK-7, PC-2, PC-3, PC-4, PC-1, PC-12, PC-11

## 1.7 Stages of competencies development and description of assessment scales



## 1.8 Forms of training organization and types of control

Form of organization of students' training	Brief description
Lectures	The lecture material contains key and most problematic issues of the discipline, which are most significant in the training of a specialist.
Practical classes	They are intended for the analysis (reinforcement) of theoretical principles and monitoring their assimilation with subsequent application of the acquired knowledge during the study of the topic.
Interactive forms of learning	<ul style="list-style-type: none"> <li>- solving situational problems and exercises with subsequent discussion,</li> <li>- interactive survey, discussions;</li> <li>- performing creative tasks,</li> <li>- small group method,</li> <li>- online course of the discipline in the Moodle system , testing in the Moodle system .</li> </ul>
Participation in the research work of the department, student circle and conferences	<ul style="list-style-type: none"> <li>- preparation of oral presentations and poster reports for presentation at a student club or scientific conference;</li> <li>- writing theses and abstracts on the chosen scientific field;</li> <li>- preparation of a literature review using educational, scientific,</li> </ul>

	reference literature and Internet sources.
<b>Types of control</b>	<b>Brief description</b>
Incoming inspection	Testing theoretical knowledge and practical skills developed by the discipline program The entrance knowledge control includes: - testing in the Moodle system (test of incoming knowledge control) - solving situational problems and exercises. The results of the incoming inspection are systematized, analyzed and used by the teaching staff of the department to develop measures to improve and update the teaching methods of the discipline.
Current control	Current knowledge control includes: - checking the solution of situational problems and exercises completed independently (extracurricular independent work); - assessment of the assimilation of theoretical material (oral survey and interview); - testing in the Moodle system on all topics of the discipline - individual assignments (practical and theoretical) for each topic of the discipline studied.
Interim assessment	The midterm assessment is represented by a test with a grade, which students take at the end of the 7th semester.

## II STRUCTURE AND CONTENT OF THE DISCIPLINE

### 2.1 Scope of the discipline and types of educational activities

Type of academic work	Total hours	7th semester
Lectures	14	14
Clinical practical classes	34	34
Independent work	24	24
Total labor intensity in hours	72	72
Total workload in credit units	2 ze	2 ze

### 2.2 Thematic plan of lectures and their brief content

Item No.	Topics and content of lectures	Codes of formed competencies	Labor intensity (hour.)
1	Features of the course of acute surgical pathology of elderly patients. Modern diagnostic and surgical technologies in providing assistance to elderly patients. Features of examination and preparation of elderly patients for surgery. Features of anesthetic care in elderly people	UK-1, OPK-1, OPK-4, OPK-5, OPK-7, PC-2, PC-3, PC-4, PC-1, PC-12, PC-11	2
2	Gastrointestinal bleeding. Pathogenesis of disorders in the elderly. Clinical picture of gastrointestinal bleeding. Diagnostics, differential diagnostics. Conservative treatment of bleeding ulcers. Method of selective embolization of gastric vessels in case of bleeding. Methods of endoscopic hemostasis. Indications for surgical treatment of ulcerative bleeding. Types of surgical interventions in case of bleeding in the elderly.	OPK-7, PK-2, PK-3, PK-4, PK-1, PK-12, PK-11	2

3	Mechanical jaundice in the elderly. Differential diagnostics. Features of surgery in icteric patients, preoperative preparation, measures to prevent cholemic bleeding. Minimally invasive technologies in the treatment of jaundice. Alternative methods in the treatment of cholelithiasis: drug lithotripsy, shock wave lithotripsy, endovideosurgery in the treatment of cholecystitis, surgery from a small (mini) approach. Diagnostics and treatment of stenosis of the terminal section of the common bile duct .	OPK-7, PC-2, PC-3, PC-1, PC-4, PC-12, PC-11	2
4	Acute pancreatitis. Peculiarities of acute pancreatitis in elderly people. Modern technologies of surgical treatment of pathology . Pathological anatomy of acute pancreatitis in elderly people. Clinic. Concepts of two phases of the disease. Complications. Clinical semiotics. The importance of laboratory research methods in diagnosing the disease. Instrumental and radiation diagnostics. Differential diagnosis. Treatment tactics depending on the form of pancreatitis. Indications for surgical intervention. The place of laparoscopic methods in surgery for acute pancreatitis.	OPK-7, PC-2, PC-3, PC-1, PC-4, PC-12, PC-11	2
5	Complicated colon cancer. Basic principles of diagnostics, development of surgical tactics. Obstructive intestinal obstruction of tumor genesis. Features of pathogenesis. Clinic. Diagnostics, differential diagnosis. Preoperative preparation and postoperative management.	OPK-7, PC-2, PC-3, PC-1, PC-4, PC-12, PC-11	2
6	Acute thrombosis of mesenteric vessels. Diagnostics. Modern principles of treatment . Peculiarities of postoperative period management. Patient medical examination.	OPK-7, PC-2, PC-3, PC-1, PC-4, PC-12, PC-11	2
7	Closed injuries of abdominal organs (hollow, parenchymatous). Diagnostics, differential diagnostics Minimally invasive technologies in the treatment of pathology.	OPK-7, PC-2, PC-3, PC-4, PC-1, PC-12, PC-11	2
<b>Total hours: 14</b>			

### 2.3 Thematic plan of practical classes and their content

No.	Name of the topics of practical classes	Contents of clinical practical classes	Codes of formed competencies and indicators of their achievements	Types of control	Labor intensity in hours
1	Peculiarities of examination of elderly persons with urgent surgical pathology. Acute appendicitis, strangulated hernias. Peculiarities of their course in elderly persons.	<p><b>Theoretical part:</b> Peculiarities of the course of acute appendicitis in elderly people. Modern technologies of surgical treatment of appendicitis.</p> <p><b>Practical part</b> Solving situational problems, viewing presentations on the topic, analyzing patients with acute appendicitis</p>	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3 PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4: ID PC-4: 4.1, 4.2 PC-11, ID PC-11: 11.1, 11.2.11.3 PC-12. ID PC-12: 12.1, 12.2, 12.3, 12.4	Frontal survey, testing, interactive survey solution situational tasks	3.4
2	Gastrointestinal bleeding in the elderly. Diagnostics, differential diagnostics. Modern methods of hemostasis.	<p><b>Theoretical part:</b> Classification, principles of diagnostics, methods of plastic surgery, complications, minimally invasive technologies of surgical treatment of patients with bleeding</p> <p><b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analyzing patients on the topic</p>	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3 PC-1: ID PC-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4: ID PC-4: 4.1, 4.2 PC-11, ID PC-11: 11.1, 11.2.11.3 PC-12. ID PC-12: 12.1, 12.2, 12.3, 12.4	Frontal survey, testing, interactive survey	3.4
3	Mechanical jaundice in the elderly. Differential diagnostics of jaundice, treatment methods. Minimally invasive technologies in the treatment of jaundice.	<p><b>Theoretical part:</b> Story treatment of cholelithiasis. Basic principles of diagnosis, treatment methods, cholelithiasis.</p> <p><b>Practical part:</b> Solving situational problems, viewing presentations on the topic</p>	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3 PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2	Frontal survey, testing, interactive survey	3.4

			PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4		
4	Complicated colon cancer in elderly people. Formation of surgical tactics.	<b>Theoretical part:</b> Basic principles of diagnosis, methods of treatment of colon cancer <b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analyzing patients on the topic of the lesson	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4	Frontal survey, testing, interactive survey	3.4
5	Thrombosis of mesenteric vessels. Diagnostics. Modern principles of treatment.	<b>Theoretical part:</b> Basic principles of diagnosis, methods of treatment of mesenteric vascular thrombosis. <b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analysis on the topic.	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4	Frontal survey, testing, situational solution tasks interactive survey	3.4
6	Modern technologies of surgical treatment of acute pancreatitis in the elderly.	<b>Theoretical part:</b> Modern basic principles of diagnostics, treatment methods, complications of acute pancreatitis, minimally invasive technologies for surgical treatment of pancreatitis.	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9	Frontal survey, testing, interactive survey	3.4

		<p><b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analysis of acute pancreatitis and its complications.</p>	<p>PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4</p>		
7	<p>Portal hypertension. Diagnostics. Modern principles of treatment.</p>	<p><b>Theoretical part:</b> Classification, diagnostics, treatment methods. Portal hypertension <b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analyzing patients on the topic of the lesson</p>	<p>OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4</p>	<p>Frontal survey, testing, interactive survey</p>	<p>3.4</p>
8	<p>Peritonitis. Definition, classification, principles of diagnosis and treatment. Minimally invasive treatment methods.</p>	<p><b>Theoretical part:</b> The concept of peritonitis, classification, basic principles of diagnosis, treatment methods, complications. <b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analyzing patients with peritonitis.</p>	<p>OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4</p>	<p>Frontal survey, testing, interactive survey</p>	<p>3.4</p>
9	<p>Abdominal trauma in the elderly . Definition, classification, principles of diagnosis and treatment. Minimally invasive</p>	<p><b>Theoretical part :</b> modern abdominal trauma, classification , diagnostic and treatment methods. <b>Practical part:</b> Solving situational problems, viewing</p>	<p>OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3,</p>	<p>Frontal survey, testing, interactive survey</p>	<p>3.4</p>

	treatment methods.	presentations on the topic, analyzing patients with abdominal trauma.	2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4		
10	Diseases of the rectum. Classification of diseases. Methodology for examining patients with diseases of the rectum. Hemorrhoids. Anal fissure. Paraproctitis, fistulas Prolapse of the rectum. Causes. Clinic, diagnostics, treatment. Classification, clinical picture, methods of conservative and surgical treatment.	<b>Theoretical part:</b> Basic principles of diagnostics, methods of treatment of rectal diseases. Complications. Minimally invasive technologies for treatment of rectal diseases. <b>Practical part:</b> Solving situational problems, viewing presentations on the topic, analysis of patients with rectal diseases.	OPK-4: ID: 4.1, 4.2, 4.3, 4.4, 4.5 OPK-5: ID: 5.1, 5.2, 5.3, 5.6, 5.8 OPK-7: ID: 7.1, 7.2, 7.3PK-1: ID PK-1 1.1, ID-1.2 PC-2: PC-2 ID: 2.1, 2.2, 2.3, 2.5.2.9 PC-3: PC-3 ID: 3.1, 3.2 PC-4:ID PC-4: 4.1, 4.2 PC-11, ID PC-11:11.1, 11.2.11.3 PC-12.ID PC-12: 12.1, 12.2, 12.3, 12.4	Frontal survey, testing, interactive survey	3.4
<b>Total hours: 34</b>					

## 2.4. Interactive forms of learning

No.	Topic of clinical practical lesson	Labor intensity in hours	Interactive forms of learning	Labor intensity in hours, in % of the lesson
1.	Methodology for examining a surgical patient.	3.4	Interactive survey using the "work in small" method, case method	40 minutes (0.66 hours 23%)
2	Gastrointestinal bleeding.	3.4	Brainstorming method, case - method	40 minutes (0.66 hours) 23%
3	Mechanical jaundice.	3.4	Interactive survey using the method of "work in small groups"	40 minutes (0.66 hours) / 23%
4.	Pancreatitis	3.4	Brainstorming method, case method	40 minutes (0.66 hours) / 23%
5	Complicated colon cancer.	3.4	Brainstorming method, case method	40 minutes (0.66 hours) / 23%
6.	Thrombosis of mesenteric vessels.	3.4	Interactive survey using the method of "work in small groups"	40 minutes (0.66 hours) / 23%
7.	Peritonitis. Peculiarities of the course of peritonitis in elderly people.	3.4	Brainstorming method, case method	40 minutes (0.66 hours) / 23%
8	Closed injuries of the hollow organs of the abdominal cavity.	3.4	Brainstorming method, case method	40 minutes (0.66 hours) / 23%
9	Closed injuries of parenchymal organs.	3.4	Interactive survey using the method of "work in small groups"	40 minutes (0.66 hours) / 23%
10	Final lesson.	3.4	Brainstorming method, case method)	40 minutes (0.66 hours) / 23%

## 2.5 Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the "Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of Russia.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct but incomplete or imprecise answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors;
- minor errors;
- shortcomings.

The success of students in mastering the topics of the discipline is determined by the quality of acquisition of knowledge, skills and practical abilities; the assessment is given on a five-point scale:

“5” – excellent, “4” – good, “3” – satisfactory, “2” – unsatisfactory.

#### **Rating scales for ongoing knowledge control**

The success of students in mastering the discipline (topics/sections), practical skills and abilities is characterized by a qualitative assessment and is assessed on a 5-point system: “5” - excellent, “4” - good, “3” - satisfactory, “2” - unsatisfactory.

**The conversion of the mark into a point scale is carried out according to the following scheme:**

Quality of development	Mark on a 5-point scale
90 - 100%	"5"
80 - 89%	"4"
70 - 79%	"3"
less than 70%	"2"

#### **Incoming inspection**

Conducted at the first lesson, includes: solving problems and exercises; testing in the Moodle system

The test control includes 100 questions on the course of disciplines (anatomy, physiology, histology) studied in the 1st and 2nd years of ASMA education.

#### **Current control**

**Current control** includes initial and final control of knowledge.

**Initial control** is carried out by the teacher at the beginning of each lesson in the form of a frontal survey, solving problems and exercises, and testing.

**Final control** - includes control over the technique of performing the patient examination, manipulations, protocol preparation , testing in the Moodle system

The assessment during the current knowledge control is given on the day of the lesson, as the arithmetic mean result for all types of activities provided for in this lesson of the discipline's work program. Based on the assessments for the current control of knowledge, skills, and abilities in practical classes, the average score of current academic performance is calculated, which is recorded in the educational (electronic) journal and taken into account during midterm assessment.

#### **Criteria for assessing the oral response**

**“5” (excellent)** – the student demonstrates deep and complete knowledge of the educational material, does not allow inaccuracies or distortions of facts when presenting, presents the material in a logical sequence, is well oriented in the presented material, and can provide justification for the judgments expressed.

**“4” (good)** – the student has mastered the educational material in full, is well oriented in the educational material, presents the material in a logical sequence, but makes inaccuracies when answering.

**“3” (satisfactory)** – the student has mastered the basic principles of the topic of the practical lesson, but when presenting the educational material, he/she makes inaccuracies, presents it incompletely and inconsistently, requires leading questions from the teacher to present it, and has difficulty substantiating the judgments expressed.

**“2” (unsatisfactory)** – the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining basic concepts, distorts their meaning, and cannot independently present the material.

#### **Assessment criteria for the practical part**

**“5” (excellent)** – the student has fully mastered the practical skills and abilities provided for by the course work program.

**“4” (good)** – the student has fully mastered the practical skills and abilities provided for in the course program, but makes some inaccuracies.

**“3” (satisfactory)** – the student has only some practical skills and abilities.

**“2” (unsatisfactory)** – the student demonstrates the performance of practical skills and abilities with gross errors.

**Criteria for assessing independent extracurricular work:**

- the level of student mastery of the educational material;
- the completeness and depth of general educational concepts, knowledge and skills on the topic being studied, to which this independent work relates;
- development of universal, general professional, professional competencies (ability to apply theoretical knowledge in practice).
- the problems were solved correctly, the exercises were completed, and the test assignments were answered accurately – “passed”.
- problems were not solved correctly, exercises were not completed correctly, inaccurate answers were given to test assignments – “failed”.

**Preparation of the abstract:**

- the abstract is written quite competently, the material is presented in detail, the abstract is formatted according to the requirements – “passed”.
- the abstract is not written correctly enough, the material is not presented in detail, the abstract design does not meet the requirements – “failed”.

A student who has not prepared an abstract or who has received a “fail” for it will not be admitted to the final midterm assessment for the discipline.

**Working off disciplinary debts.**

If a student misses a class for a valid reason, he/she has the right to make it up and receive the maximum grade provided for by the course work program for that class. A valid reason must be documented.

If a student misses a class for an unjustified reason or receives a “2” mark for all activities in the class, he/she is required to make it up. In this case, the mark received for all activities is multiplied by 0.8.

If a student is excused from a class at the request of the dean's office (participation in sports, cultural and other events), then he is given a grade of “5” for this class, provided that he submits a report on the completion of mandatory extracurricular independent work on the topic of the missed class.

**Criteria for assessing midterm assessment.**

Midterm assessment (exam) is designed to assess the degree of achievement of planned learning outcomes upon completion of the study of a discipline and allows for an assessment of the level and quality of its mastery by students.

The students' success in mastering the discipline is assessed on a 5-point scale: “5” – excellent, “4” – good, “3” – satisfactory, “2” – unsatisfactory.

**"Excellent"** - for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones, express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers. Practical skills and abilities provided for by the working program of the discipline are fully mastered.

**"Good"** - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing allows up to 20% of erroneous answers. Completely practical skills and abilities provided by the working program of the discipline, but allows some inaccuracies

**"Satisfactory"** - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; during testing, allows up to 30% of erroneous answers. Has only some practical skills and abilities.

**"Unsatisfactory"** - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers during testing. Performs practical skills and abilities with gross errors.

A student can claim to receive an "excellent" grade automatically if he/she has won a prize in disciplinary or interdisciplinary Olympiads (university, regional) and has an average grade for the current academic performance of at least 4.8 points . A student can refuse the "automatic" grade and take the test together with the group on a general basis.

**Interim assessment is carried out through a 3-stage delivery system:**

1. Test control in the Moodle system .
2. Passing practical skills (competencies).
3. Answers to exam tickets.

During the midterm assessment, the final grade is determined as the arithmetic mean of the results for all stages of the assessment.

**Evaluation criteria**

Quality of development	Mark on a 5-point scale
90 - 100%	"5"
80 - 89%	"4"
70 - 79%	"3"
less than 70%	"2"

**2.6. Independent work of students: in-class and out-of-class**

The organization of independent classroom work of students is carried out with the help of methodological instructions for students, which contain educational goals, a list of the main theoretical questions for study, a list of practical work and the methodology for conducting it, instructions for the presentation of the results obtained, their discussion and conclusions, assignments for self-control with standard answers, a list of recommended literature.

From 1/4 to 1/2 of the practical lesson time is allocated for independent work of students: conducting research, recording results, discussing them, formulating conclusions, completing individual assignments. The preparatory stage, or the formation of an approximate basis for actions, begins for students outside of class time when preparing for the practical lesson, and ends in class.

All subsequent stages are carried out in class. The stage of materialized actions ( solving problems using an algorithm or without an algorithm, with an unknown answer in advance) is carried out independently.

The teacher, if necessary, provides consultation, provides assistance and at the same time monitors the quality of students' knowledge and their ability to apply existing knowledge to solve assigned tasks.

No	Topic of the	Time to	Forms of extracurricular work of students
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.	practical lesson	prepare for the lesson	Mandatory and the same for all students	At the student's choice abstract messages on topics
1	Features of examination of elderly surgical patients.	2 hours	Writing a case history. Preparation on theoretical issues (reading primary and secondary literature, giving lectures, solving test control, abstracting)	Minimally invasive technologies in the treatment of elderly surgical patients.
3	Mechanical jaundice. Causes, differential diagnostics, choice of treatment tactics.	2 hours	Preparation on theoretical issues (reading basic and additional literature).	Minimally invasive technologies for the treatment of jaundice.
4	Diseases of the pancreas. Peculiarities of the course of pathology in elderly people.	2 hours	Preparation for theoretical issues (reading basic and additional literature, giving lectures, solving test control, writing abstracts)	Modern minimally invasive technologies for the treatment of pancreatitis.
5	Gastrointestinal bleeding in the elderly.	4 hours	Preparation on theoretical issues (reading basic and additional literature, giving lectures, solving test control, reviewing)	New approaches to the treatment of gastrointestinal bleeding in the elderly.
6	Peritonitis. Peculiarities of the course of peritonitis in elderly people.	2 hours	Preparation on theoretical issues (reading basic and additional literature, giving lectures, solving test control, reviewing)	Minimally invasive technologies in the treatment of elderly patients.
7	Complicated colon cancer in elderly patients.	2 hours	Preparation on theoretical issues (reading basic and additional literature, giving lectures, solving test control, writing abstracts)	Modern methods of gastrointestinal tract decompression.
8	Closed injuries of hollow organs in elderly people.	2 hours	Preparation on theoretical issues (reading basic and additional literature, giving lectures, solving test control, reviewing)	New technologies and treatment of closed injuries of abdominal organs in the elderly.
9	Closed injuries of parenchymal organs.	4 hours	Preparation on theoretical issues (reading basic and additional literature, giving lectures, solving test control, reviewing)	Minimally invasive technologies in the treatment of parenchymal organ injuries.
	<b>Total:</b>	20 hours		4 hours
<b>Total labor intensity (in hours) 24 hours</b>				

## 2.7. Research (project) work

Research work of students is a mandatory section of the discipline. Research work is aimed at the comprehensive formation of universal, general professional and professional competencies of students. It involves the study of specialized literature and other scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge, participation in scientific research, etc. The topics of research can be chosen by students independently in consultation with the teacher, or from the list below (taking into account the scientific direction of the department).

Sample topics of students' research work.

1. Minimally invasive technologies in surgery of elderly patients
2. Robots in the service of surgeons,
3. Minimally invasive technologies in proctology
4. The place of the SAC in providing assistance to surgical patients.

A binary system is used to evaluate research work: passed, failed

### **III . EDUCATIONAL, METHODOLOGICAL, MATERIAL, TECHNICAL AND INFORMATION SUPPORT OF THE DISCIPLINE**

#### **3.1 Main literature**

1. Surgical diseases: textbook / edited by AF Chernousov. - M.: GEOTAR - Media, 2010. - 664 p. + CD.
2. Surgical diseases: textbook / edited by MI Kuzin. 4th edition, revised and enlarged. - M.: GEOTAR-Media, 2014. - 992 p.:
3. Komyakov BK Urology / BK Komyakov. - M.: GEOTAR-Media, 2018. - 480 p. - ISBN 978-5-9704-4421-4. Access mode <http://www.studmedlib.ru/book/ISBN9785970444214.html>
4. Tactics of a urologist: a practical guide / edited by D. Yu. Pushkar. - M.: GEOTAR-Media, 2019. - 96 p. (Series "Doctor's Tactics") - ISBN 978-5-9704-5202-8. Access mode <http://www.studmedlib.ru/book/ISBN9785970452028.html>
5. Vetchinnikova ON Mineral and bone disorders in chronic kidney disease: a guide for doctors / ON Vetchinnikova, RP Gerasimchuk, VM Ermoolenko [and others]. - M.: GEOTAR-Media, 2018. - 304 p. (Series "Library of a specialist doctor") - ISBN 978-5-9704-4667-6. Access mode <http://www.studmedlib.ru/book/ISBN9785970446676.html>

#### **3.2 Further reading:**

1. Belkov AV Guide to faculty surgery. - M.: OJSC Publishing house "Medicine", 2009.-496 p.
2. Belkov AV Faculty surgery. Lecture course. - Rostov - n / Don: Phoenix.-2007.-436 p.
3. Guide to practical classes in urology: textbook/edited by Yu.G. Alyaev. – M.: “MIA”, 2003. – 208 p.
4. Hinman F. Operative urology: Atlas. Translation from English-M.: GEOTAR-Media, 2007.-1192s
5. Urology. Illustrated workshop: textbook. manual/ed. SOUTH. Alyaeva, N.A. Grigorieva. – M.: GEOTAR-Media, 2011. - 96 p.: ill. Access mode <http://old.studmedlib.ru/index.html>

#### **3.3. Educational and methodological materials prepared by the department staff**

1. Volodchenko NP Diagnostics and treatment of bleeding. Study guide. Blagoveshchensk, 2015
2. Volodchenko NP Minimally invasive technologies in abdominal surgery. Tutorial. Blagoveshchensk, 2017

3. Volodchenko NP. Abdominal trauma. Study guide. Blagoveshchensk, 2018  
 4 Volodchenko NP Gastrointestinal bleeding. Study guide. Blagoveshchensk, 2021

### 3.4 Equipment used for the educational process

No.	Name	Quantity
1	Video complex (TV, DVD)	1
2	A set of visual aids	1
3	Personal computers	8
4	Handout kit	100
5	A bank of lectures on all topics of the program (on electronic and paper media) with multimedia presentations for them.	52
6	<b>Presentations on topics</b>	1
	1) Acute intestinal obstruction;	1
	2) Acute calculous cholecystitis, choledocholithiasis, mechanical jaundice; 3) Acute destructive pancreatitis. Features of tactics and surgical treatment; 5) Modern methods of treatment of cholelithiasis;	1
7	<b>3. Atlases (on electronic and paper media):</b> 1) R-diagnostics of OKN;	1
	2) Computed tomography of pathology of the liver, pancreas and spleen;	1
	3) Computed tomography of abdominal cavity pathology;	1
	4) Distal resection of the pancreas;	1
	5) Operations on the pancreas.	1
8	<b>List of literature on electronic media</b>	
	1. Clinical surgery. National guidelines (3 volumes), 2008.	1
	2. Large anatomical atlas. R. Yokochi, L. Decolla, 1997.	1
	3. Surgery of the biliary tract. EI Galperin et al., 2009.	1

#### Stands in thematic study rooms

1. A set of radiographs on the topics: acute intestinal obstruction, acute pancreatitis, cholecystitis, peptic ulcer (tablets).
2. Problem-based learning of X- ray diagnostics (tablets).
3. Surgical treatment of gastric ulcer and duodenal ulcer.
4. Surgical treatment of peptic ulcer.
5. Drainage in surgery.

#### Videos:

1.	Surgical Atlas
2.	New technologies in surgery
3.	Colon surgery
4.	Endoscopic papillosphincterotomy
5.	Peritonitis
6.	Acute and chronic pancreatitis
7.	Surgery of peptic ulcer and its complications

8	Injuries of the duodenum
9.	Modern methods of detoxification in peritonitis

### 3.5. Professional databases, information and reference systems, electronic educational resources.

No. p/p	Resource name	Resource Description	Access	Resource address
Electronic library systems				
1	"Student Consultant" Electronic library of the medical university.	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	library, individual access	<a href="http://www.studmedlib.ru/">http://www.studmedlib.ru/</a>
2	"Doctor's Consultant" Electronic Medical Library.	The materials posted in the library have been developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information has been prepared taking into account the position of the scientific and practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.	library, individual access	<a href="http://www.rosmedlib.ru/cgi-bin/mb4x">http://www.rosmedlib.ru/cgi-bin/mb4x</a>
3	PubMed	Free search system in the largest medical bibliographic database MedLine. Documents medical and biological articles from specialized literature, and also provides links to full-text articles.	library, free access	<a href="http://www.ncbi.nlm.nih.gov/pubmed/">http://www.ncbi.nlm.nih.gov/pubmed/</a>
4	Oxford Medicine Online.	A collection of Oxford medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	library, free access	<a href="http://www.oxfordmedicine.com">http://www.oxfordmedicine.com</a>
5	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	library, free access	<a href="http://humbio.ru/">http://humbio.ru/</a>
6	Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	library, free access	<a href="http://med-lib.ru/">http://med-lib.ru/</a>
Information systems				
7	Russian Medical	Professional Internet resource. Objective:	library, free	<a href="http://ww">http://ww</a>

	Association	to promote effective professional activity of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian Medical Union.	access	<a href="http://w.rmass.ru/">w.rmass.ru/</a>
8	Web medicine.	The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	library, free access	<a href="http://webmed.irkutsk.ru/">http://webmed.irkutsk.ru/</a>
Databases				
9	World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	library, free access	<a href="http://www.who.int/ru/">http://www.who.int/ru/</a>
10	Ministry of Science and Higher Education of the Russian Federation.	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and more.	library, free access	<a href="http://www.minobrnauki.gov.ru">http://www.minobrnauki.gov.ru</a>
11	Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	<a href="https://edu.gov.ru/">https://edu.gov.ru/</a>
12	Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and health care.	library, free access	<a href="http://www.edu.ru/">http://www.edu.ru/</a> <a href="http://window.edu.ru/catalog/?p_rubr=2.2.81.1">http://window.edu.ru/catalog/?p_rubr=2.2.81.1</a>
Bibliographic databases				
13	Database "Russian Medicine"	It is created in the Central Scientific and Methodological Library and covers the entire collection, starting from 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc.	library, free access	<a href="http://www.scsmli.ru/">http://www.scsmli.ru/</a>
14	eLIBRARY.RU	Russian information portal in the field of	library, free	<a href="http://elibr">http://elibr</a>

		science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.	access	<a href="http://rare.ru/defaultx.asp">rare.ru/defaultx.asp</a>
15	Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	<a href="http://diss.rsl.ru/?menu=disscatalog/">http://diss.rsl.ru/?menu=disscatalog/</a>
16	Medline.ru	Medical and biological portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	<a href="http://www.medline.ru">http://www.medline.ru</a>

### 3.6 . Licensed and freely distributed software used in the educational process.

#### 3.6. Licensed and freely distributed software

No.	Software List (commercial software products)	Details of supporting documents
1	MS Operating System Windows 7 Pro	License number 48381779
2	MS Operating System Windows 10 Pro	AGREEMENT R No. UT-368 dated 09.21.2021
3	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4	Kaspersky Endpoint Security for Business Advanced	Agreement 326po/21-IB dated November 26, 2021
5	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/Lot02.02.2022
6	1 C : University PROF	LICENSE AGREEMENT No. CB-1151 dated 04/01/2022
7	1 C : Library PROF	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8	Consultant Plus	AGREEMENT No. 37/Sot 02.25.2022
9	Action 360	AGREEMENT No. 574 dated November 16, 2021
10	E-learning environment 3 KL (Russian Moodle )	AGREEMENT No. 1362 dated 11/15/2021
11	Astra Linux Common Edition	AGREEMENT No. 142A dated 09.21.2021
12	Information system "Plans"	AGREEMENT No. 8245 dated 06/07/2021
13	1 C : Document flow	AGREEMENT No. 2191 dated October 15, 2020
14	R7-Office	AGREEMENT No. 2KS dated 12/18/2020
<b>List of freely distributed software</b>		
No.	List of freely distributed software	Links to license agreement
1	Yandex Browser	Freely distributed License Agreement for the use of Yandex Browser programs

		<a href="https://yandex.ru/legal/browser_agreement/">https://yandex.ru/legal/browser_agreement/</a>
2	Yandex.Telemost	Freely distributed License Agreement for the use of programs <a href="https://yandex.ru/legal/telemost_mobile_agreement/">https://yandex.ru/legal/telemost_mobile_agreement/</a>
3	Dr.Web CureIt!	Freely distributed License Agreement: <a href="https://st.drweb.com/static/newwww/files/license_CureIt_ru.pdf">https://st.drweb.com/static/newwww/files/license_CureIt_ru.pdf</a>
4	OpenOffice	Freely distributable License: <a href="http://www.gnu.org/copyleft/lesser.html">http://www.gnu.org/copyleft/lesser.html</a>
5	LibreOffice	Freely distributed License: <a href="https://ru.libreoffice.org/about-us/license/">https://ru.libreoffice.org/about-us/license/</a>

### 3.7. Resources of the information and telecommunications network "Internet"

- Library of the Amur State Medical Academy: <https://amursma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/>
- Electronic Library System "Student Consultant" – <http://www.studmedlib.ru/cgi-bin/mb4x>
- Electronic library of medical literature – <https://www.books-up.ru/ru/entrance/97977feab00ecfbf9e15ca660ec129c0/>

## IV FUND OF EVALUATION TOOLS

### 4.1. Current test control (input, initial output), final

#### 4.1.1 Examples of entrance control test tasks (with standard answers)

Tests in the Mood system . Total number of tests - 100  
<https://educ-amursma.ru/local/crw/category.php?cid=36>

1. To the clinic A 75-year-old patient was admitted with complaints of chest pain on the left, shortness of breath that worsens after eating and during physical exercise, as well as in a lying position, nausea and periodic vomiting that brings relief. The anamnesis revealed a road traffic accident 10 days ago. Chest X-ray showed a gas bubble with a fluid level above the diaphragm. What is your diagnosis?

- 1) left-sided abscessing pneumonia;
- 2) angina pectoris;
- 3) sliding hernia of the esophageal opening of the diaphragm;
- 4) traumatic diaphragmatic hernia on the left.

2. A 69-year-old female patient. No complaints. A routine X-ray examination of the stomach revealed a rounded clearing with a fluid level in the posterior mediastinum, and after taking a contrast agent, the cardiac part of the stomach was found to be located above the diaphragm. What disease can be suspected in the patient?

- 1) cancer of the cardiac part of the stomach;
- 2) relaxation of the diaphragm;
- 3) sliding hernia of the esophageal opening of the diaphragm;
- 4) retrosternal Lorrei hernia;

3. A 65-year-old patient complains of pain behind the breastbone in the xiphoid process area, radiating to the scapula, belching, and heartburn. The symptoms intensify when bending the body forward. The patient is suspected of having a sliding hernia of the esophageal opening of the diaphragm. Which of the following diagnostic methods are necessary to confirm and clarify the diagnosis?

a) esophagogastrosopy; b) X-ray examination of the stomach in the Trendelenburg position; c) retrograde cholangiopancreatography; d) esophageal manometry; e) intraventricular pH-metry. Choose the correct combination of answers:

- 1) a, b, d;
- 2) a, b, g, d; +
- 3) b, c, d, e;
- 4) b, c, d.

Answer samples: 1-4, 2-3, 3-4.

#### 4.1.2 Examples of test tasks for initial control (with standard answers)

Tests in the Mood 1 e system. Total number of tests -100

<https://educ-amursma.ru/local/crw/category.php?cid=36>

1 The most common cause of mechanical jaundice in the elderly is

- 1) cicatricial strictures of the extrahepatic bile ducts
- 2) choledocholithiasis
- 3) pancreatic head cancer
- 4) liver echinococcosis

2. The nature of pain in destructive pancreatitis:

- 1) cramping pains
- 2) pain of an uncertain nature
- 3) pain that causes anxiety
- 4) severe, constant pain

3. The most common source of massive bleeding in the elderly from the upper gastrointestinal tract is:

- 1) gastric ulcer
- 2) duodenal ulcer
- 3) stomach cancer
- 4) Mallory-Weiss syndrome

Answer standards: 1-3, 2-4, 3-1

#### 4.1.3 Examples of test tasks for final control (with standard answers)

Tests in the Mood system . Total number of tests - 100

<https://educ-amursma.ru/local/crw/category.php?cid=36>

**Test #1** Courvasier syndrome is characterized by a combination of symptoms

- 1) enlarged painless gallbladder combined with jaundice
- 2) enlarged liver, ascites, dilated veins of the anterior abdominal wall
- 3) jaundice, palpable painful gallbladder, local peritoneal phenomena
- 4) absence of stool, cramping pain, appearance of a palpable formation in the abdominal cavity

**Test No. 2** The most informative diagnostic method for prolonged jaundice is

- 1) intravenous infusion cholangiography
- 2) endoscopic retrograde cholangiopancreatography
- 3) percutaneous transhepatic cholangiography.

## 4) Ultrasound

**Test No. 3** For residual choledocholithiasis in elderly people, the most preferred method of treatment is

- 1) endoscopic papillosphincterotomy
- 2) complex conservative therapy
- 3)transduodenal palillosphincteroplasty
- 4)choledochotomy with external drainage of the common bile duct

Answer standards: 1-1, 2-2, 3-1

#### 4.1.4 Examples of test tasks for assessing practical skills (with standard answers)

Tests in the Mood system . Total number of tests - 100

<https://educ-amursma.ru/local/crw/category.php?cid=36>

**Test No. 1** In case of mechanical jaundice in elderly people, it is most advisable to perform

- 1) cholecystostomy under ultrasound control
- 2) pancreatoduodenal resection in one stage
- 3) imposition of biliodigestive anastomosis
- compression of the bile ducts, after resolution of jaundice
- pancreatoduodenal resection

**Test No. 2** The most common cause of mechanical jaundice in the elderly is

- 1) cholestasis
- 2) hepatitis
- 3) cancer of the head of the pancreas
- 4) liver echinococcosis

**Test No. 3** The nature of the benefit for mechanical jaundice in the elderly

- 1)transduodenal papillosphinsterooplasty
- 2)supraduodenal choledochoduodenostomy
- 3)endoscopic papillosphincterotomy
- 4)hepaticojejunostomy

Answer standards: 1-1, 2-2, 3-1

#### 4.1.4 Examples of test tasks for the final assessment (with standard answers)

Tests in the Mood system . Total number of tests - 100

**Test No. 1 The most informative indicator for pancreatitis**

- 1) blood amylase
- 2) trypsinogen
- 3) aminotransferase
- 4) aldolase

**Test #2** Indirect sign of acute pancreatitis during gastroscopy

- 1) acute gastric ulcers
- 2) acute ulcers of the duodenum
- 3) swelling and hyperemia of the posterior wall of the stomach

4) hemorrhages on the anterior wall of the stomach

**Test No. 3** The most informative diagnostic method for acute pancreatitis

- 1) X-ray examination of the stomach;
- 2) celiacography;
- 3) portography;
- 4) laparoscopy;

Answer samples: 1-1, 2-2, 3-4

#### 4.2. Situational tasks

**Problem No. 1.** A 65-year-old woman was admitted to the emergency room with a clinical picture of gastrointestinal bleeding. She is concerned about weakness, dizziness, nausea, vomiting, and black stool. There is no history of ulcers. She was treated with non-steroidal drugs for arthrosis for a month. Diagnosis. What is the diagnostic and treatment strategy?

**Answer:** Perform gastroscopy, if bleeding continues – endoscopic hemostasis. Correction of anemia.

**Problem No. 2.** An 86-year-old patient was admitted with mechanical jaundice. Ultrasound revealed a formation in the area of the head of the pancreas, expansion of the common bile duct to 2 cm. Enlarged gallbladder (15\*6 cm). Bilirubin is above 100 mmol/l, the direct fraction predominates. Diagnosis, treatment tactics

**Answer:** The patient probably has pancreatic head cancer. Perform drainage of the bile ducts under ultrasound control.

**Problem No. 3.** A 79-year-old patient was admitted to the clinic with a picture of acute mechanical intestinal obstruction in a serious condition. Taking into account the clinical picture, the history of the disease, the results of the X-ray examination, an opinion was formed about the obstruction of tumor genesis. Your treatment tactics.

**Answer:** After preoperative preparation, perform a laparoscopic colostomy. Once the conditions stabilize, determine the extent (stage) of the process and decide on the scope of the surgical intervention.

#### 4.3. List of practical skills that a student must master after mastering the discipline

- Collect anamnesis from an elderly surgical patient
- Conduct a physical examination of an elderly patient with acute abdominal pathology. Prepare a medical history and discharge summary.
- Determine the type and scope of clinical, laboratory and instrumental research methods for the most common surgical diseases.
- Evaluate the results of instrumental, X-ray, ultrasound, radioisotope and other modern examination methods (CT, MSCT, MRI).
- Create a treatment and rehabilitation plan for an elderly patient.
- To identify and interpret symptoms of "acute abdomen" in elderly people.
- Identify symptoms of bleeding in the gastrointestinal tract; blood assess loss indicators: red blood cell count, hemoglobin, hematocrit, BCC.

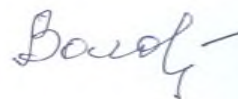
- To external abdominal hernias by examining the inguinal canal, umbilical ring, defects in the linea alba, the “cough impulse” symptom, percussion and auscultation of the hernial protrusion.
- Perform an examination of the anal area.
- Conduct a digital rectal examination.
- Perform punctures (together with a doctor) of the abdominal cavity.
- Remove superficial formations.
- Apply and remove skin sutures.
- Open and drain purulent cavities in the subcutaneous tissue.
- To master the algorithm for performing basic diagnostic measures when providing first aid in emergency and life-threatening conditions of an elderly patient.

#### **4.4 List of questions for the test**

1. Principles of providing care to elderly surgical patients.
2. Laparoscopic surgery as a modern minimally invasive method of treating emergency surgical pathology in the elderly.
3. Gastrointestinal bleeding in the elderly.
4. Endoscopic and X-ray vascular methods of hemostasis.
5. Mechanical jaundice. Clinical presentation, differential diagnostics, development of treatment tactics in elderly people.
6. Cancer of the gallbladder and bile ducts. Clinic, diagnostic methods, treatment.
7. Pancreatic head cancer. Clinical presentation, diagnostics, choice of treatment tactics in elderly people.
8. Acute pancreatitis. Classification, etiology, pathogenesis, clinical presentation, diagnostics, treatment.
9. Acute pancreatitis. Complications: formation of abscesses in the pancreas and retroperitoneal space, pancreatic fistula, false cyst, peritonitis. Clinical presentation, diagnostics, choice of treatment tactics.
10. Basic principles of conservative treatment of acute pancreatitis in the elderly.
11. Indications for surgical treatment in acute pancreatitis. Surgical options.
12. Mechanical intestinal obstruction. Etiopathogenesis, clinical features, treatment.
13. Features of diagnostics and surgical treatment of complicated tumor colonic obstruction in the elderly.
14. Acute purulent diffuse peritonitis. Causes, pathogenesis, clinical picture, modern methods of treatment in elderly people.
15. Basic principles of surgical treatment of diffuse peritonitis in the elderly.
16. Methods of detoxifying the body in diffuse peritonitis.
17. Thrombosis of mesenteric vessels. Clinical picture, diagnostics, development of treatment tactics in elderly people.
18. Diagnostic laparoscopy. Its capabilities. Indications for performing in elderly patients.
19. Classification of abdominal injuries. Main clinical symptoms, diagnostics.
20. Traumatic injuries of parenchymatous abdominal organs in elderly people. Clinical picture, diagnostics, treatment
21. Traumatic injuries of hollow abdominal organs in elderly people. Clinical picture, diagnostics, treatment features.

APPROVED

at a department meeting  
of the Department of Surgery with a  
course on urology  
Protocol No. 8 dated May 5, 2026



N.P. Volodchenko  
Head of Department

**ADDITIONS AND CHANGES TO THE WORK PROGRAM  
IN THE DISCIPLINE «CURRENT ISSUES ABDOMINAL SURGERY IN THE ERDERLY»  
SPECIALTY 31.05.01 MEDICAL CARE  
FOR THE 2026-2027 ACADEMIC YEAR**

**Make an addition and change to the table in section 3.5. «Professional databases, information and reference systems, electronic educational resources» to read as follows:**

Name resource	Resource Description	Access	Resource address
<b>Electronic library systems</b>			
"Student Consultant"  Electronic library  medical university.	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	Remote access after registration under the university profile	<a href="https://www.studentlibrary.ru/">https://www.studentlibrary.ru/</a>
Reference and information system " MedBaseGeotar ".	The MedBaseGeotar reference and information system is designed for practicing medical specialists, researchers, teachers, postgraduate students, residents, senior students, and healthcare managers to quickly search, select, and read the medical literature they need for their work in a single data source.	Remote access after registration under the university profile	<a href="https://mbasegeotar.ru/pages/index.html">https://mbasegeotar.ru/pages/index.html</a>

Electronic Library System "Bookup "	A large medical library is an information and educational platform for the shared use of electronic educational and methodological publications from medical universities in Russia and the CIS countries.	Remote access after registration under the university profile	<a href="https://www.books-up.ru/">https://www.books-up.ru/</a>
Electronic Block System "Lan"	The Network Electronic Library of Medical Universities is an electronic database of educational and scientific works on medical topics, created for the purpose of implementing network forms of professional educational programs, open access to educational materials for partner universities.	Remote access after registration under the university profile	<a href="https://e.lanbook.com/">https://e.lanbook.com/</a>
Scientific electronic library "CyberLeninka "	CyberLeninka is a scientific electronic library built on the paradigm of open science ( Open Science ), whose main goals are the popularization of science and scientific activity, public oversight of the quality of scientific publications, the development of interdisciplinary research, a modern institution of scientific review, increasing the citation rate of Russian science, and building a knowledge infrastructure. It contains over 2.3 million scientific articles.	free access	<a href="https://cyberleninka.ru/">https://cyberleninka.ru/</a>
Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology .  (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	free access	<a href="http://humbio.ru/">http://humbio.ru/</a>
State register of medicines	The State Register of Medicines website contains information about medications: indications, contraindications, mechanism of action, side effects, dosages, and methods of administration.	free access	<a href="https://grls.rosminzdrav.ru/GRLS.aspx">https://grls.rosminzdrav.ru/GRLS.aspx</a>
<b>Information systems</b>			
Clinical Guidelines	A resource of the Russian Ministry of Health that contains clinical guidelines developed and approved by medical professional non-	Link to download the	<a href="https://cr.minzdrav.gov.ru/#!/">https://cr.minzdrav.gov.ru/#!/</a>

Index	profit organizations of the Russian Federation, as well as methodological manuals, nomenclatures, and other reference materials.	application	
Federal Electronic Medical Library (FEMB)	The Federal Electronic Medical Library is part of the unified state information system in the field of healthcare as a reference system. The FEMB was created based on the collections of the I.M. Sechenov Central Scientific Medical Library.	free access	<a href="https://femb.ru/">https://femb.ru/</a>
Russian State Library (RSL)	Collection size: approximately 3 million titles. Coverage period: From the 11th century to the present day. The Russian State Library's Digital Library is a collection of electronic copies of valuable and frequently requested publications from the Russian State Library's collections, external sources, and documents originally created in electronic form.	Registration on the website	<a href="https://www.rsl.ru/">https://www.rsl.ru/</a>
Russian Medical Association	A professional online resource. Purpose: to promote effective professional activity among medical personnel. Contains the charter, personnel, structure, membership rules, and information about the Russian Medical Union.	free access	<a href="http://www.rmass.ru/">http://www.rmass.ru/</a>
Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	free access	<a href="http://webmed.irkutsk.ru/">http://webmed.irkutsk.ru/</a>
<b>Databases</b>			
Worldwide healthcare organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, free access	<a href="http://www.who.int/ru/">http://www.who.int/ru/</a>
Ministry of Science and	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports,	free access	<a href="http://www.minobrnauki.gov.ru">http://www.minobrnauki.gov.ru</a>

higher Education of the Russian Federation	publications, and much more.		
Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications, and much more.	free access	<a href="https://edu.gov.ru/">https://edu.gov.ru/</a>
<a href="https://polpred.com">Polpred.com</a>	Electronic Library System Business Media. Media Review	free access	<a href="https://polpred.com/news">https://polpred.com/news</a>
<b>Bibliographic databases</b>			
BD Russian Medicine	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	free access	<a href="https://rucml.ru/">https://rucml.ru/</a>
PubMed	A text database of medical and biological publications in English. PubMed is an electronic search engine with free access to 30 million publications from 4,800 indexed medical journals. The database contains articles published from 1960 to the present, including information from MEDLINE, PreMEDLINE, and NLM. Each year, the portal is updated with more than 500,000 new papers.	free access	<a href="https://pubmed.ncbi.nlm.nih.gov/">https://pubmed.ncbi.nlm.nih.gov/</a>
eLIBRARY.RU	A Russian information portal in science, technology, medicine, and education, containing abstracts and full texts of over 13 million scientific articles and publications. The eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals,	Full functionality of the site is available after registration.	<a href="http://elibrary.ru/defaultx.asp">http://elibrary.ru/defaultx.asp</a>

	including over 1,000 open-access journals.		
Electronic library of dissertations (RSL)	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	free access	<a href="http://diss.rsl.ru/?menu=disscatalog/">http://diss.rsl.ru/?menu=disscatalog/</a>
Medline.ru	Medical and biological portal for specialists. Biomedical journal.	free access	<a href="https://journal.scbmt.ru/jour/index">https://journal.scbmt.ru/jour/index</a>
Official Internet portal of legal information	The single official state information and legal resource in Russia	free access	<a href="http://pravo.gov.ru/">http://pravo.gov.ru/</a>

**6. Add and amend the table in section 3.6. «Licensed and freely distributed software used in the educational process» to read as follows:**

**List of software (commercial software products)**

№ p/p	List of software (commercial software products)	Details of supporting documents
1.	MS operating system Windows 7 Pro	License number 48381779
2.	MS operating system Windows 10 Pro	CONTRACT No. UT-368 from September 21, 2021
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business – Standard Russian Edition. 50-99 Node 1-year Educational Renewal License	Agreement No. 7 AA dated 02/07/2025
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022 (additional licenses)
6.	1C: PROF University	LICENSE AGREEMENT No. KrTsB-004537 dated December 19, 2023
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
8.	Consultant Plus	Contract No. 41AA dated December 27, 2024
9.	Kontur.Tolk	Agreement No. K213753/24 dated August 13, 2024
10.	3KL e-learning environment (Russian Moodle)	Agreement No. 1362.5 dated November 20, 2024
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021
12.	Information system "Plans"	Agreement No. 2873-24 dated June 28, 2024
13.	1C: Document Management	Agreement No. 2191 dated 10/15/2020

14.	R7-Office	Agreement No. 2 KS dated 12/18/2020
15.	License for the "ROSA CHROME OS Workstation"	Agreement No. 88A dated 08/22/2024
16.	Alt Virtualization Server 10 (for secondary and higher vocational education)	Agreement No. 14AK dated September 27, 2024
17.	Dr.Web Desktop Security Suite Comprehensive Protection + Control Center for 12 months.	Agreement No. 8 dated October 21, 2024
18.	Software "Schedule for educational institutions"	Agreement No. 82A dated July 30, 2024

#### List of freely distributed software

№ p/p	Scroll freely distributed software	Links to the license agreement
1.	Yandex Browser	Freely distributed License Agreement for the use of Yandex Browser programs <a href="https://yandex.ru/legal/browser_agreement/">https://yandex.ru/legal/browser_agreement/</a>
2.	Yandex.Telemost	Freely distributed License Agreement for the use of programs <a href="https://yandex.ru/legal/telemost_mobile_agreement/">https://yandex.ru/legal/telemost_mobile_agreement/</a>
3.	Dr.Web CureIt !	Freely distributed License Agreement: <a href="https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf">https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf</a>
4.	OpenOffice	Freely distributed License: <a href="http://www.gnu.org/copyleft/lesser.html">http://www.gnu.org/copyleft/lesser.html</a>
5.	LibreOffice	Freely distributed License: <a href="https://ru.libreoffice.org/about-us/license/">https://ru.libreoffice.org/about-us/license/</a>
6.	VK Calls	Freely distributed <a href="https://vk.com/licence">https://vk.com/licence</a>
7.	Kaspersky Free Antivirus	Freely distributed <a href="https://products.s.kaspersky-labs.com/homeuser/Kaspersky4Win2021/21.16.6.467/english-0.207.0/3830343439337c44454c7c4e554c4c/kis_eula_en-in.txt">https://products.s.kaspersky-labs.com/homeuser/Kaspersky4Win2021/21.16.6.467/english-0.207.0/3830343439337c44454c7c4e554c4c/kis_eula_en-in.txt</a>