

MINISTRY OF HEALTH OF UKRAINE
Kharkiv National Medical University
Department of Internal Medicine № 1

academic year 2021 -2022

SYLLABUS OF THE COURSE
"INTERNAL MEDICINE"
for 6th year students

Branch of knowledge – 22 «Health Care»
Speciality – 222 «Medicine»
Specialization – «Master of medicine»
Educational-professional program Medicine of the second (master's) level of higher education

The syllabus was approved at the methodical meeting of the Department of Internal Medicine №1

The syllabus was approved at the meeting of the methodical commission of KhNMU on the problems of therapeutic disciplines

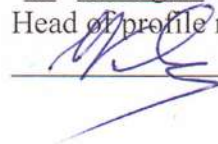
Protocol № 14 from
"30" of August 2021

Acting head of Department

 professor N. M. Zhelezniakova

Protocol № 1 from
"31" of August 2021

Head of profile methodical commission

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Information about consultations. Eye consultations: schedule and venue according to the schedule of the department. Online consultations: by prior arrangement with the teacher.

Location: auditorium and classrooms of the Department of Internal Medicine №1 on the basis of the Government Institution "National Institute of Therapy named by L.T. Malaya of National Ukrainian Academy of Medical Science" (2a L. Malaya Ave.).

Class time: Monday, Tuesday, Wednesday, Thursday, Friday (8 00-12 15/8 00-13 10 according to the schedule).

Introduction

The syllabus of the study of the discipline "Internal Medicine" is compiled in accordance with the Educational and Professional Program "Medicine" and the draft Standard of Higher Education of Ukraine (hereinafter - the Standard), second (master's) level, field of knowledge 22 "Health", specialty 222 "Medicine" "

1. Description of the discipline

Course 6

Specific semester / academic year XI-XII semesters

The course "Internal Medicine" for 6th year students include studying the basics of internal medicine with an emphasis on skills of anamnesis collection, physical examination, differential diagnosis, basic treatment and prevention of cardiovascular, rheumatology, gastroenterology and pulmonology diseases in a therapeutic clinic.

Internal medicine is one of the basic disciplines in the training of physicians of any profile who study the patterns and features of pathogenesis, clinical course of digestive system diseases using an interdisciplinary approach to their treatment, as well as rehabilitation processes after severe pathological conditions, their main preventive ways and methods.

Course page in the Moodle system – Department of Internal Medicine № 1

The purpose of studying the course "Internal Medicine" for 6th year students is to acquire and expand the range of knowledge, skills, abilities and other competencies in internal medicine, which are necessary in professional activities and established on the basis of educational-professional program.

The main tasks of studying the course "Internal Medicine" for 6th year students are:

- training of student with formation of professional problems decision skills according to kinds of professional activity (preventive, diagnostic, medical, rehabilitation);
- development of students' skills of interviewing and clinical examination of patients, interpretation of the results of routine and special laboratory and instrumental methods of organs and systems diagnostics;
- formation in students of skills of statement, substantiation and formulation of the diagnosis, planning of patient's examination, determination of their management tactics;

- formation of students' skills to carry out prevention, treatment and rehabilitation of the patient, to appoint and directly carry out treatment of patients in hospitals and outpatient stages;
- formation of skills of medical history and ambulatory card registration with the statement of all their basic sections, substantiation of the clinical diagnosis, the examination and treatment plans, definition of working capacity and indications for hospitalization, keeping diaries and registration of stage epicrisis while working with therapeutic patients.

3. Course status - normative, **course format** - mixed (combination of traditional forms of classroom learning with elements of e-learning on the platforms Moodle, ZOOM, Google Meet).

Competences and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

According to the requirements of the standard, the discipline provides acquisition by students competencies:

integral:

Ability to solve typical and complex specialized problems and practical problems in a professional health care activity, or in a learning process that involves research and / or innovation and is characterized by the complexity and uncertainty of conditions and requirements.

General:

1. Ability to apply knowledge in practical situations
2. Knowledge and understanding of the subject area and understanding of the profession
3. Ability to self-regulate and lead a healthy lifestyle, the ability to adapt and act in a new situation
4. Ability to choose a communication strategy; ability to work in a team; interpersonal skills
5. Ability to communicate in the native language both orally and in writing; ability to communicate in a second language
6. Skills in the use of information and communication technologies
7. Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained
8. Ability to apply knowledge in practical situations
9. Ability to evaluate and ensure the quality of work performed;
10. Definiteness and perseverance in terms of tasks and responsibilities
11. Ability to act socially responsible and socially conscious
12. The desire to preserve the environment

Special (Professional, Subject):

1. Ability to establish a preliminary clinical diagnosis of the disease
2. Patient information gathering skills
3. Ability to evaluate the results of laboratory and instrumental research
4. Ability to determine the principles and nature of disease treatment
5. Ability to diagnose emergencies
6. Ability to carry out medical and evacuation measures
7. Ability to determine the tactics of emergency medical care
8. Emergency care skills
9. Skills to perform medical manipulations
10. Ability to determine the required mode of work and rest in the treatment of diseases
11. Ability to determine therapeutic nutrition in the treatment of diseases
12. Ability to determine the tactics of physiological childbirth and the postpartum period
13. Ability to carry out sanitary and hygienic and preventive measures
14. Ability to plan preventive and anti-epidemic measures for infectious diseases
15. Ability to carry out preventive and anti-epidemic measures against infectious diseases
16. Ability to determine the tactics of contingent of persons subject to dispensary supervision
17. Ability to conduct a performance examination
18. Ability to keep medical records
19. Ability to process state, social, economic and medical information
20. Ability to take measures to organize and integrate medical care

21. Ability to conduct epidemiological and medical-statistical studies of public health
22. Ability to assess the impact of the environment on the health of the population (individual, family, population)
23. Ability to assess the impact of socio-economic and biological determinants on the health of the individual, family, population
24. Ability to analyze the activities of a doctor, department, health care institution
25. Ability to take measures to ensure the quality and safety of medical care
26. Ability to take measures to improve resource efficiency
27. Ability to market medical services

Learning outcomes: formation in students

- ability to effectively use knowledge of etiology, pathogenesis, clinical picture, features of the course and possible complications, modern methods of clinical, laboratory, instrumental examination of patients and methods of treatment and indications for their use;
- ability to independently master new knowledge and update and integrate acquired knowledge;
- ability to assess the role of new approaches to diagnosis and treatment in therapeutic practice.

Discipline status - normative, discipline format - mixed (combination of traditional forms of classroom learning with elements of e-learning on the platform Moodle, ZOOM, Google Meet.)

Description of the discipline

Name of indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the discipline full-time education
Number of credits 11.5	branch of knowledge 22 Healthcare	Нормативна
The total number of hours is 345	222 "Medicine"	Year - 6th
		Semester: 11-12th
Hours for full-time study: classes - 210 independent work of the student - 135	The second (master's) level	Practical 210
		Independent work - 135
		Type of control: differentiated credit

Practical classes

№	Topic	Number of hours	Teaching methods	Forms of control

1.	Management of patients with arterial hypertension	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
2.	Management of patients with hypertensive crisis	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
3.	Management of patients with chronic chest pain	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
4.	Management of patients with acute chest pain	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
5.	Management of patients with acute coronary syndrome	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

6.	Management of cardiac and respiratory arrest	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
7.	Management of patients with disturbances of heart rhythm	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
8.	Management of patients with cardiac conduction disturbances	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
9.	Management of patients with paroxysmal arrhythmias	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
10.	Management of patients with edematous syndrome	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

11.	Management of patients with dyspnea. Management of a patient with comorbid pathology in the context of the COVID-19 pandemic	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
12.	Management of patients with pulmonary hypertension	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
13.	Management of patients with pulmonary embolism	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
14.	Management of patients with cardiomegaly	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
15.	Management of patients with heart murmurs	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

16.	Management of patients with chronic heart failure	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
17.	Management of patients with acute heart failure	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
18.	Management of patients with arterial hypotension and syncope	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
19.	Management of patients with shock	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
20.	Management of patients with pain in the extremities and back	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

21.	Management of patients with articular syndrome	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
22.	Management of patients with fever uncertain origin	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
23.	Management of patients with weight loss	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
24.	Management of patients with heartburn, dysphagia and dyspepsia	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
25.	Management of patients with abdominal pain	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

26.	Management of patients with chronic diarrhea syndrome	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
27.	Management of patients with constipation	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
28.	Management of patients with melena and haematemesis	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
29.	Management of patients with jaundice	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
30.	Management of patients with hepatomegaly and hepatosplenomegaly syndrome	5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

31.	Management of patients with portal hypertension and ascites	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
32.	Management of patients with acute hepatic encephalopathy	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
33.	Management of patients with coma	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
34.	Management of patients with pulmonary infiltrates	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
35.	Management of the patient with chronic cough and bronchoobstructive syndrome	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;

36.	Management of the patient with cyanosis	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
37.	Management of the patient with hemoptysis	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
38.	Management of patients with pleural effusion	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
39.	Supervision of patients with acute respiratory failure	6	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion, round table, business, role-playing, simulation game, simulation of processes and situations, delegation of authority, case method	oral examination (individual and frontal); written survey; test control; creative tasks; individual tasks;
40.	Report of medical history protocol	5		diff. test
	Final control	1		
		210		

SELF-WORK

№	Topic	Hours		
1.	Preparation for practical classes on the topic №1 «Management of patients with hypertension." - Improvement of the method of registration and interpretation of ECG, measurement of blood pressure and interpretation of the received data. - Improvement of interpretation of data of laboratory methods (creatinine of blood, glomerular filtration rate, blood electrolytes).	3	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
2.	Preparation for practical classes on the topic №2 «Management of the patient with hypertensive crisis." - Improvement of the method of measurement of arterial pressure and interpretation of the data.	3	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
3.	Preparation for practical classes on the topic №3 «Management of patients with chronic chest pain» class - Improving the interpretation of ECG and the results of a test with metered physical activity. - Improvement of the interpretation of the results of laboratory methods of examination (lipid blood spectrum).	3	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
4.	Preparation for practical classes on the topic №4 «Management of patients with acute chest pain."	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;

	<ul style="list-style-type: none"> - Improving the interpretation of the ECG on the topic. - Improvement of the interpretation of data from the X-ray examination of the chest organs on the topic. - Improvement of interpretation of the results of laboratory tests (biochemical markers of myocardial necrosis, coagulogram, D-dimer). 			
5.	<p>Preparation for practical classes on the topic №5 «Management of patients with acute coronary syndrome.»</p> <ul style="list-style-type: none"> - Improving the methodology of registration and interpretation of ECG on the topic. - Improvement of the interpretation of laboratory test data (biochemical markers of myocardial necrosis). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
6.	<p>Preparation for practical classes on the topic №6 «Management of cardiac and respiratory arrest.»</p> <ul style="list-style-type: none"> - Improvement of the algorithm of mechanical ventilation and indirect cardiac massage during stopping of blood circulation and respiration. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
7.	<p>Preparation for practical classes on the topic №7 «Management of patients with disturbances of heart rhythm.»</p> <ul style="list-style-type: none"> - Improvement of ECG interpretation in case of disturbances of heart rhythm. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	- Improving the interpretation of data from laboratory research methods (coagulogram).			
8.	Preparation for practical classes on the topic №8 «Management of patients with cardiac conduction disturbances." - Improvement of ECG interpretation in case of violations of cardiac conduction on the topic.	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
9.	Preparation for practical classes on the topic № 9 "Management of patients with paroxysmal arrhythmias ". - Improvement of the methodology of ECG interpretation on the topic. - Improved interpretation of coagulogram data.	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
10.	Preparation for practical classes on topic №10 "Management of patients with edematous syndrome". - Improvement of the interpretation of Doppler-echocardiography data on the topic. - Improvement of the interpretation of laboratory data (total bilirubin and its fractions, total protein and fractions, blood transaminases, creatinine, glomerular filtration rate).	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
11.	Preparation for practical classes on the topic № 11 "Management of patients with dyspnea. Management of a patient with comorbid pathology in the context of the COVID-19 pandemic".	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;

	<ul style="list-style-type: none"> - Improvement of the interpretation of Doppler-echocardiography data on the topic. - Improvement of the interpretation of CT-scan data on the topic 			
12.	<p>Preparation for practical classes on the topic № 12 "Management of patients with pulmonary hypertension".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of data Doppler-echocardiography on the topic. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
13.	<p>Preparation for practical classes on the topic № 13 "Management of patients with pulmonary embolism".</p> <ul style="list-style-type: none"> - Improving the interpretation of Echo-CG data and X-ray examination of the chest cavity on the topic. - Improvement of the interpretation of laboratory research data (coagulogram, gases of arterial and venous blood and indicators of the acid-base state of the blood). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
14.	<p>Preparation for the practical classes on the topic №14 "Management of patients with cardiomegaly"</p> <ul style="list-style-type: none"> - Improving the interpretation of Echo-CG data and X-ray examination of the chest cavity on the topic. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	<p>Improvement of the interpretation of the results of laboratory research methods (C-reactive peptide, biochemical markers of myocardial necrosis).</p> <p>- Improving the interpretation of the ECG on the topic.</p>			
15.	<p>Preparation for practical classes on topic №15 "Management of patients with heart murmurs".</p> <p>- Improvement of the interpretation of Doppler-echocardiography data on the topic.</p> <p>- Improvement of the interpretation of the X-ray examination of the chest organs on the topic.</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
16.	<p>Preparation for practical classes on topic №16 "Management of patients with chronic heart failure".</p> <p>- Improvement of the interpretation of Doppler-echocardiography data on the topic.</p> <p>- Improvement of the interpretation of the results of laboratory research methods (ascitic fluid analysis, coagulogram, creatinine blood, glomerular filtration rate, electrolytes of blood, concentration of natriuretic peptide in the blood).</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
17.	<p>Preparation for practical classes on the topic №17 "Management of patients with acute heart failure".</p> <p>- Improving the interpretation of Echo-CG data on the topic.</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

18.	<p>Preparation for practical classes on topic №18 "Management of patients with arterial hypotension, syncope"</p> <ul style="list-style-type: none"> - Improvement of the method of measurement of arterial pressure and interpretation of the data. - Improvement of the methodology of registration and interpretation of ECG and interpretation of the received data on the topic. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
19.	<p>Preparation for practical classes on the topic №19 "Management of patients with shock".</p> <ul style="list-style-type: none"> - Improvement of the method of registration and interpretation of ECG and Echo-CG on the topic. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
20	<p>Preparation for practical classes on topic №20 "Management of patients with pain in the extremities and back".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of data from the X-ray examination of the spine, chest and sacroiliac joints on the topic. - Improvement of interpretation of the results of laboratory research methods (immune status indicators, HLA-B27, CFK). ро сrарусу, HLA-B27, КФК). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
21.	<p>Preparation for practical classes on topic №21 "Management of patients with articular syndrome".</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	<ul style="list-style-type: none"> - Improvement of the interpretation of data from the X-ray examination of the joints on the topic. - Improvement of the interpretation of the results of laboratory tests (analysis of synovial fluid, general blood test, acute-phase blood parameters, uric acid, RF, ANA, ds-DNA). 			
22.	<p>Preparation for practical classes on topic №22 "Management of patients with fever uncertain origin".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of X-ray examination of the chest organs, ultrasound examination of the abdominal cavity on the topic. - Improvement of the interpretation of the results of laboratory tests (CBC, general urine analysis, bacteriological blood cultures, ANA, ds-DNA,). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
23.	<p>Preparation for practical classes on topic № 23 "Management of patients with weight loss".</p> <ul style="list-style-type: none"> - Improvement of interpretation of data of anthropometric survey methods (body mass measurement, body mass index, estimation of body weight loss, evaluation of component body composition). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	<p>- Improvement of the interpretation of laboratory test data (determination of protein pools: albumin, transferrin, transtirretin, retinol-binding protein, immunological studies: absolute number of lymphocytes, skin reaction to the antigen).</p>			
24.	<p>Preparation for practical classes on topic №24 "Management of patients with heartburn and dysphagiadyspepsia "</p> <p>- Improving the interpretation of GIT upper endoscopy data (EGDS) on the topic.</p> <p>- Improvement of the interpretation of the data of the examination of the secretory function of the stomach (daily pH monitoring).</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	
25.	<p>Preparation for practical classes on topic №25" Management of patients with abdominal pain".</p> <p>- Improvement of the data interpretation of the endoscopic examination of the digestive tract (EGDS, colonoscopy) on the topic.</p> <p>- Improving the interpretation of the results of biochemical blood studies (total protein of blood and its fractions, blood transaminases, total bilirubin and its fractions, alkaline phosphatase, alpha amylase, GGTP).</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

26.	<p>Preparation for the practical classes on topic № 26 " Management of patients with chronic diarrhea syndrome ".</p> <ul style="list-style-type: none"> - Improving the interpretation of GIT endoscopy data (colonoscopy) on the topic. - Improvement of the treatment of test results (with ¹³C-urine, ¹³C triglycerides, ¹³C-starch, ¹³C-lactose and a hydrogen test with glucose and lactulose). - Improving the interpretation of faecal elastase-1 data. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
27.	<p>Preparation for practical classes on the topic №27 " Management of patients with constipation".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of coprogram data. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
28.	<p>Preparation for practical classes on the topic №28 " Management of patients with melena and haematemesis".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of EGDS, colonoscopy results on the topic. - Improvement of the method of determining the blood group and the transfusion of blood components and blood substitutes. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
29.	<p>Preparation for practical classes on topic №29 " Management of patients with jaundice ".</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	<ul style="list-style-type: none"> - Improvement of interpretation of data of multi-moment duodenal sensing and microscopic and biochemical examination of bile. - Improvement of the interpretation of data of ultrasound examination of the liver, gallbladder and biliary tract on the topic. 			
30.	<p>Preparation for practical classes on the topic №30. "Management of patients with hepatomegaly and hepatosplenomegaly syndrome".</p> <ul style="list-style-type: none"> - Improved interpretation of the results of biochemical blood studies (total bilirubin and its fractions, albumin, transaminases of blood serum, total protein of blood and its fractions, alkaline phosphatase, alpha amylase, GGTP). - Improvement of the interpretation of ultrasound data of the abdominal organs on the topic 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
31.	<p>Preparation for practical classes on topic №31 "Management of patients with portal hypertension and ascites".</p> <ul style="list-style-type: none"> - Improving the interpretation of GIT endoscopy data (EGDS) on the topic. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
32.	<p>Preparation for practical classes on the topic №32 "Management of patients with acute hepatic encephalopathy".</p>	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	<ul style="list-style-type: none"> - Improvement of data interpretation of laboratory tests (ALT, AST, creatinine, total bilirubin with fractions, coagulogram). - Improving the interpretation of ultrasound data 			
33.	<p>Preparation for practical classes on the topic №33 "Management of patients with coma".</p> <ul style="list-style-type: none"> - Improvement of interpretation of data of laboratory tests (CBC, blood glucose, ALT, AST, creatinine, GFR, common bilirubin with fractions, electrolytes, coagulogram, gases of arterial and venous blood and indicators of the acid-base state of blood). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
34.	<p>Preparation for practical classes on topic №34 "Management of patients with pulmonary infiltrates".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of the data of the X-ray examination of the chest cavity in two precessions on the topic. - Improvement of interpretation of data of laboratory methods of research (general and microbiological study of sputum). 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>
35.	<p>Preparation for practical classes on topic №35. "Management of the patient with chronic cough, bronchoobstructiv esyndrome".</p> <ul style="list-style-type: none"> - Improvement of the interpretation of data from the X-ray examination of the chest cavity on the topic. 	3,5	<p>story-explanation, conversation, illustration, demonstration, presentation, videos, discussion</p>	<p>oral examination written examination; test control; creative tasks;</p>

	- Improvement of the interpretation of spirometric data, data of provocative tests with bronchodilators on the topic.			
36.	Preparation for the practical classes on topic №36 "Management of the patient with cyanosis". - Improvement of the interpretation of data from the X-ray examination of the chest cavity on the topic. - Improving the interpretation of echo-CG data by subject. - Improvement of the interpretation of laboratory data (gases of arterial and venous blood). phic data, data of provocative tests with bronchodilators on the topic..	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
37.	Preparation for the practical classes on topic №37 "Management of the patient with hemoptysis". - Improvement of the interpretation of data from the X-ray examination of the chest cavity on the topic. - Improvement of data interpretation of laboratory tests (coagulogram and D-dimer). y data (gases of arterial and venous blood). phic data, data of provocative tests with bronchodilators on the topic.	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;

38.	Preparation for practical classes on the topic №38 "Management of patients with pleural effusion". - Improvement of the interpretation of data from the X-ray examination of the chest cavity on the topic. - Improvement of interpretation of data of laboratory tests (biochemical, cytological, microbiological analysis of pleural fluid). a of provocative tests with bronchodilators on the topic.	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
39.	Preparation for practical classes on the topic №39 "Supervision of patients with acute respiratory failure". - Improved interpretation of spirometry data. - Improvement of the interpretation of data from the X-ray examination of the chest cavity on the topic. - Improvement of interpretation of data of laboratory tests (gases of arterial and venous blood and indicators of acid-base state of blood).	3,5	story-explanation, conversation, illustration, demonstration, presentation, videos, discussion	oral examination written examination; test control; creative tasks;
40.	Preparing and writing a medical history protocol	5,0	story-explanation, conversation	diff. test
	Preparation for final control	5,0		
	Total	135		

Teaching methods.

Types of educational activities of students according to the curriculum are: a) practical classes, b) self-work.

Thematic plans of practical classes and SST ensure the implementation of all topics included in the course in the educational process.

The method of organizing clinical practical classes in internal medicine requires:

- to make the student a participant in the process of providing medical care to patients from the moment of their hospitalization, examination, diagnosis, treatment to discharge from the hospital;

- to master professional practical skills; skills of work in a team of students, doctors, other participants of medical care;
- to form the responsibility of the student as a future specialist for the level of his training, its improvement during training and professional activity. To implement this in the first lesson, each student is given a detailed plan of his work in the clinic and provides the organization of its implementation.

- This plan includes:

- research methods that the student must learn (or get acquainted with);
- algorithms (protocols) of examinations, diagnosis, treatment, prevention in accordance with the standards of evidence-based medicine;
- the number of patients for curation, which must be carried out by the student during the training cycle;
- reports of the patient's medical history in the study group, at clinical rounds, practical conferences.

Patient supervision involves:

- 1) clarification of the patient's complaints, anamnesis morbi and vitae, conducting a survey by organs and systems;
- 2) conducting a physical examination of the patient and determining the main symptoms of the disease;
- 3) analysis of laboratory and instrumental examination of the patient;
- 4) formulation of the patient's diagnosis;
- 5) appointment of treatment;
- 6) determination of primary and secondary prevention measures;
- 7) report on the results of examination of the patient by a team of students in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the examination, treatment tactics, assessment of prognosis and performance;

SST and individual work of students includes:

- preparation for practical classes on planned topics;
- work of students in the departments of the clinical base of the department, including laboratories and offices of functional diagnostics; interpretation of data of laboratory and instrumental methods of research at internal pathology;
- mastering practical skills with the help of phantoms and working with patients (according to the list)
- individual SST (speech at the scientific-practical conference of the clinic, writing articles, report of the abstract in a practical lesson, participation in competitions, etc.);
- work in the simulation class of the Educational and Scientific Institute for Quality of Education of the KhNMU.

Teachers, clinic staff and support staff of the department provide the opportunity to carry out SST, during practical classes monitor and evaluate its implementation.

The organization of the educational process ensures the participation of students in the management of at least 2/3 of inpatients. If it is not possible to supervise patients with diagnoses on the topic of the lesson, students fill in the study history with diseases of the relevant topic. The need to write such a story is determined by the group teacher based on a review of data on the availability of relevant patients in the wards. Daily patient examination protocols are provided by the teacher for control.

Teachers ensure that each student receives the necessary competence in the following areas: questioning the patient, physical examination, oral report, making diagnostic decisions and determining treatment tactics (critical thinking), filling out documentation.

Evaluation policy

Evaluation system and requirements.

Current educational activities are carried out and controlled by the teacher of the academic group, after students master each topic of the course; it is graded using a 4-point (traditional) system: "excellent", "good", "satisfactory" and "unsatisfactory".

The final lesson is held after the logically completed part of the course, consisting of a set of educational elements of the curriculum, which combines all types of training (theoretical, practical, etc.) elements of educational and professional program (academic course, all types of practices, certification), which is implemented by appropriate forms of educational process.

The final lesson is held in accordance with the curriculum during the semester on schedule, during classes. Admission of the final lesson is carried out by the teacher of the academic group or the exchange of related groups between teachers. Forms of the final lesson are standardized and include control of all types of training (theoretical, practical, independent, etc.) provided by the curriculum of the course:

The evaluation contains:

1. Solving a set of test tasks on the content of educational material in the amount of 30 tests (open database of test items for licensing examination "KROK-2". Evaluation criterion – 90.5% of correctly solved tasks);
2. Assessment of the development of practical skills (assessment criteria - "performed" or "failed");
3. During the assessment of the student's knowledge on theoretical issues included in this final lesson, the student is given a traditional grade, which is converted into a multi-point scale together with grades for current learning activities.

Recalculation of the average assessment of current educational activity in the multi-scale scale of ECTS is carried out in accordance with the "Instructions for assessing the educational activity of students of KNMU».

The minimum number of points that student must score for admission to the exam – 70 points, the maximum number of points that a student can score – 120 points.

The final semester control is carried out after the completion of the study of the course in the form of a differentiated credit by the teacher of the group in the last lesson.

Differentiated credit includes:

1. Solving a set of test tasks, which includes basic (anchor) test tasks in the amount of 30 tests. Evaluation criterion - 95-100% of correctly solved tasks, "passed – failed".
2. Assessment of the acquisition of practical skills and theoretical knowledge on all topics of the course. Assessment of practical skills is carried out according to the criteria of "performed", "failed".
3. Tasks for practical and professional training, reflecting the skills and abilities during the supervision of thematic patients, evaluation of laboratory and instrumental research methods for diagnosis and selection of treatment tactics, which are defined in the lists of discipline-based curriculum (DBC) and education and qualification characteristics (EQC) of specialties.

The minimum positive grade on the exam is 50 points. The maximum number of points is 80 points. If the exam is not passed, the dates of re-setting during the holidays are set, until the beginning of the next semester.

Elimination of academic debt (working off). Work is carried out according to the schedule (daily and on Saturdays) in full-time or distance form, within 30 days from the date of admission free of charge; after 30 days - paid or free with the permission of the dean.

List of theoretical questions to prepare for differential credit:

- Management of patients with arterial hypertension: algorithms and standards of diagnosis and treatment.
- Management of patients with hypertensive crisis: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.
- Management of patients with chronic chest pain: algorithms and standards of diagnosis and treatment.

- Management of patients with acute coronary syndrome: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.
 - Management of cardiac and respiratory arrest
 - Management of patients with disturbances of heart rhythm: algorithms and standards of diagnosis and treatment.
 - Management of patients with cardiac conduction disturbances: algorithms and standards of diagnosis and treatment.
 - Management of patients with paroxysmal arrhythmias: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.
 - Management of patients with edematous syndrome: algorithms and standards of diagnosis and treatment.
 - Management of patients with dyspnea: algorithms and standards of diagnosis and treatment.
 - Management of patients with pulmonary hypertension: algorithms and standards of diagnosis and treatment.
 - Management of patients with pulmonary embolism: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.
 - Management of patients with cardiomegaly: algorithms and standards of diagnosis and treatment.
 - Management of patients with heart murmurs: algorithms and standards of diagnosis and treatment.
 - Management of patients with chronic heart failure: algorithms and standards of diagnosis and treatment.
 - Management of patients with acute heart failure: algorithms and standards of diagnosis and treatment.
 - Management of patients with arterial hypotension: algorithms and standards of diagnosis and treatment.
 - Management of patients with syncope: algorithms and standards of diagnosis and treatment.
 - Management of patients with shock: algorithms and standards of diagnosis and treatment.
 - Management of patients with pain in the extremities and back: algorithms and standards of diagnosis and treatment.
 - Management of patients with articular syndrome: algorithms and standards of diagnosis and treatment.
 - Management of patients with fever uncertain origin: algorithms and standards of diagnosis and treatment.
 - Management of patients with weight loss: algorithms and standards of diagnosis and treatment.
 - Management of patients with heartburn and dysphagia: algorithms and standards of diagnosis and treatment.
 - Management of patients with dyspepsia: algorithms and standards of diagnosis and treatment.
 - Management of patients with abdominal pain: algorithms and standards of diagnosis and treatment.
 - Management of patients with chronic diarrhea syndrome: algorithms and standards of diagnosis and treatment.
 - Management of patients with constipation: algorithms and standards of diagnosis and treatment.
 - Management of patients with melena and haematemesis: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.
 - Management of patients with jaundice: algorithms and standards of diagnosis and treatment.
 - Management of patients with hepatomegaly and hepatosplenomegaly syndrome: algorithms and standards of diagnosis and treatment.
 - Management of patients with portal hypertension and ascites: algorithms and standards of diagnosis and treatment.
 - Management of patients with acute hepatic encephalopathy: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.

- Management of patients with coma: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages
- Management of patients with pulmonary infiltrates: algorithms and standards of diagnosis and treatment.
- Management of the patient with chronic cough: algorithms and standards of diagnosis and treatment.
- Management of patients with bronchoobstructive syndrome: algorithms and standards of diagnosis and treatment.
- Management of the patient with cyanosis: algorithms and standards of diagnosis and treatment.
- Management of the patient with hemoptysis: algorithms and standards of diagnosis and treatment.
- Management of patients with pleural effusion: algorithms and standards of diagnosis and treatment.
- Supervision of patients with acute respiratory failure: standards of diagnosis and emergency treatment at the pre-hospital and hospital stages.

List of practical work and tasks for differentiated credit

- Work with the patient:
 - Receiving patient complaints, information about medical history, life anamnesis;
 - Receiving the information about the general condition of the patient (consciousness, constitution, fatness) and appearance assessment (examination of the skin, subcutaneous fat, palpation of lymph nodes, thyroid and mammary glands), examination of the musculoskeletal system, joints;
 - Examination of the respiratory system (chest examination, palpation of the chest, percussion and auscultation of lungs);
 - Examination of the cardiovascular system (visual examination and palpation of the heart and blood vessels, percussion of heart and auscultation of heart and blood vessels);
 - Examination of the digestive system (visual examination, percussion, superficial and deep palpation);
 - Examination of the musculoskeletal system (visual examination, palpation, determination of motion range);
 - Examination of the urinary system (visual examination of the lumbar region, palpation of the kidneys).
- Identify the leading symptom or syndrome (List 1).
- Make a suspected (preliminary) or syndromic diagnosis of the disease (List 2).
- Assign and justify laboratory and / or instrumental examination of a patient with common diseases in the clinic of internal medicine (List 2).
 - Make a plan for the examination and justify the application of each non-invasive and invasive diagnostic method used in the internal medicine clinic.
- Interpret the results of laboratory and instrumental examination (List 4)
- Make a differential diagnosis for the main symptoms and syndromes (List 1).
- Make a clinical diagnosis (list 2).
- Determine the principles and nature of treatment (conservative, surgical) disease (List 2).
- Determine the necessary regimen and diet of a patient with common diseases in the clinic of internal medicine (list 2).
 - Diagnose emergency conditions (List 3)
 - Define tactics for providing emergency medical care (List 3)
 - Provide emergency medical care (List 3)
 - Perform medical procedures (list 5).
 - Determine the tactics of secondary prevention of patients subject to dispensary observation.
 - Maintain medical documentation.

List 1 (syndromes and symptoms)

1. Hypertension
2. Hypotension and syncope

3. Ascites
4. Chest pain
5. Stomach ache
6. Pain in the extremities and back
7. Bronchoobstructive syndrome
8. Pleural effusionHepatomegaly and hepatolienal syndrome
9. Dyspepsia
10. Dysphagia
11. Jaundice
12. Dyspnea
13. Constipation
14. Cough
15. Hemoptysis
16. Pulmonary infiltrateFever
17. Edema syndrome
18. Loss of consciousness
19. Heartburn
20. Portal hypertension
21. Disturbances of heart rhythm
22. Joint syndrome
23. Weight loss
24. Chronic diarrhea syndrome
25. Diffuse and local cyanosis.
26. Gastrointestinal bleeding
27. Heart murmurs

List 2 (diseases)

Diseases of the cardiovascular system

1. Essential hypertension (hypertension).
2. Secondary (symptomatic) hypertension:
3. Renal (renovascular, renoparenchymatous) hypertension;
4. Endocrine (Itsenko-Cushing's syndrome and disease, pheochromocytoma, primary hyperaldosteronism, thyrotoxicosis);
5. Coarctation of the aorta;
6. Isolated systolic hypertension;
7. Hypertension during pregnancy;
8. Neurocirculatory dystonia.
9. Atherosclerosis.
10. Chronic forms of coronary heart disease.
11. Acute coronary syndrome (unstable angina, acute myocardial infarction).
12. Pericarditis.
13. Pulmonary heart.
14. Acquired heart defects: mitral, aortic and tricuspid valves, combined mitral and aortic defects.
15. Congenital heart defects: atrial, interventricular septal defect, open ductus arteriosus, aortic coarctation.
16. Infectious endocarditis.
17. Myocarditis and cardiomyopathy.
18. Pulmonary artery thromboembolism.
19. Cardiac arrhythmia.
20. Cardiac conduction disturbances.
21. Heart failure.

Respiratory diseases

1. Chronic obstructive pulmonary disease.

2. Asthma.
3. Pneumonia.
4. Pleurisy.
5. Infectious and destructive lung diseases.
6. Respiratory failure.

Diseases of the digestive system

1. Chronic esophagitis and gastroesophageal reflux disease.
2. Functional stomach, gallbladder, biliary tract and intestine disorders.
3. Chronic gastritis and duodenitis.
4. Peptic stomach and duodenum ulcer.
5. Celiac disease and other enteropathies.
6. Nonspecific ulcerative colitis, Crohn's disease.
7. Gallstone disease; chronic cholecystitis.
8. Chronic hepatitis.
9. Liver cirrhosis.
10. Chronic pancreatitis.

Diseases of the musculoskeletal system and connective tissue

1. Osteoarthritis.
2. Systemic lupus erythematosus.
3. Systemic scleroderma.
4. Gout.
5. Reactive arthritis.
6. Acute rheumatic fever.
7. Rheumatoid arthritis.
8. Dermatomyositis / poliomyositis.
9. Ankylosing spondylitis.
10. Systemic vasculitis (hypersensitive and hemorrhagic vasculitis, nodular polyarteritis).
11. Metabolic syndrome.

List 3 (emergency conditions)

1. Hypertensive crisis
2. Acute coronary syndrome
3. Acute heart failure
4. Acute respiratory failure
5. Cardiac and respiratory arrest
6. Bleeding (esophageal and gastrointestinal)
7. Quincke's edema / laryngeal edema
8. Paroxysmal cardiac arrhythmias and cardiac conduction disorders (paroxysmal tachycardia and atrial fibrillation / flutter, high-grade atrioventricular block, Morgan-Edems-Stokes syndrome)
9. Spontaneous pneumothorax
10. Cardiac tamponade
11. Pulmonary artery thromboembolism
12. Syncope
13. Shocks

List 4 (laboratory and instrumental examination methods)

1. Adrenocorticotropic hormone, cortisol, aldosterone and blood renin
2. Analysis of pleural fluid
3. Analysis of ascitic fluid
4. Analysis of synovial fluid
5. An urine test for diastase
6. Nechiporenko's urine test
7. Zymnysky's urine test
8. Biochemical markers of myocardial necrosis, D-dimer

9. Acute-phase proteins (APPs), total blood protein and its fractions
10. Complete blood count
11. Clinical urine tests, test for microalbuminuria
12. General analysis of sputum
13. Blood electrolytes test
14. Enzyme-linked immunosorbent assay, immunochemical, molecular biological blood test
15. Coagulogram
16. Stool tests
17. Creatinine and blood urea, glomerular filtration rate
18. Lipid profile of blood
19. Alkaline phosphatase, alpha-amylase of blood
20. Markers of viral hepatitis
21. Metanephrines in urine
22. Microbiological tests of biological fluids and secretions
23. Indicators of acid-base status of blood
24. Serological reactions in autoimmune diseases
25. Blood uric acid
26. Glucose tolerance test, glycemic profile, C-peptide, glycated hemoglobin
27. Blood transaminases, total bilirubin and its fractions
28. Fecal elastase-1
29. Study of the function of external respiration
30. Examination of bile
31. Electrocardiographic examination
32. Echocardiography
33. Bronchoscopy
34. Endoscopic examination of the digestive tract
35. Tests with dosed physical load
36. Abdominal radiograph
37. Chest radiograph
38. Skull, bones and joints radiograph
39. Catheter angiography
40. Stomach and esophagus pH test

List 5 (medical manipulations)

1. Measure blood pressure
2. Record the ECG in 12 leads
3. Inject drugs
4. Determine the blood type

Know the clinical pharmacology of the main groups of drugs

1. α and β -adrenergic receptor agonists
2. Antianginal
3. Antiarrhythmic
4. Antibacterial
5. Antihypertensive
6. Anticoagulants
7. Expectorants
8. Hemostatics
9. Glucocorticoids and cytostatic immunosuppressants
10. Diuretics
11. Proton pump inhibitors
12. H₂-histamine blockers
13. Nonsteroidal anti-inflammatory drugs
14. Cholinolytics

Discipline policy

To achieve the goal of training and successfully complete the course, it is necessary to: join the work from the first day; regularly attend practical classes, read the material in advance before its consideration in a practical lesson; perform all necessary tasks and work every day; be able to work with a partner or in a group; ask for help and get it when you need it.

Students must not be late or miss classes; come to the department dressed in a medical gown, have indoor shoes, have a stethoscope, mask, gloves, notebook and pen. Prior to classes at the clinical base of the department, students must undergo a medical examination and have a health book with permission to work in a medical institution.

The use of electronic gadgets (mobile phone, tablet) is allowed during practical classes and is not allowed during all types of control.

Copying and plagiarism in the preparation of student research papers are not allowed. The department considers inadmissible violation of academic integrity (academic plagiarism, self-plagiarism, fabrication, falsification, writing off, deception, bribery, biased evaluation), for which liability is provided in accordance with the Law of Ukraine "On Education" dated 05.09.2017 № 2145-VIII. In the first lesson, teachers inform students about what exactly is considered plagiarism and how to properly conduct research.

Students with special educational needs should meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions, please contact the teacher.

To successfully complete the course, the student must be active during practical classes and perform the required minimum of educational work.

Students can receive additional points for individual tasks, namely: a report at clinical conferences of the department, a report on an abstract in practice, a report on the patient's medical history in practice, writing abstracts, articles, participation in national competitions, a report on scientific conferences of the university, Ukraine and foreign.

The number of points accrued for different types of individual tasks depends on their scope and significance, but not more than 10 points. They are added to the amount of points earned by the student in the classroom during the current academic activity. In any case, the total amount of points for the current educational activity may not exceed 120 points.

All students must be instructed in safety, which is conducted at the beginning of the first lesson. The instruction is conducted by the teacher of the academic group or the responsible person, according to the instruction approved by the order of KhNMU with an entry in the relevant journal.

Necessary changes in the syllabus are approved by the methodical commission of KhNMU on professional training of disciplines of therapeutic profile and published on the site of KhNMU, and the site of Department of Internal Medicine No1.

Recommended information resources

Basic:

1. Babak O.Ya., Bilovol O.M., Zhelezniakova N.M. et al.; Internal Medicine: Critical Care: textbook (III—IV a. l.) / edited by O.Ya. Babak, O.M. Bilovol. 2018. 386 p. ISBN: 9786175056363

2. Internal Medicine: Part 1: textbook for English-speaking students of higher medical schools / edited by Professor M.A. Stanislavchuk and Professor V.K.Serkova. – Vinnytsia: Nova Knyha, 2019. – 408 p.

3. Internal Medicine: Part 2: textbook for English-speaking students of higher medical schools / edited by Professor M.A. Stanislavchuk and Professor V.K.Serkova. – Vinnytsia: Nova Knyha, 2019. – 360 p.

4. Goldman L., Schafer A.I. Goldman-Cecil Medicine, 2-Volume Set (Cecil Textbook of Medicine) 25th Edition. 2016. ISBN: 9781455750177

5. Jameson J. L., Fauci A. Harrison's Principles of Internal Medicine, Twentieth Edition (Vol.1 & Vol.2) 20th Edition. 2018. ISBN: 9781259644030

7. Siegenthaler W. Differential Diagnosis in Internal Medicine. Thieme Medical Publishers, 2019. 1140 p. ISBN 9783131421418.
8. Wittich C. M. Mayo Clinic Internal Medicine Board Review (12 edn). Oxford University Press, 2019. ISBN 9780190938369.
9. Hampton J., Hampton J. The ECG Made Easy E-Book 9th Edition, Kindle Edition. 2019. 198 p. ISBN 9780702074578
10. Kasper D. L. Harrison's gastroenterology and hepatology. New York: McGraw-Hill Education, 2017.
11. Kiefer M. M., Chong C. R. Pocket Primary Care (Pocket Notebook Series). 2013. 1274 pages. ISBN: 9781496378651
12. Ashar B., Hopkins J., Miller R. The Johns Hopkins Internal Medicine Board Review: Certification and Recertification 5th Edition. 2016. ISBN: 9780323377331
13. Sabatine M.S. Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine. 2016. 272 p. ISBN: 9781975173449
14. Firestein G. S. (Author), Budd R. C., Gabriel S. E. Firestein & Kelley's Textbook of Rheumatology, 2-Volume Set (Kelleys Textbook of Rheumatology) 11th Edition. 2020. ISBN: 9780323639200
15. Leslie K. O., Wick M. R. Practical Pulmonary Pathology: A Diagnostic Approach: A Volume in the Pattern Recognition Series 3rd Edition. 2017. ISBN: 9780323442848
16. Murphy J. G., Lloyd M. A. Mayo Clinic Cardiology: Concise Textbook (Mayo Clinic Scientific Press) 4th ed. Edition. 2013. ISBN: 9780199915712

Additional

1. Landsberg L. On Rounds: 1000 Internal Medicine Pearls 1st Edition. 2015. ISBN: 9781496322210
2. Thaler M. The Only EKG Book You'll Ever Need 9th Edition. 2021. ISBN: 9781496377234
3. Medical journals: JAMA Internal Medicine, Annals of Internal Medicine, Hypertension, Journal of Internal Medicine, Journal of General Internal Medicine, Journal of Hypertension, Current Opinion in Nephrology and Hypertension, American Journal of Hypertension, Internal and Emergency Medicine, Metabolic Syndrome and Related Disorders, Internal Medicine
4. Medical scientific databases: PubMed, Cochrane Library, ACP Journal Club, BMJ Best Practice
5. KhNMU Repository (<http://repo.knmu.edu.ua/>) and KhNMU Library (<http://libr.knmu.edu.ua/>)

Rules for appealing the assessment. The student can appeal his positive assessment in accordance with the "Instructions for assessing the educational activities of students of KhNMU."

ACADEMIC INTEGRITY:

http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=2520%3A2015-04-30-08-10-46&catid=20%3A2011-05-17-09-30-17&Itemid=40&lang=uk

http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/kodex_AD.docx

**Acting Head of Department of
Internal medicine №1
Doctor of Medical Science, Professor**



N.M. Zhelezniakova