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

Approved by
Deputy Rector for Academic Affa

_____E.V. Konovalova

"16" June 2022, Record No.6

Faculty therapy

Syllabus

Department **Internal diseases**

Curriculum s310501-ЛечДелоИн-21-1.pli.xml
Specialty 31.05.01 General Medicine

Qualification **General Practitioner**

Form of education **Full-time**

Total (in credits) **7**

Total academic hours 252
including:
Classes 144
Self-study 81
Control 27

Control:
Credit / Mark 7th term
Exam, 8th term

Course outline in terms

Academic year (Term)	**4 (4.7)**		**4 (4.8)**		Total	
Weeks	16		12			
Types of classes	Cur	Syl	Cur	Syl	Cur	Syl
Lectures	16	16	16	16	32	32
Practical	64	64	48	48	112	112
Self-study	64	64	17	17	81	81
Control hours			27	27	27	27
Total	144	144	108	108	252	252

The Syllabus is compiled by:
PhD in Medical Sciences (Medicine), Associate Professor, Shuvalova O.I. _____

The Syllabus
Faculty therapy

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

Based on the Curriculum:
31.05.01 GENERAL MEDICINE
Specialization: General Medicine
Approved by the Academic Council of Surgut State University, "16" June 2022, Record No.6

The Syllabus was approved by the department
Internal diseases

Head of Department, Doctor of Medicine, Professor Ariamkina O.L

1. COURSE OBJECTIVES	
1.1	The **aim** of the course is to acquire scientific knowledge about the etiology, pathogenesis, diagnosis, rational pharmacotherapy, rehabilitation, and prevention of major diseases of internal organs. The **objectives** are: - to prepare for the state final certification, - to form professional competencies required in the framework of the professional activity of the general practitioner; - to conduct therapeutic and preventive activities under the supervision of a general practitioner; - to prepare students to postgraduate education programs.

2. COURSEOVERVIEW	
Course code (in curriculum)	Б1.О.04.39
2.1	**Assumed background:**
	Human anatomy
	Chemistry
	Biology
	Internal Diseases Propaedeutics,
	X-Ray Diagnostics
	Hominal physiology
	Biochemistry
	Pharmacology
	Microbiology, Virology
	Histology, embryology, cytology
	Clinical pathophysiology
	Pathological anatomy
	Pathophysiology
2.2	**Post-requisite courses and practice:**
	Hospital Therapy (the 5th year)
	Hospital surgery, Paediatric surgery
	Outpatient Therapy
	Anesthesiology, resuscitation, intensive care
	Clinical pharmacology
	Disaster Medicine
	Medical rehabilitation
	Oncology, X-Ray Therapy
	Phthisiatrics

3. COMPETENCES UPON COMPLETION OF THE COURSE (MODULE)
PC-1.1: Demonstrates knowledge in etiology, pathogenesis, diagnostic criteria (clinical - subjective, physical, laboratory, instrumental, identifies the patient's common pathological conditions, symptoms, disease syndromes and diagnoses nosological forms according to the International Statistical Classification of Diseases and Related Health Problems, X - XI revisions
PC-1.2: Carries out diagnostics, evaluates the prognosis (short-, medium- and long-term course) of the disease, identifies acute complications and complications of chronic diseases
PC-3.1: Examines the patient (handle the patient's complaints, anamnesis, physical data based on the examination results, determines the necessary examination plan, evaluates the parameters of laboratory, instrumental, pathological and anatomical and other methods in order to diagnose diseases, assesses the prognosis (short-, medium- , long-term) of its course and outcomes
PC-3.2: Makes an initial and clinical diagnosis in accordance with the International Statistical Classification of Diseases and Health Problems X - XI revisions and current clinical classifications
PC-3.3: Carries out early and differential diagnostics of diseases

PC-3.4: Provides routing and management of patients based on the current legislation (standards, procedures for the provision of medical care, Clinical guidelines)
PC-5.1: Demonstrates knowledge of the mechanisms and methods applied in pharmacotherapy, medical nutrition, medical devices and methods of non-drug treatment, palliative and personalized medical care
PC-5.2: Provides various categories of patients with outpatient treatment, treatment in hospitals and high-tech medical care (HMC) centers applying drugs, medical devices and medical nutrition, according to clinical pattern and current procedures, standards of medical care, Clinical guidelines (treatment protocols)
PC-5.4: Demonstrates knowledge of side effects of drugs, methods and duration of their use; assesses the effectiveness and safety of pharmacotherapy, medical nutrition and non-drug treatment, medical nutrition of palliative care.
PC-8.1: Demonstrates the ability and readiness to organize planning and reporting of medical personnel, to analyze the performance indicators of a medical institution and its departments, present the analysis results
PC-8.2: Keeps medical records, including the electronic format
PC-8.3: Provides internal quality control and safety of medical activities within the scope of job duties, control of the performance of duties by middle and junior medical personnel and other medical workers of their job duties

As a result of mastering the discipline, the student must

3.1	**Know:**
3.1.1	- significant problems and processes - main pathological symptoms, clinical and laboratory syndromes; - the features of collecting anamnesis from patients with therapeutical profile; - basic and additional methods of patient's examination (in accordance with ICD). - clinical symptoms and pathogenesis of major diseases, their prevention, diagnosing and treating; - clinical symptoms of borderline states; - principles of the non-drug and medication therapy, physiotherapy, physical therapy and medical monitoring; - indications for surgical treatment of somatic pathology; - basics of rational diet therapy; - modern methods of clinical and laboratory diagnosing and treating in accordance with the standards and clinical protocols. - principles of differential diagnosis of the most common pathologies; - principles of treating and preventing diseases; - side effects of drugs; - the emergency therapeutic care in the life-threatening conditions; - indications for hospitalization of patients. - the basic principles of treating patients with different nosologies.
3.2	**Be able to:**
3.2.1	- conduct a survey, physical and clinical examination; - interpret the results of laboratory and instrumental examination. - interpret the results of laboratory and instrumental methods of research; - give a diagnosis according to the ICD based on the data from the main and additional researches; - conduct basic and additional researches to clarify the diagnosis; - use normative documents in medical practice. - outline the program of patient's examination; - formulate a detailed clinical diagnosis based on the data obtained during the examination; - determine the activity and the stage of the pathological process; - assign treatment to the patient, taking into account knowledge of the etiology and the features of the disease pathogenesis (etiological, pathogenetic treatment, basic and additional therapy, symptomatic treatment); - develop specific measures for the secondary prevention and rehabilitation therapy of the supervised patient; - keep medical records; - predict the necessity for the medications. - treat patients with different nosologies.
3.3	**Have skills of:**

3.3.1	- surveying and examining patients objectively with the help of laboratory and instrumental methods; - keeping medical history and other medical documentation and filling in all the main sections with substantiating the clinical diagnosis, examination and treatment plan, diaries and landmark epicrises; - giving the comprehensive clinical diagnosis of patients with endocrine diseases (in accordance with ICD); - performing the main and additional medical, diagnostic and instrumental methods of examination. - giving the comprehensive clinical diagnosis according to the ICD; - performing the main and additional medical diagnostic and instrumental methods of research; - assisting in case of emergency conditions. - making a preliminary and detailed clinical diagnosis; - providing emergency therapeutic care in the life-threatening conditions; - keeping medical records; - using different methods of forming healthy lifestyle among the population. - treating patients with different nosologies.

4. STRUCTURE AND CONTENTS OF THE COURSE (MODULE)

Class Code	Topics/Class type	Term / Academic year	Academic hours	Competences	Literature	Interactive	Notes
	Section 1. General part	7					
1.1	Examination of the patients / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4 PC-8.1 PC-8.2 PC-8.3	L 1.1 L 2.1	0	Oral quiz, case - study
1.2	Examination of the patients / self-study/	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1	0	Case history of the disease
	Section 2. Respiratory diseases	7					
2.1	Pneumonia /lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
2.2	Pneumonia / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1	0	Oral quiz, case – study.
2.3	Pneumonia / self-study	7	4		L 1.1 L 2.1	0	Essay
2.4	Bronchitis. Bronchiectatic disease / lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
2.5	Bronchitis. Bronchiectatic disease / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
2.6	Bronchitis. Bronchiectatic disease / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
2.7	Bronchial asthma / lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	

2.8	Bronchial asthma / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
2.9	Bronchial asthma / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
2.10	Chronic obstructive pulmonary disease (COPD) / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
2.11	Chronic obstructive pulmonary disease (COPD) / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
2.12	Acute pulmonary abscess. Necrotizing pneumonia. Lung cancer / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
2.13	Acute pulmonary abscess. Necrotizing pneumonia. Lung cancer / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
	Section 3. Diseases of the cardiovascular system						
3.1	Atherosclerosis / lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
3.2	Atherosclerosis / practical classes	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case – study, test.
3.3	Atherosclerosis / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Analysis of patient's electrocardiograms
3.4	Coronary artery disease. Angina pectoris / lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
3.5	Coronary artery disease. Angina pectoris / practical classes	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
3.6	Coronary artery disease. Angina pectoris / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz

3.7	Essential hypertension / lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
3.8	Essential hypertension / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
3.9	Essential hypertension / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
3.10	Acute coronary syndrome and myocardial infarction /lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
3.11	Acute coronary syndrome and myocardial infarction / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
3.12	Acute coronary syndrome and myocardial infarction / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
3.13	Infective endocarditis / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
3.14	Infective endocarditis / self-study/	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
3.15	Heart arrhythmia / practical classes	7	8	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case – study, test
3.16	Heart arrhythmia / self-study	7	8	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Analysis of patient's electrocardiograms
3.17	Rheumatism. Acute rheumatic fever / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
3.18	Rheumatism. Acute rheumatic fever/ self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz

3.19	Mitral and aortal defectes / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
3.20	Mitral and aortal defectes / self-study	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
3.21	Chronic heart failure / lecture	7	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
3.22	Chronic heart failure / practical classes	7	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
	Credit / Mark	7	**4**	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4 PC-8.1	L 1.1 L 2.1 L 3.1	0	Case history of the disease
	TOTAL for the 7th semester		**144**				
	Section 4. Gastroenterology	8					
4.1	Examination of the patients / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4 PC-8.1 PC-8.2 PC-8.3	L 1.1 L 2.1	0	Oral quiz, case – study, test.
4.2	Chronic diseases of oesophagus, stomach and duodenum. / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
4.3	Chronic diseases of oesophagus, stomach and duodenum. / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
4.4	Chronic diseases of oesophagus, stomach and duodenum. / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Case history of the disease
4.5	Gastric and duodenum ulcer / lecture /	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
4.6	Gastric and duodenum ulcer / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study

4.7	Chronic enteritis and colitis. Functional disorders of the colon. Colon cancer / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
4.8	Chronic enteritis and colitis. Functional disorders of the colon. Colon cancer / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
4.9	Biliary dyskinesia. Chronic acalculous cholecystitis / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
4.10	Biliary dyskinesia. Chronic acalculous cholecystitis / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
4.11	Biliary dyskinesia. Chronic acalculous cholecystitis / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
4.12	Chronic cholangitis. Choledocholithiasis. Pancreatitis / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
5.13	Chronic cholangitis. Choledocholithiasis. Pancreatitis / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
5.14	Chronic hepatitis. Gilbert disease / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
4.15	Chronic hepatitis. Gilbert disease / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
4.16	Chronic hepatitis. Gilbert disease / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
4.17	Cirrhosis and hepatic cancer / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
4.18	Cirrhosis and hepatic cancer / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study

4.19	Cirrhosis and hepatic cancer / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
4.20	Human helminthosis. Opisthorchiasis / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, Essay
4.21	Human helminthosis. Opisthorchiasis / self-study	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
	Section 5. Nephrology						
5.1	Acute and chronic glomerulonephritis. Chronic pyelonephritis / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
5.2	Acute and chronic glomerulonephritis. Chronic pyelonephritis / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case – study.
5.3	Acute and chronic glomerulonephritis. Chronic pyelonephritis / self-study	8	1	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
5.4	Chronic kidney disease (CKD) / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
5.5	Chronic kidney disease (CKD) / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
5.6	Chronic kidney disease (CKD) / self-study	8	1	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
	Section 6. Hematology						
6.1	Anemia. Iron deficiency anemia / lecture	8	2	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4		0	
6.2	Anemia. Iron deficiency anemia / practical classes	8	4	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study

6.3	Iron deficiency anemia / self-study	8	1	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	L 1.1 L 2.1 L 3.1	0	Written quiz
	TOTAL for the 8th		**81**			0	
	Exam	8	**27**	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4 PC-8.1 PC-8.2 PC-8.3	L 1.1 L 2.1 L 3.1	0	Oral quiz, case - study
	TOTAL		**252**				

5. ASSESSMENT TOOLS

5.1. Tasks

Supplement 1

5.2. Topics for written papers

Supplement 1

5.3. Assessment tools

Supplement 1

5.4. Assessment tools

Oral and written quiz, case – study, test, case history, patient's electrocardiograms, essay

6. COURSE (MODULE) RESOURCES

6.1. Recommended Literature

6.1.1. Core

	Authors	Title	Publish., year	Quantity
L 1.1	Ivashkin V.T., Okhlobystin A.V.	Internal diseases propedeutics https://www.studentlibrary.ru/book/ISBN9785970436011.html	Moscow: GEOTAR, 2016.	1

6.1.2. Supplementary

	Authors	Title	Publish., year	Quantity
L 2.1	V. N. Oslopov, O. V. Bogoyavlenskaya, Yu. V. Oslopova et al	Case history of therapeutic patient : manual https://www.studentlibrary.ru/book/ISBN9785970433836.html	Moscow: GEOTAR, 2014.	1
L 3.1	Kharkevitch D. A.	Pharmacology: Textbook / Translation of Russian textbook, 12th edition, revised and improved. http://www.studmedlib.ru/book/ISBN9785970443071	Moscow.: GEOTAR Медиа, 2018.	1

6.1.3. Methodical development

	Authors	Title	Publish., year	Quantity

6.2. Internet resources

1	Educational resource for doctors. Dia Academy
2	Endocrinological scientific center of the ministry of health of the Russian Federation
3	Medline
4	Free Medical Journals
5	European Society of Cardiology
6	Consilium medicum
7	Russian medical journal

6.3.1 Software

6.3.1.1	Operational system Microsoft, applied programs pack Microsoft Office

6.3.1.2	Internet access (Wi-Fi)
6.3.2 InformationReferralsystems	
6.3.2.1	«Guarantor», «Consultant Plus»,
6.3.2.2	http://www.studmedlib.ru
7. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE (MODULE)	
7.1	Classrooms for lectures, seminars (practical classes), group and individual consultations, formative and summative control are equipped with typical educational furniture, technical teaching aids for the presentation of educational information
7.2	Practical classes, individual consultations, formative and summative control are held in the classroom of the Department of Internal Diseases of the Medical Institute.
7.3	Simulation center
7.4	The audience of the simulation center equipped with simulation equipment, laboratory tools and consumables in sufficient quantity
7.5	Multimedia Projector
7.6	Library of laboratory and instrumental research results
7.7	Collection of roles for standardized patients
7.8	Library of situational problems
7.9	Clinical Script Library
7.10	Eevaluation library
7.11	The classrooms for lectures are equipped with multimedia projectors, screen, and laptop, stationary educational board for chalk, tables, and chairs.
7.12	Classrooms have a material and technical base that is necessary for all types of disciplinary and interdisciplinary training, practical and research work of the students, and also complies with current sanitary and fire regulations and standards.
8. Course manuals	
Supplement 2	

Supplement 1

ASSESSMENT TOOLS

Syllabus Supplement

Faculty therapy

Qualification	**Specialist**
Specialty	31.05.01 General Medicine
Form of education	Full-time
Designer Department	Internal diseases
Graduate Department	Internal diseases

Sample tasks and tests

Stage I: Formative assessment

1.1. Points of oral or written quiz:

Section 1. General part

1. Examination of the patients. Keeping medical documentation in the polyclinics and hospitals.
2. Medical History: structure, rules of registration.

Section 2. Respiratory diseases

1. Pneumonia. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Principles of therapy. Complications. Prevention.
2. Bronchitis. Bronchiectasis. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Principles of therapy. Complications. Prevention.
3. Bronchial asthma. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Principles of therapy. Complications. Prevention.
4. Chronic obstructive pulmonary disease (COPD). Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
5. Acute pulmonary abscess. Necrotizing pneumonia. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention.

Section 3. Diseases of the cardiovascular system

1. Atherosclerosis. Definition. Focal and diffuse atherosclerotic cardiosclerosis. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
2. Coronary artery disease. Angina pectoris. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
3. Essential hypertension. Pathogenesis of increased blood pressure. Features of the clinical picture. Laboratory and instrumental diagnostics. Differential diagnosis. Drug and surgical treatment. Complications. Forecast.
4. Acute coronary syndrome and myocardial infarction. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics.

ECG diagnosis. Differential diagnosis. Principles of therapy. Early and late complications of myocardial infarctions. Prevention. Forecasts.

5. Infective endocarditis. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
6. Rheumatism. Acute rheumatic fever. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Treatment.
7. Mitral stenosis. Aortic stenosis. Insufficiency of the mitral and aortal valves. Hemodynamic disorders. Instrumental diagnostics. Clinical picture. Options flow. Drug and surgical treatment. Complications. Forecasts.
8. Heart arrhythmia. Extrasystoles. Tachyarrhythmias and bradyarrhythmias. Conduction disturbance. Atrial fibrillation. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Adams-Stokes syndrome. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
9. Chronic heart failure. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention.

Section 4. Gastroenterology

1. Chronic diseases of oesophagus, stomach and duodenum. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
2. Gastric and duodenum ulcer. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention.
3. Chronic enteritis and colitis. Functional disorders of the colon. Colon cancer. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
4. Biliary dyskinesia. Chronic acalculous cholecystitis. Definition. Epidemiology. Etiology and pathogenesis. Clinical picture. Options flow. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
5. Chronic cholangitis. Chronic hepatitis. Gilbert disease. Definition. Epidemiology. Etiology and pathogenesis. Clinical picture. Options flow. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
6. Cirrhosis and hepatic cancer. Definition. Epidemiology. Etiology and pathogenesis. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.
7. Human helminthosis. Opisthorchiasis. Definition. Epidemiology. Etiology and pathogenesis. Clinical picture. Options flow. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.

Section 5. Nephrology

1. Acute and chronic glomerulonephritis. Chronic pyelonephritis. Definition. Epidemiology. Etiology and pathogenesis. Clinical variants of the course. The main clinical syndromes. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.

2. Chronic kidney disease (CKD). Definition. Epidemiology. Etiology and pathogenesis. Clinical picture. Options flow. Laboratory and instrumental diagnostics. Differential diagnosis. Principles of therapy. Complications. Prevention. Forecasts.

Section 6. Hematology diseases

1. Anemia. Iron deficiency anemia Epidemiology. Etiology. Hemodynamic disorders. Clinic. Instrumental diagnostics. Differential diagnosis. Complications. Indications for surgical treatment

1.2 Sample of Case study:

№1: Diseases of the respiratory system

Sample

Case study №1

Male, 40 years old, locksmith. He complains to the shortness of breath when walking, fever up to 38 °C, chest pain, and cough with sputum, headache, malaise, weakness, and sweating.

From the anamnesis of the disease. Acutely ill. Three days ago at work he felt chills, fever up to 39 °C, cough with a small amount of sputum, sweating, and weakness. Taking antipyretics gave no effect. After 2 days, he noted the shortness of breath during exercising, increased weakness, and the patient went to the district doctor, who sent him to the hospital.

Objectively. Satisfactory condition. Consciousness is clear. The patient is excited. BMI is 27 kg/m2. The skin is pale, cyanosis of the lips. Peripheral lymph nodes are not enlarged. The shape of the chest is correct; the right half of the chest lags is far behind when breathing. In the right lower parts of the lungs is swelling of intercostal spaces. On percussion of the lower parts of the right lung (from XI to IX ribs), dull percussion sound is heard. On auscultation of the right lower parts of the lungs, breathing is not carried out. The respiration rate is 24 per minute. Heart tones are muffled, the rhythm is wrong. Systolic murmur is at the top. BP is 150/100 mm. hg art. Heart rate is 120 per minute. Pulse is 120 beats/min. The abdomen is soft, painless. The size of the liver by Kurlov is 9;8;7. Swelling is not observed. Defecation is normal.

Laboratory and instrumental studies:

Common blood test: Hb - 115 g/l; red blood cells - 4.7×10^{12}/l; leukocytes - 4.6×10^{9}/l; ESR - 40 mm/h.

Biochemical blood test: ALAT – 22 mol/l; AAT – 24 mol/l.

X-Ray: intense homogeneous darkening in the lower part of the right lung to the level of the IVc.

Pleural effusion: relative density-1023; protein-4.1 g/l; leukocytes – 16-20 in p/h; erythrocytes 5-7 in p/h; mesothelium 3-6 in p/h; leukocyte formula: neutrophils – 97%, lymphocytes – 3%.

Instructions

1. The formulation of the clinical diagnosis:

- major disease;

- complications of the underlying disease;

- concomitant disease;

- complications of comorbidities;

- functional state.

2. Plan for the additional laboratory and instrumental methods of examination.

3. Tactics of urgent and planned therapeutic measures (drug and non-drug).

4. Forecast.

Answer:

1. Preliminary diagnosis:

- underlying disease: community-acquired pneumonia in the lower lobe of the right lung.

- complications of the main disease: exudative pleurisy, respiratory failure 1.

- concomitant diseases: mild anemia, unspecified.

2. Additional examination plan: General blood test, General urine analysis in dynamics, biochemical blood test (CRP, glucose, total bilirubin, lipidogram, transaminase, creatinine, urea, total protein, proteinogram, ionogram, immunogram, TIBC, ferritin), blood gas composition, sputum analysis, BC and atypical cells, sputum analysis with determination of microflora and its sensitivity to antibiotics, spirogram, ECG, and if necessary - serological examination - determination of viral antigen titer, bronchoscopy, lung MRI.

3. Treatment at the hospital. Principles of treatment: antibacterial therapy with broad-spectrum antibiotics for 5 days, then sensitivity, bronchodilator, toxic-allergic and nodular therapy: euphyllinum, bromhexine; detoxification therapy; glucose and salt solutions, rheopolyglukin, plasma; immunocorrecting therapy (with the prolonged course): glucocorticoids, interferon, levamisolum, immunoglobulins.

Symptomatic treatment: antipyretic. The development of heart failure: cardiac glycosides, diuretics, vascular, sulfocamphocaine, cordiamin; with the development of infectious-toxic shock: haemodes, albumin, prednisone, sympathomimetic, correction of metabolic acidosis, suppression of DIC-syndrome; when you exit the acute stage of the disease: physiotherapy treatment (inhalation of alkalies, bronchodilators, calcium chloride, electrophoresis, UHF, inductotherm, magnet, halo chamber), physical therapy.

4. Favorable.

1.3 Sample of Tests.

Purpose of digitalis in atrial fibrillation is to:

a) Depress vagus nerve

*b) Slow ventricular rate

c) Slow atrial rate

d) Restore sinus rhythm

P-wave is absent in

a) Wolff-Parkinson-White syndrome

*b) Atrial fibrillation

c) Ventricular extrasystole

d) Atrial Tachycardia

Duration of pain in angina is

*a) 1-10 mins

b) 5-30 mins

c) 30-60 mins

d) > 1 hour

1.4. Sample of case history:

The student chooses the nosological form, writes the history of the disease (with the further presentation) according to the proposed scheme.

The main stages of writing educational history:

Title page (separate page)

1. Passport part.
2. Complaints: the main complaints and those found when examining the organ systems.
3. Anamnesis of the main and concomitant diseases.
4. Anamnesis of life.
5. Data from the objective survey of the patient.
6. Justification of the preliminary diagnosis and its formulation.
7. Survey plan.
8. Data of laboratory and instrumental researches, consultations.
9. Final clinical diagnosis (rationale and formulation).
10. Treatment of the underlying disease (only for the educational history of the disease).Treatment of the patient and his rationale.
11. The diary of supervision.
12. Epicrisis.

1.5. Analysis of patient's electrocardiograms (ECG):

I. Analysis of heart rate and conductivity:

1) assessing heart rate

2) counting the number of heartbeats

3) determining the excitation source

4) evaluating the conductivity function

II. Determination of the heart turns around the anteroposterior, longitudinal and transverse axes.

1) determining electric axis of the heart.

2) determining the electrical position of the heart.

III. Analysis of the atrial R peak.

IV. Analysis of the ventricular complex QRS-T:

1) Analysis of the QRS complex

2) Analysis of the RS-T segment

3) Analysis of T wave

4) QT interval analysis

V. ECG conclusion

1.6. Essay Topics

1. Pneumonia in the hospital
2. Pulmonary edema
3. Lung cancer in old age
4. Complication of myocardial infarction
5. Cardiogenic shock
6. Status asthmaticus
7. Hypertensive crisis

Stage: midterm assessment (credit / mark) 7th term

Midterm assessment is carried out in the form of credit-with-mark. Tasks for the credit-with-mark includes case history of the disease.

Tasks for competence assessment «Knowledge», «Abilities»	Task type
1. Case history of the disease 1. Passport part. 2. Complaints: the main complaints and those found when examining the organ systems. 3. Anamnesis of the main and concomitant diseases. 4. Anamnesis of life. 5. Data from the objective survey of the patient. 6. Justification of the preliminary diagnosis and its formulation. 7. Survey plan. 8. Data of laboratory and instrumental researches, consultations. 9. Final clinical diagnosis (rationale and formulation). 10. Treatment of the underlying disease (only for the educational history of the disease).Treatment of the patient and his rationale. 11. The diary of supervision. 12. Epicrisis.	- theoretical - practical

Midterm assessment (exam) 8th term

Midterm assessment is carried out in the form of exam. The exam is held in the oral form. Tasks for the exam include two questions for **Oral quiz** and one Case – study.

Tasks for competence assessment «Knowledge»	Task type
List of points for **oral quiz:** 1. Pneumonia: definition. Etiology. Pathogenesis. Classification. Clinical picture. 2. Types of Pneumonia. Diagnostics. Principles of treatment. Complications. Prevention. 3. Chronic bronchitis: definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment.	-theoretical

4. COPD: definition. Etiology, the most important mechanisms of pathogenesis. Classification. Clinical picture. Principles of treatment. Forecast. 5. Abscess and gangrene of the lungs: definition. Etiology. Pathogenesis. Clinical picture. Principles of treatment. Prevention. Indications for surgical treatment. 6. Bronchial asthma. Definition. Etiology, basic mechanisms of pathogenesis. Classification. 7. Bronchial asthma. Clinical picture. Diagnostics. Principles of treatment. 8. Status asthmaticus. Definition. Clinical picture. Stages. Diagnostics. Principles of intensive care. 9. Lung cancer. Risk factor. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment. 10. Acute rheumatic fever. Definition. Etiology, basic mechanisms of pathogenesis. Classification. Clinical picture. Diagnostics. Principle of treatment. 11. Atherosclerosis. Definition. Pathogenesis. Clinical picture. Diagnostics. Principles of treatment 12. Acute coronary syndrome. Definition. Causes and risk factors. Pathogenesis. Classification. Diagnostics. 13. Angina. Definition. Classification. Clinical picture. Diagnostics. Principles of treatment. 14. Heart attack. Definition. Pathogenesis. Clinical picture. Diagnostics. Principles of treatment. 15. Cardiogenic shock. Definition. Classification. Clinical picture. Diagnostics. Principles of treatment. 16. Pulmonary edema. Definition. Classification. Clinical picture. Diagnostics. Principles of treatment. 17. Heart attack. Early and late complications. Classification of acute heart failure. Principles of treatment. 18. Hypertensive disease. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment. 19. Hypertensive crisis. Definition. Classification. Clinical picture. Diagnostics. Principles of treatment. Prevention. 20. Mitral valve insufficiency: definition, etiology. Hemodynamic changes. Clinical picture. Diagnostics. Principles of treatment. 21. Mitral stenosis. Etiology. Hemodynamic changes. Clinical picture. Diagnostics. Principles of treatment. 22. Insufficiency of the aortic valve. Organic and relative insufficiency. Etiology. Hemodynamic changes. Clinical picture. Diagnostics. Principles of treatment. 23. Aortic stenosis. Etiology. Hemodynamic changes. Clinical picture. Principles of treatment. Indications for surgical treatment. Forecast. 24. Chronic heart failure. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Principles of treatment. 25. Infective endocarditis. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment.	

26. Arrhythmias. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment 27. Fibrillation. Features of etiology and pathogenesis. Classification. Clinical picture. Diagnosis. Principles of treatment. 28. Extrasystole. Features of etiology and pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment. 29. Atrioventricular conduction abnormalities. Features of etiology and pathogenesis. Classification. Clinical picture. ECG diagnostics. Principles of treatment. 30. Intraventricular conduction abnormalities. Features of etiology and pathogenesis. Classification. Clinical picture. ECG diagnostics. Principles of treatment 31. Iron-deficiency anemia. Etiology. Pathogenesis. Clinical picture. Diagnostics. Principles of treatment. 32. Chronic myelogenous leukemia. Risk factor. Pathogenesis. Classification. Clinical picture. Diagnostics. Principle of treatment. Forecast. 33. Chronic lymphocytic leukemia. Risk factor. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment. Forecast. 34. Diseases of the esophagus. Definition of esophagitis, hiatal hernia, esophageal achalasia, Barrett's esophagus. Risk factor. The main clinical syndromes. Diagnostic tactics. Principles of treatment. 35. Dyskinesia of esophagus. Definition. Etiology. Pathogenesis. Clinical picture. Diagnostics. Principles of treatment. 36.Chronic gastritis. Etiology. Classification. Clinical picture. Diagnostics. Principles of treatment. Forecast. 37.Gastric and duodenal ulcer. Definition. Causes and risk factors. Pathogenesis. Classification. 38.Gastric and duodenal ulcer. Clinical picture. Diagnostics. Principles of treatment. Forecast. 39.Gastric and duodenal ulcer. Complications. Clinical picture. Principles of treatment. Indications for surgical treatment. 40.Stomach cancer. Risk factor. Classification. Clinical picture. Diagnostics. Principles of treatment. 41.Chronic hepatitis. Etiology. Pathogenesis. Clinical picture. 42.Chronic hepatitis. Diagnostics. Principles of treatment. Forecast 43.Chronic enteritis. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment. 44.Chronic colitis. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment. 45.Colorectal cancer. Risk factor. Classification. Clinical picture. Diagnostics. Principles of treatment. 46.Chronic pancreatitis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principle of treatment. 47.Dysfunction of the biliary tract. Definition. Etiology. Pathogenesis. Clinical picture. Diagnostics. Principles of treatment. 48.Chronic cholecystitis: definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principles of treatment.	

49.Cirrhosis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. 50.Cirrhosis. Diagnostics. Principles of treatment. 51.Chronic opisthorchiasis. Way of infection. Classification. Clinical picture. Diagnostics. Principles of treatment. Prevention. 52.Cholelithiasis. Etiology. Pathogenesis. Clinical picture. Diagnostics. Complications. Principle of treatment.Indications for surgical treatment. 53.Acute glomerulonephritis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Current state and outcomes. Principle of treatment. 54.Chronic glomerulonephritis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Current state and outcomes. Principle of treatment 55.Tubulointerstitial nephritis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Treatment 56.Chronic pyelonephritis. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Principle of treatment. 57.CKD. Definition. Etiology. Pathogenesis. Classification. Early and late syndromes. Principles of treatment. Indications for renal replacement therapy. 58. Rheumatism. Acute rheumatic fever. Definition. Etiology. Pathogenesis. Classification. Clinical picture. Diagnostics. Treatment.	
Tasks for competence assessment «Abilities»	**Task type**
Sample of Case-study: Male, 65 years old, cook. He complains to the fever up to 39 °C, shortness of breath when walking, chest pain, and cough with sputum, headache, malaise, sweating. <u>From the anamnesis of the disease.</u> Acutely ill. Three days ago at work he felt chills, fever up to 39-40 °C, cough with a small amount of sputum, sweating, and weakness. Taking antipyretics gave no effect. After 2 days, he noted the shortness of breath during exercising, increased weakness, and the patient went to the district doctor, who sent him to the hospital. <u>Objectively.</u> Satisfactory condition. Consciousness is clear. The patient is excited. BMI is 35 kg/m2. The skin is pale, cyanosis of the lips. Peripheral lymph nodes are not enlarged. The shape of the chest is correct; the right half of the chest lags is far behind when breathing. In the right lower parts of the lungs is swelling of intercostal spaces. On percussion of the lower parts of the right lung (from XI to IX ribs), dull percussion sound is heard. On auscultation of the right lower parts of the lungs, breathing is not carried out. The respiration rate is 18-20 per minute. Heart tones are muffled, the rhythm is wrong. Systolic murmur is at the top. BP is 135/90 mm. hg art. Heart rate is 120 per minute. Pulse is 120 beats/min. The abdomen is soft, painless. The size of the liver by Kurlov is 9;8;7. Swelling is not observed. Defecation is normal. <u>Laboratory and instrumental studies:</u> Common blood test: Hb - 135 g/l; red blood cells - 4.7 × 10^{12}/l; leukocytes - 15 × 10^{9}/l; ESR - 45 mm/h. Biochemical blood test: ALAT – 55 mol/l; AAT – 58 mol/l.	-practical

X-Ray: intense homogeneous darkening in the lower part of the right lung to the level of the IVc. Pleural effusion: relative density-1025; protein-2.1 g/l; leukocytes – 8-10 in p/h; erythrocytes 2-4 in p/h; mesothelium 3-6 in p/h; leukocyte formula: neutrophils – 97%, lymphocytes – 3%.	

METHODOLOGICAL GUIDELINES FOR LEARNING OUTCOMES ASSESSMENT

Stage: Formative assessment

Formative assessment is a regular checking of student academic progress during the academic term. It is performed in various oral and written forms (quizzes, essays, checking of home assignments, compilation of cases, self-study, colloquiums, and testing). During formative assessment, the teacher monitors the level of student's academic progress according to the curriculum identifying lack of knowledge, or misunderstanding.

The tasks of formative assessment are aligned with the Curriculum and Syllabus.

1. Guidelines for assessing the oral or written quiz:

In assessing the teacher takes into account:

- knowledge and understanding of the subject matter;

- activity during the class;

- consistency of presentation;

- argumentation of the answer, the level of independent thinking;

- ability to link theoretical and practical principles with future professional activity.

Assessment criteria:

The results are assessed in a four-grading scale: "excellent", "good", "satisfactory", "unsatisfactory".

Type of the task	Assessed competences	Assessment criteria	Grade
oral or written quiz	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student demonstrates a comprehensive, systematic and in-depth knowledge of the academic material; has learned the required and additional resources. The student demonstrates a consistent and thorough understanding of the required knowledge, concepts,	Excellent

		skills of the material learned, and their significance for future profession.	
		The student demonstrates a comprehensive knowledge of the academic material; has learned the required and additional resources. The student demonstrates a consistent understanding of the required knowledge, concepts, skills of the material learned, but makes minor errors.	Good
		The student demonstrates basic knowledge necessary for further study; has learned basic recommended literature. The student operates with inaccurate formulating, has difficulties in the independent answers, makes significant mistakes but is able to correct them under the guidance of a teacher.	Satisfactory
		The student does not know the obligatory minimum or demonstrates gaps in knowledge of the academic material, makes major mistakes or gives completely wrong answers.	Unsatisfactory

2. Guidelines for case-study assessment:

Assessment criteria:

The results are assessed in a four-grading scale: “excellent”, “good”, “satisfactory”, “unsatisfactory”.

Type of the task	Assessed competences	Assessment criteria	Grade
Case - study	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student correctly and solves the case-study task, demonstrating deep knowledge. There are no errors in logical reasoning and solution, the problem is solved in a rational way. The right answer is obtained, ways are clearly described.	Excellent
		The student correctly solves the case-study task, demonstrating deep knowledge. There are minor errors in logical reasoning and solution, the problem is solved in a rational way. The right answer is obtained, ways are clearly described.	Good
		The student correctly solves the case-study task, demonstrating basic knowledge. There are significant errors in logical reasoning and solution. The student demonstrates difficulties, but still is able to solve a case-study task.	Satisfactory
		The student incorrectly solves the case-study task, makes significant mistakes. The student is not able to solve a case-study.	Unsatisfactory

3. Guidelines for test assessment.

Assessment criteria:

The results are assessed in a four-grading scale: “excellent”, “good”, “satisfactory”, “unsatisfactory”.

Type of the task	Assessed competences	Assessment criteria	Grade
Test	PC-1.1 PC-1.2 PC-3.1 PC-3.2	80 – 100%	Excellent
		66 – 80%	Good
		46 – 65%	Satisfactory
		Less Than 46%	Unsatisfactory

4. Guidelines for the assessment of practical skills:

Assessment of practical skills based on simulation or participation of third parties may include a demonstration of manipulation, response to the questions of the task;

- assessment of practical skills at the bedside may include a demonstration of detection and / or interpretation of signs, symptoms, methods of examination and treatment;

-the task may include a brief introduction, questions, and list of practical skills for demonstration (according to Curriculum).

In assessing the teacher takes into account:

- knowledge and understanding of the subject matter;

- ability to apply theoretical knowledge into practice;

- the level of formed practical skills;

- reasoning and response style;

- rationale for data selection, additional tests, differential diagnosis and/or choice of treatment, level of clinical thinking.

Assessment criteria:

The results are assessed in a four-grading scale: “excellent”, “good”, “satisfactory”, “unsatisfactory”.

Type of the task	Assessed competences	Assessment criteria	Grade
Practical skills	PC-1.1 PC-1.2 PC-3.1 PC-3.2	The student correctly demonstrates practical skills on the model with a deep knowledge of the material. There are no mistakes in the demonstration and the used technique. The indications and conditions used in this method are clearly described.	Excellent
		The student demonstrates practical skills on the model with slight inaccuracies. There are insignificant mistakes in the demonstration and the used technique. The indications and conditions used in this method are clearly described.	Good
		The student demonstrates practical skills on the model with inaccuracies. There are significant mistakes in the demonstration and the used technique. The indications and conditions used in this method are clearly described.	Satisfactory
		The student demonstrates practical skills on the model with significant mistakes. The indications and conditions used in this method are not described.	Unsatisfactory

5. Guidelines for the case history assessment:

In assessing the teacher takes into account:

- knowledge and understanding of the subject matter;
- compliance of the case history with the methodological requirements of the department;
- literacy, logic, and style of writing;
- reasoning and interpretation of additional survey data;
- differential diagnosis and/or its rationale, choice of treatment, practical recommendations;
- level of independent thinking;
- ability to link theory and practice.

The criteria for case history assessment:

1. The subjective examination of the patient (complaints, anamnesis).

2. The objective examination of the patient.

3. Planning and interpreting additional methods of examination.

4. Differential diagnosis, clinical diagnosis, its rationale.

5. Purpose of treatment.

6. Epicrisis.

Assessment criteria:

The results are assessed in a four-grading scale: “excellent”, “good”, “satisfactory”, “unsatisfactory”.

Type of the task	**Assessed competences**	**Assessment criteria**	**Grade**
Case history	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student demonstrates a comprehensive, systematic and deep knowledge of material, the ability to gather complaints, anamnesis, to conduct an objective examination of the patient, to assign additional methods of examination for this pathology, to conduct a differential diagnosis and make diagnosis, prescribe treatment in accordance with modern concepts of medical science, use the main and additional literature.	Excellent
		The student demonstrates a comprehensive and systematic knowledge of material, the ability to gather complaints, anamnesis, to conduct an objective examination of the patient, to assign additional methods of examination for this pathology, to conduct a differential diagnosis and make diagnosis, prescribe treatment in accordance with modern concepts of medical science, use the main and additional literature. The student makes single mistakes in medical terminology, single stylistic mistakes and inconsistences in the text, inaccuracies of subjective or objective examination of the patient. The student demonstrates insufficient ability to use the data of objective examination in the formulation and solving therapeutic and diagnostic problems.	Good
		The student demonstrates a basic knowledge required for further study, the ability to gather complaints, anamnesis, to conduct an objective examination of the patient, to assign additional methods of examination for this pathology, to conduct a differential diagnosis and make diagnosis, prescribe treatment in accordance	Satisfactory

		with modern concepts of medical science, use the main and additional literature. The student makes multiple mistakes in medical terminology, multiple stylistic mistakes and inconsistences in the text, errors of subjective or objective examination of the patient. The student demonstrates insufficient ability to use the data of objective examination in the formulation and solving therapeutic and diagnostic problems, but has abilities to eliminate the mistakes under the guidance of a teacher.	
		The student has significant gaps in knowledge of the basic material, has made fundamental mistakes in examining a patient, is not able to make a differential diagnosis, assign diagnostic and therapeutic measures for the pathology.	Unsatisfactory

6. **Guidelines for assessing patient's electrocardiograms (ECG):**

Type of the task	Assessed competences	Assessment criteria	Grade
Analysis of ECG results assessment	PC-1.1 PC-1.2 PC-3.1 PC-3.2	The analysis of ECGs results was carried out according to all criteria, and the pathology was identified correctly.	Excellent
		The student demonstrates knowledge of electrocardiograms analysis, but there are minor inaccuracies. The main parameters of ECG assessment are identified and analyzed, the pathology is verified correctly.	Good
		The student makes significant inaccuracies, has an insufficient knowledge of the academic material, and makes significant mistakes in analyzing ECGs results. He**\ she** isn't able to identify pathologies.	Satisfactory
		The student does not know the algorithm of ECGs assessment, makes significant mistakes in analyzing ECGs results and isn't able to identify pathologies.	Unsatisfactory

7. Essay requirements:

1) Volume: 1500-3000 words,

2) Contents structure:

• Introduction

- prove the relevance of the chosen topic

- point out the purpose of the essay

- give a summary of the main points

• Body

- use information obtained from different sources during the research

- show inaccuracy of the opposite points of view

• Conclusion

• List of references

The essay assumes usage of several specialized sources (at least 8-10 publications, monographs, the reference media, manuals). Preference is given to the publications in specialized medical journal and monographs including foreign databases.

Assessment criteria:

The results are assessed in a four-grading scale: “excellent”, “good”, “satisfactory”, “unsatisfactory”.

Type of the task	Assessed competences	Assessment criteria	Grade
Essay	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The requirements are fulfilled: - the problem is formulated and its relevance is proved; - the various approaches to problem are presented; - conclusions are formulated; - the subject is thoroughly studied; - volume is observed; - design requirements are observed; - correct answers to additional questions are given.	Excellent
		The main are fulfilled with some mistakes: - inaccuracies in material statement; - no logical sequence in judgments; - volume is not observed; - errors in design requirements; - incomplete answers are given to additional questions in the process of defense.	Good
		There are significant deviations from requirements: - topic is only partially explored; - mistakes in contents of the paper; - mistakes in answers to additional questions; - no conclusion is given at the process of defense.	Satisfactory

		The essay is not prepared at all. The subject of the essay is not explored, significant misunderstanding of a topic.	Unsatisfactory

Stage: midterm assessment (credit / mark)

Midterm assessment is carried out in the form of credit-with-mark. Tasks for the credit-with-mark includes one **Case history of the disease:**

Requirements for the student:

- to attend classroom classes regularly; skipping classes is not allowed without a good reason;
- in case of missing the lesson, the student must be ready to answer the questions of the teacher on the topic of the class he/she missed;
- to hand over written papers on time and to make sure they are credited;
- preparing for the next class, the student must read the relevant textbooks, manuals, monographs, etc., and be ready to demonstrate their knowledge; student's participation in the discussion is taken into account and assessed;
- in case the student has not mastered the necessary material or has not understood something, he/she should attend consultation sessions;
- preparation for one theoretical question is 5-7 minutes;

- the second stage is the demonstration of a practical skill. The student has to describe indications and conditions and demonstrate technique on the model.

Midterm assessment (credit / mark) is assessed in a four-grading scale

Type of the task	Assessed competences	Assessment criteria	Grade
Case history	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student demonstrates a comprehensive, systematic and deep knowledge of material, the ability to gather complaints, anamnesis, to conduct an objective examination of the patient, to assign additional methods of examination for this pathology, to conduct a differential diagnosis and make diagnosis, prescribe treatment in accordance with modern concepts of medical science, use the main and additional literature.	Excellent
		The student demonstrates a comprehensive and systematic knowledge of material, the ability to gather complaints, anamnesis, to conduct an objective examination of the patient, to assign additional methods of examination for this pathology, to conduct a differential diagnosis and make diagnosis, prescribe treatment in accordance with modern concepts of medical science, use the main and additional literature.	Good

		The student makes single mistakes in medical terminology, single stylistic mistakes and inconsistences in the text, inaccuracies of subjective or objective examination of the patient. The student demonstrates insufficient ability to use the data of objective examination in the formulation and solving therapeutic and diagnostic problems.	
		The student demonstrates a basic knowledge required for further study, the ability to gather complaints, anamnesis, to conduct an objective examination of the patient, to assign additional methods of examination for this pathology, to conduct a differential diagnosis and make diagnosis, prescribe treatment in accordance with modern concepts of medical science, use the main and additional literature. The student makes multiple mistakes in medical terminology, multiple stylistic mistakes and inconsistences in the text, errors of subjective or objective examination of the patient. The student demonstrates insufficient ability to use the data of objective examination in the formulation and solving therapeutic and diagnostic problems, but has abilities to eliminate the mistakes under the guidance of a teacher.	Satisfactory
		The student has significant gaps in knowledge of the basic material, has made fundamental mistakes in examining a patient, is not able to make a differential diagnosis, assign diagnostic and therapeutic measures for the pathology.	Unsatisfactory

Stage: midterm assessment (exam)

Methodological guidelines for summative assessment (exam)

Examination is held in the oral form and includes several stages:

- oral quiz (the card includes two questions);

- case-study

Requirements for the student:

1) regularly attend classes; the absence from classes is not allowed without good reason;

2) in case of absence from classes the student has to work out passed classes;

3) the student has to hand over written papers on time;

4) the student has successfully passed all colloquiums provided by the plan;

5) in case the student has been negatively assessed on the colloquium, he/she should try to pass it again;

6) during the test week the student has to hand over all the tasks (clinical case).

The students are allowed to take examinations in case of all the tests passed and no academic debts (on the basis of the academic records).

The students are not allowed to take examination:

- with unpassed tests on the discipline;

- with missed classes, debts on the discipline;

- with 5 (five) and more debts for the previous term;

- with one debt for earlier terms for more than a year.

Recommendations for the examination assessment:

Type of the task	Assessed competences	Assessment criteria	Grade
Oral quiz	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student demonstrates comprehensive, systematic and profound knowledge of the subject, can independently perform the tasks provided by the program; who has a good knowledge of the main literature and familiar with the additional literature recommended by the program; demonstrates creative abilities in understanding, statement and use of material of the studied discipline, faultlessly answers not only questions of the card, but also additional questions within the main program, correctly performs a practical task.	Excellent
	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2	The student has good knowledge of material of the studied discipline; can successfully perform the	Good

	PC-5.4	tasks provided by the program; has a good knowledge of the main literature recommended by the program; answers all questions of the card, correctly performs a practical task, but makes some mistakes.	
	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student demonstrates knowledge of material for further study; can cope with the tasks provided by the program; familiar with the main recommended literature; makes mistakes when performing examination tasks, but has necessary knowledge for their elimination under the supervision of the teacher.	Satisfactory
	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student demonstrates poor knowledge of the material, makes significant mistakes in performance of the tasks provided by the program.	Unsatisfactory
Case - study	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student correctly and fully solves the case-study task, demonstrating deep knowledge. There are no errors in logical reasoning and solution, the problem is solved in a rational way. The right answer is obtained, ways are clearly described.	Excellent
	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student correctly solves the case-study task, demonstrating deep knowledge. There are minor errors in logical reasoning and solution, the problem is solved in a rational way. The right answer is obtained, ways are clearly described.	Good
	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student correctly solves the case-study task, demonstrating basic knowledge. There are significant errors in logical reasoning and solution. The student demonstrates difficulties, but still is able to solve a case-study task.	Satisfactory
	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	The student incorrectly solves the case-study task, makes significant mistakes. The student is	Unsatisfactory

		not able to solve a case-study.	

Chart of the examination grade assessment:

Tasks	Assessed competences	Grade	Score
Theoretical point № 1 (Oral quiz)	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	Excellent	5
		Good	4
		Satisfactory	3
		Unsatisfactory	2
Theoretical point № 2 (Oral quiz)	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4	Excellent	5
		Good	4
		Satisfactory	3
		Unsatisfactory	2
Practical task (case studies)	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4 PC-8.1 PC-8.2 PC-8.3	Excellent	5
		Good	4
		Satisfactory	3
		Unsatisfactory	2
Total	PC-1.1 PC-1.2 PC-3.1 PC-3.2 PC-3.3 PC-3.4 PC-5.1 PC-5.2 PC-5.4 PC-8.1 PC-8.2 PC-8.3	Excellent	15-14
		Good	13-12
		Satisfactory	11-10
		Unsatisfactory	7-6