

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

Medical Institute

Recommended MCSD

SYLLABUS
(STUDY GUIDE)

Subject

Hospital Therapy

Recommended for the direction of training (specialty)

31.05.01 General Medicine

Program (profile, specialization)

General Medicine

1. Goals and objectives of the discipline:

The purpose of the development of the discipline "hospital therapy" is to acquire knowledge of the students in this discipline, the ability to correctly diagnose, make a differential diagnosis with similar diseases, determine the clinical prognosis of a particular patient, to know modern methods of examination, treatment and prevention.

Objectives of the discipline:

1. To make the questioning of the patient and his relatives to identify the complaints, to collect the anamnesis of illness and anamnesis of life.
2. Perform examination and physical examination of the patient (percussion, palpation, auscultation), to identify the main symptoms and the main syndrome.
3. Make a preliminary diagnosis and determine the list of diseases with similar symptoms and syndromes.
4. To present the data obtained during the examination of the patient in the form of sections of the medical history, to make a plan for the examination of the patient.
5. Analyze the results:
Laboratory tests of blood; urine; sputum; contents of the pleural, pericardial, joint cavity; contents of the stomach and the duodenum;
Endoscopic methods of research (bronchoscopy, esophagogastroduodenoscopy, colonoscopy);
Ultrasonic research methods: liver, bile, pancreas, kidneys and urinary tract, pleura and pleural cavity.
pH of esophagus, stomach, duodenum
ECG, EchoCG
Spirometry, Picflowmetry
X-ray, Computed Tomography (CT), Scintigraphy, Magnetic resonance imaging (MRI).
6. Based on the data obtained, to diagnose the main syndromes, to determine the list of diseases in which these syndromes occur and to make a differential diagnosis.
7. After the differential diagnosis to formulate a clinical diagnosis.
8. Make a plan of treatment of the patient and be able to justify it.
9. To be able to properly execute staged and discharge epicrisis.
10. To be able to solve deontological problems associated with the collection of information about the patient and the diagnosis of symptoms and syndromes.
11. To be able to work independently with educational, scientific, normative and reference literature – to search, to turn what you read into a tool for solving problems.

2. The place of discipline in the structure of EP of HE:

Discipline hospital therapy refers to the basic part of block 1 of the curriculum.

Table 1 shows the previous and subsequent disciplines aimed at the formation of the competencies of the discipline in accordance with the matrix of competencies of EP HE.

Table 1

Previous and subsequent disciplines aimed at the formation of competencies

N/N	Code and name of competence	Previous disciplines	Subsequent disciplines (groups of disciplines)
General cultural competences			
1.	UC-1	Philosophy, Psychology and Pedagogy, Physics, Mathematics, Biochemistry, Anatomy, Immunology, Pathophysiology, Clinical Pathophysiology, Hygiene, Propaedeutics of Internal diseases, Public Health and Healthcare, Health Economics, Epidemiology,	Endocrinology, Infectious Diseases, Phthisiology, Medical Elementology, Allergology

		Neurology, Medical Genetics, Neurosurgery, Disaster Medicine, Faculty Therapy	
General professional competences			
2.	GPC-5	Biochemistry, Biology, Anatomy, Histology, Embryology, Cytology Normal Physiology, Microbiology, Virology, Pathophysiology, Clinical Pathophysiology, Propaedeutics of Internal Diseases, General Surgery, Topographic Anatomy and Operative Surgery, Dermatovenerology, Neurology, Medical genetics, Neurosurgery, Ophthalmology, Forensic Medicine, Faculty Therapy, Faculty Surgery, Occupational Diseases.	Anesthesiology, Resuscitation, Intensive Care Hospital Surgery, Pediatric Surgery, Oncology, Radiation Therapy, Maxillofacial Surgery, Medical Elementology.
Professional competence (Medical doctor (district general practitioner))			
3	PC-1, PC -2, PC -3	Life safety, Immunology, Pathophysiology, Clinical pathophysiology, Propaedeutics of Internal Medicine, Radiation Diagnostics, General Surgery, Topographic Anatomy and Operative Surgery, Dermatovenerology, Neurology, Medical genetics, Neurosurgery Psychiatry, Medical Psychology, Otorhinolaryngology, Ophthalmology, Disaster Medicine, Faculty therapy, Faculty surgery, Urology.	Outpatient therapy, Anesthesiology, Resuscitation, Intensive Care, Hospital surgery, Pediatric surgery, Dentistry, Oncology, Radiation Therapy, Traumatology, Orthopedics, Pediatrics, Maxillofacial Surgery, Sectional Course, Biotechnology, Medical Elementology, Allergology.

3. Requirements for the results of the discipline:

The process of studying the discipline is aimed at the formation of the following competencies:

Table 2

Universal Competence Category	Universal Competence Code and Name	Universal Competence Achievement Indicator Code and Name
Systems and critical thinking	UC-1. Being able to implement critical analysis of problem situations based on systems	UC-1.1. Analysing scientific and technical literature and regulatory documents of medical institutions. UC-1.2. Assessing in a critical way the

	approach, develop an action strategy	reliability of information sources, working with contradictory information from different sources. UC-1.3. Understanding the trends, strategic goals, problems in the field of healthcare/ being aware of regulatory framework to develop a strategy. UC-1.4. Analysing and assessing the economic potential, financial viability and risks of an organization.
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General Professional Competence Category	General Professional Competence Code and Name	General Professional Competence Achievement Indicator Code and Name
Etiology and pathogenesis	GPC-5. Being able to assess morpho-functional, physiological conditions and pathological processes in the human body to solve professional tasks	GPC-5.1. Mastering the algorithm of clinical, laboratory and functional diagnosis when dealing with professional tasks. GPC-5.2. Being able to evaluate the results of clinical, laboratory and functional diagnosis when dealing with professional tasks. GPC-5.3. Being able to determine morpho-functional, physiological states and pathological processes of the human body.

Professional Competence Code and Name	Professional Competence Achievement Indicator Code and Name
PC-1. Being able to provide emergency or urgent medical care to a patient	PC-1.1. Being able to assess the condition of a patient who needs emergency or urgent medical care. PC-1.2. Being able to recognize conditions that arise from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and which require emergency medical care. PC-1.3. Being able to provide emergency medical care to patients with sudden acute diseases, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life. PC-1.4. Being able to recognize conditions which pose a threat to the patient's life, including conditions of clinical death (cessation of the vital bodily functions (blood circulation and/or respiration) which require emergency medical care. PC-1.5. Being able to provide emergency medical care to patients in conditions which pose a threat to the patient's life, including clinical death (cessation of the vital bodily functions (blood circulation and/or respiration). PC-1.6. Being able to use drugs and medical devices when providing medical care in emergency or urgent forms.
PC-2. Being able to examine a patient in order to determine a diagnosis	PC-2.1. Mastering the skills to collect complaints, anamnesis of the patient's life and disease, as well as conduct a complete physical examination of the patient (examination, palpation, percussion, auscultation).

	<p>PC-2.2. Being able to make a preliminary diagnosis and make up a plan of laboratory and instrumental examinations of a patient.</p> <p>PC-2.3. Being able to refer a patient to a laboratory examination in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the medical care standards.</p> <p>PC-2.4. Being able to refer a patient to an instrumental examination in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.5. Being able to refer a patient to consult with a medical specialist if there is a medical indication in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.6. Being able to refer a patient to be provided with specialized medical care in an inpatient setting or in a day hospital in case there are medical indications in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-2.7. Being able to carry out differential diagnosis with other diseases/conditions, including the urgent ones, as well as to make a diagnosis taking into account the current international statistical classification of diseases and problems related to health (ICD).</p>
<p>PC-3. Being able to prescribe treatment and monitor its efficacy and safety</p>	<p>PC-3.1. Being able to develop a treatment plan for a disease or condition taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.2. Being able to prescribe medicinal drugs, medical devices and medical nutrition taking into account the diagnosis, age and clinical picture of the disease and in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.3. Being able to prescribe non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.</p> <p>PC-3.4. Being able to assess the efficacy and safety of the</p>

	<p>use of drugs, medical devices, medical nutrition and other treatment methods.</p> <p>PC-3.5. Being able to provide palliative care in collaboration with medical specialists and other healthcare professionals.</p> <p>PC-3.6. Being able to organize personalized treatment for a patient, including pregnant women, elderly and senile patients; assess the efficacy and safety of treatment.</p>
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As a result of studying the discipline "hospital therapy" the student must:

Know: etiology, pathogenesis and prevention of the most common diseases; modern classification of diseases; clinical picture, features of the course and possible complications of the most common diseases occurring in a typical form in different age groups; methods of diagnosis, diagnostic capabilities of methods of direct examination of the patient therapeutic profile, modern methods of clinical, laboratory, instrumental examination of patients (including endoscopic, radiological methods of ultrasound diagnosis); criteria for the diagnosis of various diseases;

Be able to plan, analyze and evaluate the quality of medical care, public health and the impact of environmental and industrial factors;

to determine the status of the patient, to collect anamnesis, conduct a survey of the patient and/or his relatives, to conduct a physical examination of the patient (examination, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.);

to assess the condition of the patient to make a decision on the need for medical care; to conduct an initial examination of the systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joint, eye, ear, throat, nose;

to set priorities for solving the patient's health problems: critical (terminal) state, state with pain syndrome, state with chronic disease, state with infectious disease, disability, geriatric problems, mental patients;

to assess the social factors affecting the physical and psychological health of the patient: cultural, ethnic, religious, individual, family, social risk factors (unemployment, violence, illness and death of relatives, etc.); to make a preliminary diagnosis - to synthesize information about the patient in order to determine the pathology and its causes;

outline the scope of additional studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain reliable results;

formulate a clinical diagnosis;

develop a plan of therapeutic (surgical) actions, taking into account the course of the disease and its treatment;

to formulate indications for the chosen method of treatment taking into account the etiologic and pathogenetic agents, to justify pharmacotherapy in a particular patient with major pathological syndromes and emergency conditions, to determine the route of administration, regimen and dose of drugs, to assess the effectiveness and safety of the treatment;

to use different methods of drug administration; to make a preliminary diagnosis -to synthesize information about the patient in order to determine the pathology and the causes of it;

outline the scope of additional studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain reliable results.

to use in medical activity methods of primary and secondary prevention (on the basis of evidence-based medicine), to establish cause-and-effect relationships of changes in health from the impact of environmental factors; fill in the medical history, write a prescription;

Own: proper management of medical records.

methods of General clinical examination.

interpretation of the results of laboratory, instrumental diagnostic methods.

algorithm of detailed clinical diagnosis.

algorithm of preliminary diagnosis with subsequent referral of the patient to the appropriate specialist.

the main medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.

4. The volume of disciplines and types of academic work

The total complexity of the discipline is 10 credits.

Classroom training (total)	Всего часов	Semesters			
		9	10	11	12
Classroom training (total)	264	96	48	48	96
Including:	-	-	-	-	-
<i>The lectures</i>					
<i>Practical (laboratory) sessions</i>		96	48	48	96
<i>Seminars (S)</i>					
<i>Laboratory classes (LC)</i>					
Self-study (academic hours)	132	48	24	24	48
Total workload (academic hours)	360	144	72	72	108
Total workload (credit units)	10	4	2	2	3

5. Content of the discipline

5.1. The content of sections of discipline

№ п/п	The name of the discipline section	Section contents
1.	Diseases of the circulatory system.	<ol style="list-style-type: none"> 1. Differential diagnosis of secondary (symptomatic) hypertension. Hypertensive disease. 2. Differential diagnosis of acute coronary syndrome with ST elevation and without elevation. 3. Differential diagnosis of myocardial infarction, coronary and non-coronary cardialgias. 4. Differential diagnosis of heart rhythm and cardiac conduction. 5. Differential diagnosis of acquired heart defects 6. Differential diagnosis for pericarditis, myocarditis, cardiomyopathies (hypertrophic, dilated, restrictive). 7. Differential diagnosis for infective endocarditis. 8. Acute and chronic heart failure, clinical presentation, differential diagnosis, treatment. 9. Atherosclerosis and dyslipidemia.

2.	Diseases of the respiratory system.	<ol style="list-style-type: none"> 1. Differential diagnosis for interstitial and infiltrative lung diseases. 2. Acute bronchitis and chronic obstructive pulmonary disease, bronchial asthma: clinical picture, differential diagnosis, treatment. 3. Differential diagnosis for lesions of the pleura, mediastinum, and diaphragm. 4. Differential diagnosis of pleural effusion. 5. Acute and chronic respiratory failure. 6. Acute and chronic pulmonary heart (cor pulmonale), differential diagnosis. 7. Acute respiratory distress syndrome in adults. 8. Primary and secondary pulmonary hypertension, differential diagnosis. 9. Sleep apnea syndrome.
3.	Kidney disease.	<ol style="list-style-type: none"> 1. Differential diagnosis of pyelonephritis with other infectious and inflammatory diseases. Differential diagnosis of acute and chronic glomerulonephritis. 2. Differential diagnosis of nephropathy. 3. Differential diagnosis for acute kidney injury and chronic kidney disease (CKD).
4.	Diseases of blood system	Acute leukemia, chronic myelo- and lymphoproliferative diseases, Hodgkin's lymphoma, iron deficiency anemia, anemia of chronic disease, megaloblastic and aplastic anemias, coagulopathy, paraproteinemic hemoblastosis - clinical picture, differential diagnosis, treatment.
5.	Diseases of the joints, systemic diseases of the connective tissue.	<ol style="list-style-type: none"> 1. Differential diagnosis of arthropathies. Rheumatoid arthritis. Etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, treatment. 2. Systemic connective tissue diseases. Systemic lupus erythematosus, dermatomyositis, systemic scleroderma. Etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, treatment. 3. Differential diagnosis for systemic vasculitis. Separate forms of systemic vasculitis. Definition, clinic, diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis.
6.	Diseases of the digestive system.	<ol style="list-style-type: none"> 1. Differential diagnosis of diseases of the esophagus. 2. Differential diagnosis for symptoms of diseases of the stomach and duodenal ulcer. 3. Differential diagnosis for symptoms of diseases of the small and large intestines, the syndrome of impaired digestion (maldigestion) and the syndrome of impaired absorption (malabsorption). 4. Differential diagnosis for diseases of the gallbladder and bile ducts. 5. Differential diagnosis for diffuse liver lesions 6. Differential diagnosis for jaundice and focal liver lesions. 7. Differential diagnosis in liver cirrhosis, ascites, portal hypertension, encephalopathy, spontaneous bacterial peritonitis, hepatorenal syndrome. 8. Differential diagnosis for diseases of the pancreas.

		9. Emergencies in gastroenterology.
7.	Clinical laboratory diagnostics	Fundamentals of Clinical Laboratory Diagnostics. Modern laboratory technologies. Clinical laboratory diagnostics and laboratory medicine. The place of laboratory medicine in the system of sciences. Training of personnel for laboratory service. Variation of laboratory results and its mechanisms. The concept of reference intervals. Critical difference coefficient. Sensitivity and specificity of the laboratory test. Stages of laboratory research.
8.	Laboratory genetics	Organization of hereditary material. Changes in hereditary material, types of mutations. Methods for studying violations of hereditary material. Karyotyping. FISH hybridization. Molecular genetic methods. Polymerase chain reaction, principle of the method, areas of application. Sequencing. Fields of application of methods of genetic diagnostics. Types of genetically determined diseases.

(The content is indicated in didactic units. At the discretion of the developers, the material may not be presented in the form of a table)

5.2. Sections of disciplines and types of classes

		Lectures	Practical classes	Laboratory classes	Workshop	Self-study work	Total
1.	Diseases of the circulatory system.		48			24	72
2.	Respiratory diseases		48			24	72
3.	Kidney diseases		48			24	72
4.	Diseases of the blood system.		48			24	72
5.	Joint diseases, systemic connective tissue diseases, systemic vasculitis.		12			6	18
6.	Diseases of the digestive system.		48			24	72
7.	Clinical laboratory diagnostics. Laboratory genetics		12			6	18

6. Laboratory practice (no)

№ п/п	№ Discipline section	Name of laboratory work	Labor-capacity (hour.)
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7. Practical training (seminars)

№ п/п	№ Discipline section	Subjects of practical classes (seminars)	Labor- capacity (hour.)
1. 1.1	Curation	Analysis of the scheme of the medical history. Patient supervision.	4
1.2	Differential diagnosis and differential treatment of arterial hypertension.	Differential diagnosis and differential treatment of arterial hypertension. Classification of hypertension. Definition of the concept "degree" of arterial hypertension, assessment of blood pressure. Diagnosis formulation. Risk factors, target organ damage, associated clinical conditions. Diagnostic criteria for risk stratification. Treatment of arterial hypertension. Differential diagnosis of symptomatic arterial hypertension: definition of symptomatic hypertension, classification; renal, endocrine, hemodynamic, central genesis, etc. Clinic, differential diagnosis, treatment.	4
1.3	Differential diagnosis of angina pectoris and non-coronary cardialgia.	<p>Exertional angina. Classification (functional classes of angina pectoris), clinical symptoms, differential diagnosis with cardialgia, drug and non-drug treatment. Surgical and interventional treatments, indications and contraindications. Features of angina pectoris in young and old. Acute coronary syndrome: concept, patient management tactics, clinical and laboratory diagnostics, stratification of risk groups and treatment strategy. Unstable angina pectoris: definition, pathogenesis, classification, diagnosis, stratification of risk groups, differential diagnosis, stabilization criteria, drug treatment, surgical and interventional methods of treatment of unstable angina pectoris, indications and contraindications. Antithrombotic therapy of unstable angina pectoris. Drug regimens for the appointment of antiplatelet agents and anticoagulants for endovascular and surgical interventions. Prinzmetal's angina. The reasons. The clinical picture. Diagnostics, differential diagnostics, treatment tactics. Painless myocardial ischemia. Causes of occurrence, clinical picture, diagnosis and differential diagnosis, treatment.</p> <p>Small coronary artery disease. Diagnosis criteria, clinical picture, differential diagnosis, treatment features. Features of ischemic heart disease in women. Medication and non-medication methods of treatment of angina pectoris, surgical and interventional methods of treatment (indications and contraindications). Management of patients before and after surgical and interventional treatment. Prevention (primary and secondary). Forecast. Differential diagnosis of angina pectoris with:</p> <p>Diseases of the musculoskeletal system: a symptom of a sliding rib, Titze's syndrome, anterior chest wall syndrome, anterior scalene muscle syndrome, osteochondrosis of the cervical and thoracic spine, myositis, chest injuries, shingles.</p> <p>Diseases of the lungs and pleura: PE, spontaneous pneumothorax, dry pleurisy and mediasthenitis.</p> <p>Diseases of the esophagus and stomach: esophageal spasm, cardiospasm (achlasia of the esophagus), tumors and diverticula of the esophagus, hiatal hernia, gastric and duodenal ulcers, pancreatitis, calculous cholecystitis.</p>	4

		<p>With non-coronary heart disease: rheumatic heart disease, myocarditis, cardiomyopathy, pericarditis, mitral valve prolapse, aortic stenosis, idiopathic hypertrophic subaortic stenosis, dissecting aneurysm and rupture of the aorta, Dressler's syndrome, trauma. With neurocirculatory dystonia. Disharmonic cardiomyopathy.</p> <p>Other diseases: Left-sided mastitis, cystic - fibrous mastopathy, breast tumors</p>	
1.4	Differential diagnosis of acute coronary syndrome and myocardial infarction.	<p>Acute coronary syndrome. Forms of acute coronary syndrome. Management of patients with acute coronary syndrome with and without ST-segment elevation. Myocardial infarction. Epidemiology. Risk factors. Pathogenesis. Classifications. Stages of myocardial infarction. The clinical picture at different periods of the disease. Clinical variants of the acute stage of myocardial infarction. Diagnostics and differential diagnosis of myocardial infarction. Diagnostics and differential diagnosis of myocardial infarction. Instrumental methods: ECG changes, their staging; echocardiography. Laboratory diagnostics (changes in the general blood test, the role of enzymatic diagnostics: myocardial troponins, creatine phosphokinase and its CF fraction, transaminases). The course of myocardial infarction. Complications: Treatment. Medical tactics at different periods of the disease Treatment of complications of myocardial infarction. Principles of resuscitation of a patient with myocardial infarction in case of sudden clinical death Principles of rehabilitation of patients with myocardial infarction. Clinical examination. Forecast and labor expertise.</p>	5
1.5	Differential diagnosis of cardiac arrhythmias.	<p>Etiology, pathogenesis, classification of cardiac arrhythmias. Diagnostic methods. Extrasystole. Classification, clinical presentation, diagnosis, drug and non-drug treatment. Tachycardia. Classification, clinical presentation, diagnosis, drug and non-drug treatment. Supraventricular paroxysmal tachycardia. Clinic, ECG diagnostics, treatment. Paroxysmal ventricular tachycardia. Clinic, ECG diagnostics, treatment. Atrial fibrillation and flutter. Etiology, pathogenesis, clinic. ECG diagnostics. Treatment of paroxysmal and persistent forms of atrial fibrillation and atrial flutter. Contraindications to the restoration of sinus rhythm. Ventricular fibrillation. Etiology, pathogenesis, clinical picture, ECG diagnostics. Emergency therapy.</p>	5
1.6	Differential diagnosis of cardiac conduction disorders.	<p>Etiology, pathogenesis, classification of cardiac conduction disorders. Sinus node dysfunction, clinical picture, diagnosis, differential diagnosis, treatment. Sinus atrial block. Reasons, clinical picture, diagnosis, treatment tactics. Atrioventricular (atrioventricular block). Clinic and ECG diagnostics, treatment. Isolated blockade of branching of the His bundle (fascicular blockade), bifascicular and trifascicular. ECG diagnostics, treatment tactics. Parasystole. Electrophysiological disorders, ECG criteria, diagnosis, treatment. Ventricular pre-excitation syndromes. Classification, diagnostics, differential diagnostics. Medication and non-medication treatment. Long QT syndrome. Causes, ECG diagnostics, clinical symptoms, treatment tactics. Transesophageal cardiac stimulation in the diagnosis and treatment of patients with cardiac arrhythmias and conduction disorders. Pacemakers. Classification. Indications and contraindications for temporary and permanent cardiac stimulation. Methods of implantation of pacemakers. ECG with pacing. Features of hemodynamics during cardiac stimulation. Pacemaker's syndrome, mechanism of occurrence and treatment. Complications in patients with an implantable pacemaker.</p>	5

1.7	Differential diagnosis of acquired heart defects.	Etiology, pathogenesis, classification of acquired heart defects. Diagnostic and treatment methods. Mitral valve defects: stenosis, insufficiency, prolapse, chordal avulsion. Etiology, pathogenesis, clinic, diagnostic methods, differential diagnosis, treatment. Aortic valve defects: stenosis, insufficiency. Etiology, pathogenesis, clinical picture, differential diagnosis, surgical treatment. Tricuspid valve defects: stenosis, insufficiency. Etiology, pathogenesis, clinical picture, differential diagnosis, treatment. Combined and concomitant heart defects. Etiology, pathogenesis, clinical manifestations, diagnosis, differential diagnosis, treatment. Surgical treatment of valvular heart disease. Indications and contraindications for surgical treatment. Complications, prognosis.	4
1.8	Differential diagnosis of pericarditis.	Etiology, pathogenesis, classification of pericarditis. Features of the clinical manifestations of pericarditis in trauma, tuberculosis, neoplasms, systemic lupus erythematosus, myxedema, uremia, etc. Dry pericarditis. Etiology, pathogenesis, clinic, diagnostic methods, differential diagnosis, treatment. Pericardial effusion. Etiology, pathogenesis, classification, clinic, diagnostic methods, differential diagnosis, treatment. Cardiac tamponade. Etiology, pathogenesis, clinical picture, diagnostic methods, differential diagnosis, treatment. Adhesive (constrictive) pericarditis. Etiology, pathogenesis, development mechanism and peculiarities of circulatory disorders, clinical picture, diagnostic methods, differential diagnosis, treatment. Postoperative pericarditis. Etiology, pathogenesis, clinic, diagnostic methods, differential diagnosis, treatment. Indications for surgical treatment and its types. Complications, prognosis, prevention. Indications for pericardiocentesis, pericardial puncture technique. Pericardial biopsy.	4
1.9	Differential diagnosis of cardiomyopathies and myocarditis.	Myocarditis. Etiology, pathogenesis, classification, clinic, diagnostic methods, differential diagnosis, treatment. Complications, prognosis, prevention. Cardiomyopathies. Etiology, classification, pathogenesis of intracardiac hemodynamic disorders in dilated, hypertrophic and restrictive cardiomyopathy. Clinical manifestations, diagnosis and differential diagnosis, treatment, complications, prognosis. Indications for surgical treatment.	4
1.10	Acute heart failure.	Etiology, pathogenesis, classification, clinical picture, diagnostic methods, differential diagnosis, treatment of acute heart failure. Complications, prognosis.	4
1.11	Chronic heart failure.	Etiology, pathogenesis, classification, clinical picture, diagnostic methods, differential diagnosis, treatment of chronic heart failure. Complications, prognosis.	5
2 2.1	Differential diagnosis of infiltrative lung diseases.	Pneumonia: focal, polysegmental, lobal, postthromboembolic. Etiology (methods for identifying the pathogen). Diagnosis (X-ray methods: fluoroscopy, X-ray, tomography, computed tomography), nuclear magnetic resonance (MRI), angiography, fibroscopy, lung biopsy, ECG, blood test). Differential diagnosis with pulmonary tuberculosis, peripheral lung cancer, cyst and lymph node involvement. Complications: pleurisy, lung abscess, pneumothorax, pleural empyema. Basic principles of treatment of infiltrative lung diseases. Bronchiectasis (etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, treatment).	8
2.2	Differential diagnosis of interstitial lung disease.	Interstitial lung disease. Exogenous allergic alveolitis. Farmer's lung. Idiopathic fibrosing alveolitis (Hamen-Rich disease).	8

		Sarcoidosis, Lefleur's syndrome. Adults respiratory distress syndrome. Radiation pneumonitis. Etiology, pathogenesis, clinical manifestations (general signs), differential diagnosis, current examinations methods, basic principles of treatment.	
2.3	Bronchial asthma.	Definition of the term, etiology, pathogenesis, classification, clinic, basic examination methods, differential diagnosis. The course of bronchial asthma (exacerbation and remission). Status astmaticus, current methods of treatment.	8
2.4	Dif. diagnosis of diseases of the pleura, mediastinum, and diaphragm.	Pleural effusion: pathogenesis, examination plan, differential diagnosis of pleural effusion. Pneumothorax (primary and secondary spontaneous pneumothorax, traumatic and tension pneumothorax). Diseases of the mediastinum (masses, acute and chronic mediastinitis, pneumomediastinum). Diseases of the diaphragm.	8
2.5	Dif. diagnosis of COPD.	Etiology, pathogenesis. Family and hereditary factors ($\alpha 1$ - antitrypsin deficiency), clinical presentation (emphysematous and bronchitic type), treatment. Primary and secondary pulmonary hypertension.	8
2.6	Dif. diagnosis of acute and chronic pulmonary heart disease.	Acute and chronic cor pulmonale, differential diagnosis. Acute and chronic respiratory failure.	8
3 3.1	Differential diagnosis of pyelonephritis with other infectious and inflammatory diseases.	Etiology, pathogenesis, clinic, modern examination methods, diagnostics, classification. Differential diagnosis with other infectious and inflammatory diseases. Modern antibacterial drugs used in the treatment of pyelonephritis.	8
3.2	Differential diagnosis of acute and chronic glomerulonephritis.	Etiology, pathogenesis, clinic, modern examination methods, diagnostics, classification. Differential diagnosis of acute and chronic glomerulonephritis. Dispensary observation of patients with chronic glomerulonephritis.	8
3.3	Differential diagnosis of nephropathy.	The concept of organic and functional proteinuria. Types of organic proteinuria. Goodpasture Syndrome. Alport syndrome. Nephropathy of pregnant women. Kidney damage in multiple myeloma. Alcoholic nephritis.	8
3.4	Kidney damage in systemic diseases.	Kidney damage in systemic diseases. Nephroptosis. Renal metabolic lesions. Amyloidosis of the kidneys. Definition of the concept, classification, clinic, diagnostics. Causes of secondary amyloidosis. Laboratory signs of amyloidosis. Instrumental examination methods. Kidney biopsy. Treatment: etiological, pathogenetic, symptomatic.	8
3.5	Differential diagnosis for acute kidney injury (AKI).	Definition of concepts. Etiology and pathogenesis of acute renal injury. Classification. Clinic of "renal" AKI. Differential diagnosis of AKI. Laboratory and instrumental examination methods for AKI.	8
3.6	Differential. diagnosis of chronic kidney disease (CKD).	Definition of concepts. Etiology and pathogenesis of CKD. Classification of CKD. Clinical presentation and diagnosis of CKD. Indications and contraindications for the appointment of intravenous urography. Differential diagnosis of CKD. CKD treatment. Indications for hemodialysis, kidney transplantation.	8
4 4.1	Aplastic anemias.	Hypoplastic anemia. Etiology. Pathogenesis. The role of the autoimmune mechanism. Clinic. Laboratory diagnostics.	6

		Differential diagnosis. Flow. Treatment principles. Opportunities for bone marrow transplantation. Prognosis.	
4.2	Hemolytic anemias.	Hemolytic anemias. Classification. Mechanisms of hemolysis and the main causes of the development of hemolytic anemias. Hereditary hemolytic anemias: membranopathy, fermentopathy, hemoglobinopathy (clinical picture, diagnosis, treatment principles). Autoimmune hemolytic anemias. Classification. Clinical manifestations. Laboratory indicators. Differential diagnosis of hemolytic anemias. Treatment. Forecast. Paroxysmal nocturnal hemoglobinuria: pathogenesis, diagnosis, treatment.	7
4.3	Iron deficiency and megaloblastic anemias	Classification of anemias. Iron-deficiency anemia. Iron metabolism in the body, the body's daily requirement for iron. Etiological factors. Stages of development of iron deficiency in the body. Clinical picture, main syndromes. Diagnosis criteria. Differential diagnosis of hypochromic anemias. Treatment. Monitoring the effectiveness of therapy with iron preparations. Course, prevention. B12 deficiency anemia. How does vitamin B12 enter the body? Etiology. Pathogenesis. The main clinical syndromes. Diagnosis criteria. Differential diagnosis. Flow. Treatment. Relapse prevention. Folic acid deficiency anemia. Etiology, pathogenesis, clinical picture, diagnosis, treatment.	7
4.4	Coagulopathy.	Hemorrhagic diathesis. Definition. The reasons for the development. Classification. Common signs, types of bleeding. Research methods. Idiopathic thrombocytopenic purpura. The main etiological factors. The pathogenesis of bleeding. Clinic. Diagnosis. Differential diagnosis with symptomatic thrombocytopenia. Flow. Treatment. Hemorrhagic vasculitis (Shenlein-Henoch disease). The pathogenesis of bleeding. Clinic, options for the course of the disease. Treatment. Hemophilia. The importance of a hereditary factor in the development of the disease. The pathogenesis of bleeding. Clinical manifestations and course of hemophilia. Diagnosis. Forecast. Treatment and prevention. Hemorrhagic telangiectasia (Randu-Osler disease). The pathogenesis of bleeding. The role of the hereditary factor. Clinic. Treatment.	7
4.5	Acute leukemia.	Classification. The main clinical syndromes. Laboratory morphological diagnostics, immunological phenotyping of leukemic cells. Course and complications. Principles of treatment (cytostatic and detoxification therapy, immunotherapy, treatment of hemorrhagic syndrome and anemia, bone marrow transplantation). Cytostatic disease. Outcomes of acute leukemia.	7
4.6	Chronic myeloproliferative diseases.	Chronic myelogenous leukemia. Pathogenesis. Stages of the course and clinical picture. Laboratory and morphological diagnostics. Complications. Treatment. Forecast. Leukemoid reactions. Polycythemia. Pathogenesis. Stages of the disease and the main clinical syndromes. Differential diagnosis with symptomatic erythrocytosis. The course and outcomes of the disease. Treatment. Principles of treatment of polycythemia and its complications. Prognosis.	7
4.7	Chronic lymphoproliferative diseases. Lymphogranulomatosis. Paraproteinemic hemoblastoses.	Pathogenesis. The main clinical syndromes, stages of the course. Laboratory and morphological diagnostics. Principle of treatment. Forecast. Lymphomas (non-Hodgkin's and Hodgkin's). Classification. Basic principles of diagnosis and treatment. Pathogenesis. Myeloma. Clinical picture. Diagnostics. Principle of treatment. Prognosis.	7

5 5.1	Differential diagnosis of arthropathy. Rheumatoid arthritis	Differential diagnosis of arthropathy: arthropathy of metabolic genesis (gout); arthropathy of degenerative-destructive genesis (deforming osteoarthritis); arthropathy of inflammatory genesis, neuropathic, endocrine, enteropathic, reactive: spondyloarthritis. Etiology, pathogenesis, clinic, diagnostics: laboratory data, joint x-rays. Differential diagnosis, treatment. Rheumatoid arthritis. Etiology, pathogenesis, clinic, diagnostics, laboratory data, joint x-rays, differential diagnosis, treatment.	4
5.2	Differential diagnosis of systemic connective tissue diseases.	Systemic diseases of connective tissue. Systemic red lupus. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment. Dermatomyositis Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment. System Scleroderma. Etiology, Pathogenesis, Clinic, Diagnostics, Differential Diagnosis, Treatment.	4
5.3	Differential diagnosis in systemic vasculitis.	Systemic vasculitis. Definition, clinic, principles of diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis. ANCA - associated systemic vasculitis - Definition, clinic, principles of diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis. Polyarteritis Nodosa Definition, clinic, principles of diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis. Hemorrhagic vasculitis (Henoch-Schoenlein purpura) Definition, clinic, principles of diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis. Giant cell arteritis and rheumatic polymyalgia. Definition, clinic, principles of diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis. Takayasu's arteritis. Definition, clinic, principles of diagnosis, differential diagnosis. General principles and methods of treatment of systemic vasculitis.	4
6 6.1	Differential diagnosis of esophageal diseases.	Differential diagnosis in diseases of the esophagus – failure of the cardia, esophagitis, Barret's esophagus, ulcers of esophagus, dysphagia, achalasia cardia, esophagospasm, diverticula of the esophagus, foreign bodies of the esophagus, esophageal ruptures, the syndrome of Mallory-Weiss tears, esophageal cancer, strictures of the esophagus, candidiasis of the esophagus, a hiatal hernia of the diaphragm. Methods of examination of patients with diseases of the esophagus (fluoroscopy, radiography, esophagoscopy, study of the acidity of the lower esophagus, esophageal manometry).	5
6.2	Differential diagnosis of gastric and duodenal disease.	Differential diagnosis of stomach and duodenal disease - nausea, vomiting, epigastric pain, burps, heartburn. Gastritis, duodenites, ulcers, symptomatic ulcers, effects of gastric surgery (dumping syndrome, diarrhea, gastric stasis, post-vagotomy dysphagia, inducing loop syndrome), tumors, Mallory-Weiss syndrome. Methods of examination of patients with stomach and duodenum diseases (X-ray, gastroduodenoscopy, acidity, methods of detection of Helicobacter pillory, gastrin level, motor function of stomach). Prevention of malignant formations in the upper departments of GI.	5

6.3	Differential diagnosis of small bowel disease.	Differential diagnosis of symptoms of small bowel disease – diarrhea, malabsorption, celiac disease, tropical sprue, dysbacteriosis, disaccharidase deficiency, food Allergy, short bowel syndrome, radiation enteritis, Crohn's disease, Whipple's disease, ischemic bowel disease. Methods of examination of patients with diseases of the small intestine (radiography, duodenoscopy, test with D-xylose, lactose test, angiography, hydrogen breath test).	5
6.4	Differential diagnosis of colon disease,	Differential diagnosis of diseases of the colon – chronic colitis, ulcerative colitis, Crohn's disease, diverticulitis, colon polyps, irritable bowel syndrome, ischemic colitis, Hirschsprung's disease, constipation. Methods of examination of patients with diseases of the colon (x-ray methods, colonoscopy, rectoromanoscopy, study of stool sample, anorectal manometry).	6
6.5	Differential diagnosis for gallbladder and bile duct diseases.	Differential diagnosis of diseases of the gallbladder and bile ducts – disabled gallbladder, chronic cholecystitis, cholelithiasis, cholestatic jaundice, post-cholecystectomy syndrome, sclerosing cholangitis, bacterial cholangitis, cholangiocarcinoma. Methods of examination of patients with diseases of the biliary tract and gallbladder (cholecystography, ERCP, ultrasound, laparoscopy).	5
6.6	Differential diagnosis in diffuse liver lesions.	Differential diagnosis in diffuse liver lesions – hepatomegaly, hepatitis, hemochromatosis, Wilson-Konovalov's disease, amyloidosis. Acute and chronic liver failure. Poisoning with hepatotoxic substances (drugs, pale toadstool, carbon tetrachloride). Acute liver dystrophy. Methods of examination of patients with liver diseases (esophagogastroskopy, ultrasound, laparoscopy, liver biopsy, study of the content of ferruloplasmin, study of markers of viral hepatitis, biopsy of subcutaneous fat, gums, rectum).	6
6.7	Differential diagnosis in jaundice and focal liver lesions.	Differential diagnosis of jaundice and focal lesions of the liver – metabolism of bilirubin, inherited and acquired jaundice (gall-stone disease, strictures of the biliary tract, compression of the biliary tract, cholangitis, cholestatic hepatitis, primary biliary cirrhosis), a liver tumor, liver abscess, parasitic cysts of the liver (ultrasound, ERCP, liver biopsy, study the content of antibodies to mitochondria, alpha-fetoprotein).	6
6.8	Differential diagnosis in liver cirrhosis, ascites, portal hypertension, encephalopathy, spontaneous bacterial peritonitis, hepatorenal syndrome.	Liver cirrhosis – etiology, differential diagnosis in liver cirrhosis, ascites, portal hypertension, encephalopathy, spontaneous bacterial peritonitis, hepatorenal syndrome (ultrasound, laparoscopy, liver biopsy, study of the content of ferruloplasmin, alpha-1-antitrypsin, methods of diagnosis of hepatic encephalopathy, esophagogastroskopiya, study of ascitic fluid). Methods of prevention and treatment of cirrhosis decompensation.	5
6.9	Differential diagnosis in diseases of the pancreas	Differential diagnosis of the pancreas diseases – chronic pancreatitis, pancreatic cancer, cysts and pseudocysts of the pancreas, violation of exocrine pancreatic function (ERCP, ultrasound, computed tomography, MRI, study of feces, sweat study).	5

7 7.1	Basic organization of laboratory services.	Fundamentals of clinical laboratory diagnostics. Modern laboratory technologies. Clinical laboratory diagnostics and laboratory medicine. The place of laboratory medicine in the system of Sciences. Training of laboratory service personnel. Duties of the doctor of KLD. The history of development of laboratory diagnostics. Current trends in the development of KLD. Variation of laboratory results and its mechanisms. The concept of reference intervals. The ratio of the critical difference. Sensitivity and specificity of the laboratory test. Stages of laboratory research. Preanalytical phase – sequence and the responsible persons. Internal and external quality control of laboratory tests. Tasks of new laboratory technologies. Chromatography, applications. Mass spectrometry, fields of application.	6
7.2	Basic research in modern laboratory diagnostics: genetic, chromatographic and cytometric methods	Organization of hereditary material. Changes in hereditary material, types of mutations. Methods of investigation of violations of hereditary material. Karyotyping. FISH-hybridization. Molecular-genetic methods. Polymerase chain reaction, the principle of the method, application. Sequencing. Areas of application of methods of genetic diagnosis. Types of genetically determined diseases. Monogenic diseases. Multifactorial diseases. Molecular genetic diagnosis in Oncology. Principles of targeted therapy. This personalization of drug therapy. Pharmacogenetics by the example of warfarin. Noninvasive prenatal DNA diagnosis. Micro-RNA as a biomarker, biomixing and drug.	6

8. Material and technical support of discipline:

1. Electrocardiograph "CARDIOVIT AT-101";
2. Blood pressure monitor "Don" (rus. Дон)
3. Equipment with electronic memory "KAMA-Medicom" KAMA-Medicom set for 1 patient for daily monitoring of ECG
4. Pulse Oximeter 503 DX MINISPO2T
5. Spiroanalyzer Eton
6. FibroScan 502 TOUCH device for non-invasive determination of the degree of liver fibrosis
7. Portable ultrasonic scanner "ANGIODIN-SONO / P" (rus. АНГИОДИН-СОНО/П)
8. Bioelectrical impedance analyzer for body composition AVS-02 "MEDASS" (rus. МЕДАСС)
9. Express - analyzer (glucometer) portable "Accu-Chek Performa"
10. General purpose negatoscope "Armed" version: 1-frame
11. Medical weight scale
12. Medical metallic stadiometer R-St- "MSK" (rus. Р-Ст-"МСК")
13. Tonometer with phonendoscope
14. Direct microscope "BiOptik" V-200 Trino with a 3-megapixel digital camera and specialized software
15. Imaging system: fluorescence microscope EVOS® Fluid (RT) with fluorescence detection
16. Laser analyzer for platelet aggregation ALAT 2- "Biola" (rus. АЛАТ 2-"Биола");
17. Detecting thermal cycler DTLite, complete set 4S1: detecting amplifier;
18. Automatic cell counter Countess;
19. Fluorimeter Maxlife;
20. Sequencer Min ION Starter Pack;
21. CO2 incubator Galaxy;
22. Document camera AverVision 300AF;
23. Laptops - Lenovo IdeaPad G7080, Asus K52JU; HP 6715s TL-60;
24. Multimedia projectors - NEC, Epson EV-HOZ; Acer X113P;
25. Drive Western Digital Essential WDBFBW0020BBK;
26. Copier Canon;

27. Canon Scanner;
28. Laser MFP HP.
29. Wireless access points Wi-Fi Cisco;
30. Switches TP-Link TL-SF1008P 8xLAN PoE.
31. Study tables with chairs.

9. Information support of discipline

(specify the list of information technologies used in the implementation of the educational process in the discipline (module), including a list of software and information reference systems (if necessary))

a) software:

1. Office Pro Plus 2016 Desktop ALNG LilcSAPk MVL A Faculty EES-Registration number-90-07-012-00604-5; Conduct for work on installation № 2696 from 19.09.2017.
2. Office Pro Plus 2013 Desktop Education ALNG LilcSAPk MVL A Faculty EES-Registration number-90-07-012-00602-2; Conduct for work on installation № 2584 from 18.05.2016.
3. Windows 10 Education Desktop Education ALNG LilcSAPk MVL A Faculty EES-Registration number-90-07-01-00599-8; Conduct for work on installation No. 2695 from 19.09.2017.
4. Windows 8.1 Desktop Education ALNG LilcSAPk MVL A Faculty EES-Registration number-90-07-01-00600-1; Conduct for work on installation № 2581 from 18.05.2016.

b) resources of information and telecommunication network "Internet»:

1. ELMS RUDN and third-party ELMS, to which University students have access on the basis of contracts:

- The electronic library management system of PFUR – PFUR ELMS <http://lib.rudn.ru/MegaPro/Web>
- ELMS "University library online" <http://www.biblioclub.ru>
- ELMS Yurait <http://www.biblio-online.ru>
- ELMS "Consultant of a student" www.studentlibrary.ru
- ELMS "LAN" <http://e.lanbook.com/>

2. Databases and search engines:

- electronic Fund of legal and normative-technical documentation <http://docs.cntd.ru/>
- search engine Yandex <https://www.yandex.ru/>
- Google search engine <https://www.google.ru/>
- Scopus abstract database <http://www.elsevierscience.ru/products/scopus/>
- WHO documentation centre <http://whodc.mednet.ru/>

National guidelines for cardiology – 2015, rheumatology – 2010, pulmonology – 2013, Nephrology – 2014, gastroenterology – 2015, Physiology and pathology of hemostasis. Textbook. Ed. And. Steklova, 2016 Manual of Hematology, edited by A. I. Vorob'ev – 2002.

10. Educational and methodological support of the discipline:

(indicates availability of printed and electronic educational and information resources)

a) основная литература

1. Current Medical Diagnosis & Treatment 2020. Edited by Maxine A. Papadakis, Stephen J. McPhee McGraw-Hill. 2020, 4683 P.
2. Harrison's Principles of Internal Medicine, 20th Edition, By J. Larry Jameson, Anthony Fauci, Dennis Kasper, Stephen Hauser, Dan Longo, Joseph Loscalzo. McGraw-Hill Education. 2021.
3. Davidson's Principles and Practice of Medicine, 23rd Edition Edited by: Stuart H. Ralston MD FRCP FMedSci FRSE FFPM, Ian D Penman BSc MD FRCPE, Mark W J Strachan BSc MD FRCPE. Elsevier. 2018
4. 2014 ESC Guidelines on diagnosis and management of hypertrophic cardiomyopathy. European Heart Journal (2014) 35, 2733–2779 doi:10.1093/eurheartj/ehu284.
5. 2015 ESC Guidelines for the diagnosis and management of pericardial diseases. European Heart Journal (2015) 36, 2921–2964 doi:10.1093/eurheartj/ehv318.

6. 2018 ESC Guidelines for the diagnosis and management of syncope. *European Heart Journal* (2018) 39, 1883–1948 ESC GUIDELINES doi:10.1093/eurheartj/ehy037.
7. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *European Heart Journal* (2016) 37, 2129–2200 doi:10.1093/eurheartj/ehw128
8. 2018 ESC/ESH Guidelines for the management of arterial hypertension TheTask Force for the management of arterial hypertension of the European Society of Cardiology and the European Society of Hypertension. *Journal of Hypertension* 2018, 36:1953–2041
9. Diagnosis and Treatment of Adults with Community-acquired Pneumonia An Official Clinical Practice Guideline of the American Thoracic Society and Infectious Diseases Society of America. *American Journal of Respiratory and Critical Care Medicine* Volume 200 Number 7 | October 1 2019
10. Emergencies in the clinic of internal diseases [Text / electronic resource]: Textbook / V.E. Dvornikov, G.G. Ivanov; Ed. P.P. Ogurtsov, V.E. Dvornikova. - Electronic text data. - M.: Publishing house of RUDN, 2013 .-- 571 p.- ISBN 978-5-209-04270-9: 191.52. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>
11. Internal diseases [Electronic resource]: Textbook in 2 volumes. T. 1, T. 2 / V.S. Moiseev, A.I. Martynov, N.A. Mukhin. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2015. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>
12. The ABC of electrocardiography [Text] Dvornikov Vladimir Evgenievich: Textbook for universities / V.E. Dvornikov, G.G. Ivanov. - M.: Publishing house of RUDN, 2011 .-- 165 p. : ill.- ISBN 978-5-209-03588-6 : 260.00.<http://lib.rudn.ru/MegaPro/Web/Search/Simple>
13. Test tasks [Electronic resource]: Textbook for 5–6 year students, interns and residents studying in the specialty "Medicine" / Ed. P.P. Ogurtsova. - Electronic text data. - M.: Publishing house of RUDN, 2013 .-- 334 p.- ISBN 978-5-209-04976-0. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>
14. Textbook on hematology. Text; Textbook / N.I. Stuklov, G.I. Kozinets, N.G. Tyurina -M .: Practical medicine, 2018 - 360 p
15. Physiology and pathology of hemostasis [Text]: Textbook / Ed. N.I. Stuklova. - M.: GEOTAR-Media, 2016 .-- 112 p. : ill. - (Library of the medical specialist). - ISBN 978-5-9704-3625-7 : 530.00.
16. Internal medicine in clinical cases [Electronic resource]: Collection of articles. Issue 14 / Ed. V.S. Moiseeva, J.D. Kobalava, P.P. Ogurtsova. - electronic text data. - M .: Publishing house of RUDN, 2015 .-- 166 p. : ill. - ISBN 978-5-209-06407-7. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>
17. 16. Differential diagnosis of internal diseases [Electronic resource] / Ed. V.V. Shchekotova, A.I. Martynova, A.A. Spassky. - M .: GEOTAR-Media, 2017.<http://lib.rudn.ru/MegaPro/Web/Search/Simple>
18. Hepatology. Fundamentals of Internal Medicine. Manual for Physicians. Zh. D. Kobalava, S. V. Moiseyev, V. S. Moiseyev. Redaction acad. RAMS V. S. Moiseyev. - M.: GEOTAR-Media, 2014. C: 573 - 636. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>
19. FUNDAMENTALS OF INTERNAL MEDICINE G.N. Avakyan, O.V. Averkov, S.V. Willewalde, S.L. Voznesensky, V.P. Golub et al. Manual for doctors in 2 volumes / Moscow, 2020. (2nd edition, revised and expanded) <http://lib.rudn.ru/MegaPro2/Web/SearchResult/ToPage/1>

6) Additional Literature

1. Diagnosis and treatment of emergency conditions in a therapeutic clinic. Textbook. Ed. by P.P. Ogurtsov, E.V. Dvornikov. Publishing house: M.: LLC "Medical news Agency", Year: 2018. – 624 p.
2. Acute cardiac care. Textbook. Ed. by P.P. Ogurtsov, E.V. Dvornikov. Publishing house: Moscow: Publishing group "GEOTAR-Media, 2016. – 272 p.
3. Metabolic syndrome [Text/electronic resource]: Guidelines for therapists, cardiologists, endocrinologists, gastroenterologists / PP Cucumbers. - Electronic text data. - M.: publishing house

of PFUR, 2013. - 16 p. - ISBN 978-5-209-05270-8: 10.60.
<http://lib.rudn.ru/MegaPro/Web/Search/Simple>

4. P. P. Ogurtsov, N.V. Mazurchik, I.V. Garmash, O. I. Tarasova, T. S. Polikarpova. Hepatorenal syndrome in liver cirrhosis: risk factors, prevention and treatment. Methodical recommendation. – M.: publishing house of RUDN, 2010.- 15pg.

5. Hematology [Electronic resource]: National guidelines / Edited by O. A. Rukavitsyn. - Moscow: GEOTAR-Media, 2015. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>

6. Anemia [Electronic resource] / edited by O. A. Rukavitsyn. - 2nd ed.. I DOP. - M.: GEOTAR-Media, 2016. - 256 p.: Il. - ISBN 978-5-9704-3978-4.
<http://lib.rudn.ru/MegaPro/Web/Search/Simple>

7. Internal diseases: differential diagnosis and treatment [Text]: Textbook / I.N. Bokarev, L.V. Popova. - Moscow: Medical news Agency, 2015. - 773 p - ISBN 978-5-9986-0217-7: 1350.00.

8. Anemias. Clinic, diagnostics and treatment [Text]: tutorial / N.I. Stuklov, V.K. Alpidowski. - M.: MIA, 2013. - 264 p. - 0.20. <http://lib.rudn.ru/MegaPro/Web/SearchResult/ToPage/1>

9. Diagnosis of family hyperlipidemia [Electronic resource]: Teaching aid / V.I. Kuznetsov, V.A. Koshechkin, A.M. Amaeva. - Electronic text data. - Moscow: Publishing house of RUDN, 2015. - 34 p.: Il. - ISBN 978-5-209-06523-4. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>

10. Internal diseases [Electronic resource]: In 2 volumes. Vol. 1: Course of internal medicine clinic / S.P. Botkin. - Moscow: GEOTAR-Media, 2013. <http://lib.rudn.ru/MegaPro/Web/SearchResult/ToPage/464497>

11. Internal disease. [Electronic resource]: In 2 volumes. Vol. 2: Clinical lectures / S.P. Botkin. - Moscow: GEOTAR-Media, 2013
<http://lib.rudn.ru/MegaPro/Web/SearchResult/ToPage/464497>

12. Diagnosis and its justification [Text]: Textbook: For students of the 3-6 course of the medical faculty "General medicine" / S.V. Villevalde [et al.]; Ed. Zh.D. Kobalava. - M.: Publishing house of RUDN, 2016 - 188 p.: Il. - ISBN 978-5-209-06927-0 : 136.43. 104

13. Internal medicine [Electronic resource]: Textbook / V.I. Makolkin, S.I. Ovcharenko, V.A. Sulimov. - 6th ed.. I DOP. - M.: GEOTAR-Media, 2017
<http://lib.rudn.ru/MegaPro/Web/Search/Simple>

14. Yu.V. Shchukin. Functional diagnostics in cardiology [Electronic resource]: Textbook / - Moscow: GEOTAR-Media, 2017. - 336 p.- ISBN 978-5-9704-3943
<http://lib.rudn.ru/MegaPro/Web/Search/Simple>

15. Cardiology [Electronic resource]: National leadership / Ed. E.V. Shlyakhto. - 2nd ed. I DOP. - M.: GEOTAR-Media, 2015. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>

16. Internal diseases propedeutics [Electronic resource]: Textbook / V.T. Ivashkin, A.V. Okhlobystin. - Moscow: GEOTAR-Media, 2016. <http://lib.rudn.ru/MegaPro/Web/Search/Simple>

17. Clinical Cases in Internal Diseases Specialty (in English) [Текст] Study guide for internal medicine / ed. Zh. D. Kobalava. - M. : PFUR, 2018. - 89 p. - ISBN 978-5-209-08527-0 : 49.21.

18. Internal diseases by Tinsley R. Harrison Classic of modern medicine, Moscow 2008.

19. Guidelines for cardiology. In 4 volumes. Volume 2. Methods of diagnosis of cardiovascular diseases. Editor Evgeny Chazov, Publishing house Praktika, 2014 – 776 p.

20. Davidson's internal medicine. Cardiology. Hematology Under the General editorship of N.A. Mukhin. - Moscow: GEOTAR-Media, 2009. - 288c.

21. Heart disease in Braunwald. Guidelines for cardiovascular medicine. In 4 volumes. Ed. by P. Libby and others; transl. from English., edited by R. G. Oganov, logosphere Publishing house, 2013.

22. Sherlock W., J. Dooley. Diseases of the liver and biliary tract. Translation from English/Ed. Z.G. Aprosina, N.A. Mukhin. – Moscow: Publishing house GEOTAR-Media, 2002. – 864 p.

23. Differential diagnosis in the clinic of internal diseases. V.A. Vinogradov, 2009

24. Cardiology: National Manual. Short Edition / Redaction. E.B. Shlahto. - 2nd Ed. Over. and Up. – M. Publishing house GEOTAR-Media. 2020.

https://bookmos.ru/components/com_jshopping/files/img_products/kardiologiya-nacionalnorukovodstvo-kratkoize-danie-2020-978-5-9704-53971.pdf

25. Cardiology: National Manual / Redaction. E. V. Shlyahto. - 2nd D. - revised. and up. – Moscow.
26. GEOTAR-Media, 2021. <https://www.rosmedlib.ru/book/ISBN9785970460924.html>
27. Russian clinical recommendations. Rheumatology. Edition Academic RAN E.L. Nasonov, M. GEOTAR-Media. - 2020, 448 p.
28. Rheumatology. Training manual. Redaction Prof. A.A. Usanova. M, GEOTAR-Medicine - 2018, 408 p.
29. Rheumatology: training manual / Redaction Prof. H.A. Shostak. - M.: GEOTAR-Media, 2012. - 448 p.
30. Medical manual. Diagnosis and treatment. Adamolekun, Alexander, Altman: The Merck Manual , 2015г.
31. Zakim and Boyer's Hepatology: A Textbook of Liver Disease. 5th edition. Philadelphia: Saunders, 2006, 1765 pp.
32. Gastroenterology. National Administration / Redaction V.T. Ivashkin, T.L. Lapina M.:GEOTAR-Media, 2008. 704

Electronic full-text materials:

1. Student consultant [Electronic resource]: Database / Publishing group "GEOTAR-Media"; LLC "Institute of health management problems". - Moscow: GEOTAR-Media, 2013. - Access mode: <http://www.studmedlib.ru/> Access by login and password after registration from the territory of the PFUR. <http://lib.rudn.ru:8080/MegaPro/Web>
2. Database elibrary.ru - scientific electronic library. <http://elibrary.ru/defaultx.asp>
3. Russian society of cardiology <https://scardio.ru/>
4. European Association of cardiologists <https://www.escardio.org/>
5. American heart Association <https://www.acc.org>
6. Society of heart failure specialists <http://www.ossn.ru/>
7. Center for the study of liver PFUR <http://www.hepatocentre.ru/>
8. Gastroportal <http://www.gastroportal.ru/>
9. The website of the world organization of gastroenterology <http://www.worldgastroenterology.org/>
10. Website of the Russian gastroenterological Association <http://www.gastro.ru/>
11. European Association for the study of the liver <https://easl.eu/>
12. American Association for the study of liver diseases <https://www.aasld.org/>

11. Methodical instructions for students on the development of the discipline (module)

Students are required to attend classes, perform tasks of the teacher, familiarity with the recommended literature.

In practical classes and lectures in the classroom, the analysis of relevant topics using multimedia technology (computer, projector).

Independent work in extracurricular hours can take place both in the classrooms of the Department and in the computer lab, where students can study the material on presentations prepared by teachers of the Department, as well as on tests., prepared on electronic and paper media.

Presentations on the topics of classes can be recorded on CDs or flash cards for independent work of students on the home computer.

Textbooks in electronic form on a number of topics are available on the pages of the Department and the staff of the Department of hospital therapy on the Educational portal of the RUDN, as well as on local resources of the electronic library system of the RUDN.

One of the forms of independent work is the preparation of abstracts on various sections of the course, as well as the presentation of reports at the seminar.

Out-of-class independent work includes:

-the study of the material on the textbook, textbooks on paper and electronic media;

- preparation of abstract messages or presentations on selected topics;
- preparation for the implementation of tests and tests, writing a history of the disease.

Recommendations and requirements for registration of medical history (course work):

The implementation of the course work should contribute to the in-depth assimilation of students of the theoretical foundations of the studied problems, as well as the acquisition of skills of independent research activities. Writing term papers is the basis of specialization of students.

The course work is carried out according to the following scheme:

- choice or formulation of topic;
- search for literature and familiarization with it;
- understanding, systematization and analysis of the collected material,
- preparation of a work plan,
- writing the first version of the work and providing it to the supervisor,
- revision of the text on the comments of the head;
- submission of the final text of the course work to the Department and getting a review on it.

The estimated volume of term paper 15-30 pages. Course work must be properly framed. The rules of registration of the student can be found on the website of the Department. The history of the disease is equal to the course work and is the main work in which the student reflects and analyzes all the events related to the patient: his health, social and material status, develops the concept of diagnostic representation and treatment. The student must independently justify the diagnosis, conduct a differential diagnostic search, guided by all the knowledge and information about the patient (survey, examination, accompanying sheet of the ambulance doctor, outpatient card, conversation with relatives, etc.).

Main sections of the medical history:

1. Title page
2. Complaints
3. Anamnesis (history of the present disease)
4. The history of life
5. Objective status (present status)
6. Preliminary diagnosis
7. Examination and treatment plan
8. Data of laboratory, instrumental methods of research and expert advice
9. Clinical diagnosis
10. The substantiation of the clinical diagnosis
11. Differential diagnosis
12. Treatment and rationale
13. Diary of curation (not less than 3 days)
14. The temperature of the sheet, the scheme of development of the disease
15. Epicrisis (discharge or stage)
16. List of references

Rules for the medical history records:

A4 paper is used, the text should be typed on the computer, required fields around the perimeter of the sheet, each section from a new page. For rent in the folder: sheets are numbered and reset. Corrections, use of own abbreviations in diagnoses, names of preparations and units of measurement are not allowed.

Requirements for writing and registration of the abstract

This form of control is an independent research work. Simply copying text from books, articles or downloading finished work from the Internet is unacceptable.

The abstract has a strictly defined structure: the title page, content, introduction, chapters of the main part, conclusion, references.

The volume of the abstract – at least 15 pages. Pages of the abstract, except the title page, must be numbered. The text of the abstract is printed in 14 font, 1.5 line spacing. Margins: left – 3 cm, right 1 cm, top 2 cm, bottom – 2,5 cm, the Text is printed with the paragraphs. Headings and subheadings are separated from the main text by a space at three intervals at the top and bottom.

When making a title page it is necessary to indicate University, faculty, departments, topics of the essay, name of student, group number, name of teacher.

The introduction takes 1-1.5 pages and introduces readers to the problem. In the introduction, it is necessary to formulate the purpose of the work, it is necessary to have relevance, in which it is necessary to justify your choice of this topic.

In the main part it is necessary to give a meaningful description of the problem. The text of the main part should be divided into several paragraphs (not less than three and not more than five), have references to literary sources. Preparation of the abstract should be based on those scientific materials that are relevant today (for the last 10 years).

In conclusion, conclusions should be formulated that reflect the main results of the work.

The list of references is made in alphabetical order of authors ' surnames or titles of works (in the absence of the author's surname). In the list the General numbering of literary sources is applied. When writing an abstract it is recommended to refer to the latest scientific sources. When making the source data, the surname and initials of the author, the title of the work, place of publication, publisher, year of publication, the total number of pages are indicated.

Presentation requirements

1. The presentation is an independent work and is used as a visual aid or visual series.
2. Requirements to the content of the multimedia presentation:
 - 1 compliance of the content of the presentation with the set didactic goals and objectives;
 - 2 observance of the accepted rules of spelling, punctuation, abbreviations and rules of registration of the text (absence of a point in headings, etc.);
 - 3 no factual errors, accuracy of the information provided;
 - 4 laconism of the text on the slide;
 - 5 completeness (the content of each part of the text information is logically completed);
 - 6 Association of semantically related information items are perceived holistically in the group;
 - 7 conciseness and brevity, maximum information content of the text;
 - 8 layout of information on the slide (preferably horizontal arrangement of information, from top to bottom on the main diagonal; the most important information should be located in the center of the screen; if the slide picture, the inscription should be located under it; it is desirable to format the text width; avoid “torn” edges of the text);
 - 9 Text slides make up no more than 30% of the presentation, the remaining slides are presented in the form of graphical objects (graphs, charts, tables, etc.).
 - 10 information submitted attractive, original, draws the attention of students.
3. Visual and audio requirements:
 - 1 use only optimized images (for example, shrinking using Microsoft Office Picture Manager, shrinking using the Microsoft Office image settings panel);
 - 2 matching images to content;
 - 3 matching images to the age characteristics of students;
 - 4 image quality (contrast of the image with respect to the background; no “extra” details on the photo or picture, brightness and contrast of the image, the same file format);
 - 5 validity and rationality of the use of graphic objects.
4. Text requirements:
 - 1 readability of the text on the presentation slide background (the text is clearly visible on the slide background, using contrasting colors for the background and text);
 - 2 font size corresponds to the age characteristics of students and must be at least 24 points;
 - 3 the length of the string is no longer than 36 characters;
 - 4 distance between lines within paragraph 1.5, and between paragraphs – 2 interval;
5. Requirements for effective use of the presentation:
 - 1 taking into account the requirements of Sanpins for the use of technical means (duration of continuous viewing of the presentation – no more than 20 minutes);

- 2 creative, original approach to creating a presentation.
6. The presentation should not be boring, monotonous, cumbersome (15-20 slides is optimal).
 7. The title slide shows the author's data (name and title of OU), the title of the material, the date of development. You can use the option of headers and footers. Other placement of the author's data is allowed if it interferes with the perception of the material on the title.
 8. The last slide shows the list of used sources, active and accurate links to all graphical objects. On the final slide, you can once again specify information about the author of the presentation (slide № 1) with a photo and contact information about the author (mail, phone).
 9. Multimedia presentation with methodological support and applications is downloaded in one archive file.
- (includes guidelines for the organization and implementation of the SRS in the study of the discipline, defines the requirements and conditions for the tasks).

12. Fund of estimated means for carrying out intermediate certification of students on discipline “Hospital Therapy”

Materials for assessing the level of mastery of the subject «Hospital Therapy» (assessment materials), including a list of competences with their stages of formation, a description of indicators and criteria for the evaluation of competences at different stages of their formation, A description of evaluation scales: Model benchmarks, situation-specific tasks necessary for the evaluation of knowledge, skills, skills and experience of the activity, describing the stages of formation of competences in the process of mastering the educational programme; Methodological materials; Procedures for the evaluation of knowledge, skills, skills and experience, which characterize the stages of competency-building, are fully developed and available to trainees on the discipline page of TUIS PFUR.

The program is compiled in accordance with the requirements of the FSES HE.

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