PRIVATE HIGHER EDUCATIONAL INSTITUTION
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"
Department of internal medicine with a course in psychiatry and narcology

WORKING PROGRAM
EDUCATIONAL DISCIPLINE

" Internal medicine, Infectious Diseases and Tuberculosis"

LEVEL OF HIGHER EDUCATION Second (master's) level
DEGREE OF HIGHER EDUCATION Master
FIELD OF KNOWLEDGE 22 Health care
SPECIALTY 222 Medicine

Reviewed and approved
at the meeting of the Academic Council
Protocol No. 1, dated August 31, 2018

Kiev 2018

Work program in the discipline " **Internal Medicine** " for the training of applicants for a second (master's) higher education level of higher education in specialty 222 Medicine.

Description of the academic discipline

<table>
<tr><td rowspan="2">Name of indicators</td><td rowspan="2">Field of knowledge, direction of training, educational qualification level</td><td>Characteristic academic discipline</td></tr>
<tr><td>Full-time teaching</td></tr>
<tr><td rowspan="2">Number of credits 19,0</td><td>Branch of knowledge
22 "Health care"</td><td rowspan="2">Full course</td></tr>
<tr><td>Specialty :
222 "Medicine"</td></tr>
<tr><td>Modules 3</td><td rowspan="5">Qualifications of the educational "Master of Medicine"</td><td>A year of training</td></tr>
<tr><td></td><td>VI</td></tr>
<tr><td>ECTS credits - 19.0</td><td>Semester</td></tr>
<tr><td>the total number of 570 hours</td><td>XI, XII</td></tr>
<tr><td></td><td></td></tr>
<tr><td rowspan="9"></td><td rowspan="9">Form of education:
daytime

Type of discipline:
mandatory</td><td></td></tr>
<tr><td>Practical</td></tr>
<tr><td>440 hours</td></tr>
<tr><td></td></tr>
<tr><td></td></tr>
<tr><td>Individual work</td></tr>
<tr><td>130 hours</td></tr>
<tr><td>Type of control:</td></tr>
<tr><td>Test</td></tr>
</table>

CONTENTS OF THE CURRICULUM

EXPLANATORY NOTE

The internal medicine program for students of higher medical institutions of III-IV levels of accreditation is drawn up for the specialties "Treatment" 7.110104, "Pediatrics" 7.110104, "Medical-prophylactic case" 7.110105 of the field of training 1101 "Medicine" in accordance with current regulatory documents. According to the curriculum, the training of doctors at the educational and qualification level "Specialist" studying the academic discipline "Internal medicine,Infectious Diseases and Tuberculosis" is carried out in the VI courses (11-12 semesters).

The program is based on the following regulatory documents:

- educational and qualification characteristics (OKH) and educational and professional programs (OPP) of training specialists, approved by the order of the Ministry of Education and Culture of Ukraine No. 239 dated 04.16.03 "On approval of the constituent industry standards of higher education in the field of training 1101 - Medicine";
- recommendations on the development of educational programs of educational disciplines, approved by the order of the Ministry of Health of Ukraine No. 152 dated 24.03.2004 "On approval of recommendations on the development of educational programs of educational disciplines" with changes and additions introduced by the order of the Ministry of Health of Ukraine No. 492 dated 12.10.2004 "On introduction of changes and additions" to recommendations on the development of educational programs of educational disciplines";
- Order of the Ministry of Health of Ukraine No. 148 dated 31.01.03 "On measures to implement the provisions of the Bologna Declaration in the system of higher medical and pharmaceutical education";
- an experimental curriculum developed on the principles of the European Credit Transfer System (ECTS) and approved by the Order of the Ministry of Health of Ukraine No. 52 dated January 31, 2005.
- Order of the Ministry of Health of Ukraine No. 52 of 31.01.2005 "On the approval and introduction of a new curriculum for the training of specialists of the educational and qualification level "specialist" qualification "doctor" in higher educational institutions of the III-IV accreditation levels of Ukraine in the specialties "medical affairs", "pediatrics" ", "medical and preventive care"

Internal medicine as an educational discipline :

a) is based directly on students' study of propaedeutics of internal medicine, propaedeutics of other clinical disciplines (pediatrics, general surgery), as well as other basic disciplines (medical biology, medical and biological physics, bioorganic and biological chemistry, histology, cytology and embryology, human anatomy, pathomorphology, physiology and pathophysiology, microbiology, virology and immunology, radiology) and integrates with these disciplines;

b) lays the foundation for students' assimilation of knowledge in specialized clinical professional-practical disciplines.

c) forms the ability to apply knowledge of the pathology of internal organs in the process of further education and professional activity in accordance with the principles of evidence-based medicine.

According to the curriculum for the training of specialists (Order No. 52 of the Ministry of Health of Ukraine, 31.01.2005), the discipline "Internal Medicine" is studied by students in the IV-V-VI courses.

The educational process is organized according to the credit-module system in accordance with the requirements of the Bologna process.

The goal (**ultimate goals)** of studying internal medicine established on the basis of OKH and OPP training of a doctor by specialty and is the basis for building the content of the educational discipline. The description of goals is formulated through skills in the form of target tasks (actions). On the basis of the final goals for each module or content module, **specific goals are formulated**

in the form of certain skills (actions), target tasks that ensure the achievement of the final goal of studying the discipline.

Final goals of the discipline :

- Determine the etiological and pathogenetic factors of the most common therapeutic diseases according to list 1 of the OKH
- To analyze the typical clinical picture of the most common therapeutic diseases
- Identify different clinical variants and complications of the most common diseases of internal organs
- Carry out differential diagnosis, substantiate and formulate a preliminary diagnosis of the most common diseases of internal organs
- Determine the management tactics (recommendations regarding the regime, diet, drug treatment, rehabilitation measures) of the patient with the most common diseases of internal organs and their complications
- Prepare a patient examination plan and analyze the data of laboratory and instrumental examinations in the typical course of the most common therapeutic diseases and their complications
- To assess the prognosis of life and working capacity in the most common therapeutic diseases
- Diagnose and provide medical care for emergency conditions in the internal medicine clinic
- Carry out primary and secondary prevention of the most common diseases of internal organs
- Carry out medical manipulations according to the list of 5 OKH
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in therapy.

Chapter 3 (6th course, 11th semester).
Modern practice of internal medicine
Total hours – 210 / 7 credits (practical classes – 150, SRS – 60)

Content sections:

1. Management of patients with diseases of the circulatory system
2. Management of patients with diseases of the musculoskeletal system and connective tissue
3. Management of patients with diseases of the digestive organs
4. Management of patients with respiratory diseases
5. Management of patients with diseases of the endocrine system
6. Management of patients with diseases of the blood and hematopoietic organs
7. Management of patients with diseases of the genitourinary system

Chapter 4 (6th course, 11th semester).
Emergency conditions in the clinic of internal medicine
Total hours - 120 / 4 credits (practical classes – 90, SRS – 30)

Content section:

1. Emergency conditions in cardiology
2. Emergency conditions in rheumatology
3. Emergency conditions in pulmonology and allergology
4. Emergency conditions in gastroenterology
5. Emergency conditions in endocrinology
6. Emergency conditions in hematology
7. Emergency conditions in nephrology

Chapter 5 (6th course, 12th semester).
Internal medicine practice in primary health care - Family Medicine.
Total hours – 120 / 4 credits (practical classes – 80, SRS – 40)

Content sections:

1. Principles of providing primary health care to the population on the basis of family medicine. Organization of the family doctor's work, financing issues. Organization of day and home hospitals. Fundamentals of evidence-based medicine in the work of a family doctor. Telemedicine in the practice of a family doctor. Implementation of the Second Revision International Classification of Primary Health Care (ICPC2).
2. Clinical examination, rehabilitation and sanatorium-and-spa selection carried out by a family doctor.
3. Work of a family doctor with special groups of the population (geriatric contingent, children, adolescents, pregnant women).
4. General issues of the organization of medical and social examination (MSE) by a family doctor. Examination of temporary disability of patients, issuance of disability certificates by a family doctor. Examination of patients' permanent disability, their referral by a family doctor to a medical and social expert commission. Principles of the modern system of rehabilitation care, biopsychosocial model of disability, implementation of the International Classification of Functioning, Disability and Health (ICF) in Ukraine Psychosomatic and somatopsychiatric conditions in the practice of a family doctor. ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the respiratory and circulatory organs.
5. ITU and the organization of out-of-hospital therapeutic care for the most common respiratory diseases.
6. ITU and the organization of out-of-hospital therapeutic care for the most common
7. diseases of the circulatory system.
8. ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the digestive system.
9. ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the kidneys and urinary system.
10. ITU and the organization of out-of-hospital therapeutic care for the most common connective tissue diseases.
11. ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the blood system.
12. ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the endocrine system and metabolism.
13. Organization of emergency medical care in the practice of a family doctor. Methodology for providing emergency care for traumatic death, cardiac arrest, primary respiratory arrest, convulsions and loss of consciousness, pain, stings, bites, electrical injuries, drowning, exposure to low and high temperatures.
14. Medical and social aspects of public health. Assessment of the quality of life of patients, carried out by a family doctor. The role of a family doctor in promoting a healthy lifestyle and disease prevention. Assessment of the prevalence of risk factors in the development of major chronic noncommunicable diseases and development of preventive measures taking into account the syndromic approach.

Chapter 6 (6th course, 12th semester).
Internship chosen by the student
Total hours 120 / 4 credits (practical classes – 120)

Possible to choose (Each student is limited to selecting only one practice to be included a as part of the course):

1. Pulmonology
2. Cardiology
3. Gastroenterology
4. Endocrinology
5. Nephrology
6. Family medicine
7. Infectious Diseases and Tuberculosis

In the 6th year, students study the modern practice of internal medicine by:

Section 3: **curation of mainly hospitalized patients** with basic symptoms and syndromes, various clinical courses of diseases and their complications, in practice studying modern approaches to diagnosis, differential diagnosis, treatment and prevention of diseases and syndromes in each of the sections of internal diseases , existing standards of diagnosis and treatment, evidence-based medicine data,

Module 4: as well as emergencies in the clinic of internal medicine.

Module 5: as well as internal medicine practice in primary health care

Module 6: as well as internship chosen by the student

Approximate duration of practical classes - 5.5 hours.

The modern practice of internal medicine is structured in such a way as to allow students to take part in the management of patients with frequent clinical manifestations and urgent conditions found mainly in the practice of internal medicine hospitals. Each student is given the opportunity to study many diseases of varying degrees of severity, from acute conditions treated in the emergency room to life-threatening and terminal conditions that must be treated in intensive care units. Students also get the opportunity to improve their basic clinical skills, learn new procedures available in the hospital, the technique required for examinations, and evaluate the effectiveness of their clinical interventions.

Types of educational activities of students according to the curriculum are:

a) practical classes,

b) independent work of students (SRS).

The methodology for organizing **clinical practical classes** in internal medicine requires the following:

- to make the student a participant in the process of providing medical care to patients from the moment of their hospitalization, examination, diagnosis , treatment until discharge from the hospital;
- master professional practical skills; skills of working in a team of students, doctors, other participants in the provision of medical care;
- to form the student's responsibility as a future specialist for the level of his training, its improvement during training and professional activity.

To implement the above, it is necessary to provide the student with a detailed plan of his work in the clinic at the first lesson of the corresponding module and ensure the organization of its implementation. This plan should include:

- research methods that the student should 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 the student must carry out during the cycle;

- reports of the patient's medical history in the study group, at clinical rounds, practical conferences.

Treatment of the patient involves:

1) elucidation of the patient's complaints, disease and life history, conducting a survey of 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 patient examination data;
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 the 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, scope of the prescribed examination, treatment tactics, assessment of prognosis and work capacity;

SRS and individual work of students makes up 60% of the classroom load .

It contains:

- study of topics that are not part of the classroom lesson plan
- the work of students in departments of clinical bases of departments, including in laboratories and departments (cabinets) of functional diagnostics, interpretation of laboratory data and instrumental methods of research in internal pathology outside classroom time
- learning practical skills using phantoms and working with patients (according to the list)
- individual SRS (speech at the scientific and practical conference of the clinic, writing articles, presenting an abstract at a practical session, etc.)
- work in the computer class in preparation for Step-2.

Teachers and auxiliary staff of the department provide the opportunity to carry out SRS, during practical classes and final module control, they control and evaluate its implementation. The topics submitted for independent study are evaluated only during the final module control.

3. PROGRAM CONTENT

Section 3 (6th year, 11th semester of study).

Modern practice of internal medicine

Total hours - 210 / 7 credits (practical classes – 150, SRS - 60)

The ultimate goals of the chapter

Students must:

- Demonstrate the ability to diagnose and present a treatment plan for the most common conditions encountered in internal medicine clinics.
- Demonstrate the ability to apply diagnostic methods that help in making a decision (treatment plan) for the management of various diseases found in internal medicine hospitals.
- Apply the principles of evidence-based medicine in making diagnostic and therapeutic decisions for internal diseases encountered in internal medicine hospitals.
- Know the main classes of drugs used in the clinic of internal medicine, show the ability to apply the relevant clinical and pharmacological principles for the management of patients with the most frequent conditions of internal medicine found in hospitals.
- Demonstrate ease of application of medical information technology and critical peer review of medical literature in diagnosis and treatment in an internal medicine clinic.
- Demonstrate the ability to perform a focused medical examination and targeted physical examination according to the patient's chief complaints and medical history.
- Demonstrate the ability to take medical histories and perform a physical examination in an inpatient setting.

- Demonstrate the ability to diagnose and formulate a treatment plan for the most common diseases in a hospital setting.
- Demonstrate the ability to admit and efficiently transport patients to and from the intensive care unit. Demonstrate ability to initiate transition from inpatient to outpatient.
- Demonstrate ability to perform routine technical procedures including: venipuncture, nasogastric tube insertion, Faley catheter insertion, vital signs support, cardiac function support, show facility in interpreting EKG, FKG, Echocardiogram, Ultrasound and Chest X-rays
- Demonstrate the ability to justify and apply clinical methods to understand disease manifestations in hospital settings.
- Demonstrate a basic understanding of ethical principles and their application in the treatment of inpatients.
- Demonstrate an effective ability to communicate with the patient's diverse environment, doctors and other medical professionals.
- Demonstrate a basic understanding of how age, gender, culture, social, and economic status influence patient management in an internal medicine clinic.
- Demonstrate the ability to clearly and succinctly communicate the patient verbally and in writing to other members of the treatment team with particular attention to the inclusion of meaningful and synthesized clinical information.

Students must conduct curation of patients (new or those already treated) with the following diseases:

- Essential and symptomatic arterial hypertension - 4
- Uncomplicated and complicated hypertensive crisis - 3
- Chronic heart failure - 5
- Violation of rhythm and conduction - 5
- Cardialgia - 2
- Angina - 2
- Systemic diseases of connective tissue - 2
- Arthritis - 3
- Asthma/COPD – 4
- Pneumonia - 5
- Dyspepsia - 5
- Abdominal pain - 3
- Hepatitis - 3
- Jaundice - 2
- Cirrhosis/Spontaneous bacterial peritonitis/Ascites – 3
- Pancreatitis - 2
- Inflammatory bowel diseases - 2
- Malabsorption syndrome - 2
- Anemia - 3
- Leukosis - 2
- Diabetes with complications - 4
- Goiter syndrome - 2
- Glomerulonephritis and pyelonephritis - 3
- Chronic kidney failure - 2

The organization of the educational process should ensure the participation of students in the management of at least 2/3 of hospitalized patients. If it is not possible to access patients in any category, students complete a medical history with the diagnoses/problems of the appropriate

category. The necessity of writing such a history is determined by the assistant/associate professor (head of the department) on the basis of a weekly review of data on the availability of relevant patients in the departments.

The course is held in hospitals that work in emergency care. Each student must take on 3 new/undifferentiated patients weekly in the hospital setting. During the entire course, students examine 6-10 patients who are under dynamic observation or permanent patients every week. If, for any reason, the student examines less than 2 patients per day (dynamically observed), the treatment of previously admitted patients is raised and studied. The number of patients for which the student is responsible is determined by the complexity of the cases and the student's demonstrated willingness to participate in the treatment of additional patients. Students are expected to participate fully in the management of at least 2/3 of hospitalized patients.

Didactic classes are held during morning tests, lectures and practical classes. The assessment of the student's filling in the medical history and discharges is performed by the teacher in the process of working with the patient.

Content section 1. " ***Introduction of patients in the cardiology clinic "***

Students must:

- Conduct interviews and physical examinations of patients with major cardiac syndromes
- Draw up a plan for the examination of patients with heart diseases, justify the use of the main invasive and non-invasive diagnostic methods used in cardiology, determine the indications and contraindications for their implementation, possible complications
- Identify different course options and complications of heart diseases
- Carry out a differential diagnosis, substantiate and formulate a diagnosis for the main cardiac syndromes based on the analysis of laboratory and instrumental examination data
- Prescribe treatment, determine prognosis, carry out primary and secondary prevention of heart diseases
- Record and interpret 12-lead ECG
- Measure and interpret blood pressure
- Diagnose and provide assistance in case of fainting
- Diagnose and provide assistance in case of hypertensive crisis
- Diagnose and provide assistance with arterial hypotension
- Diagnose and provide assistance with paroxysmal heart rhythm disorders
- Diagnose and provide care for Morgana-Edems-Stokes syndrome
- Perform cardiopulmonary resuscitation
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 1. **Management of a patient with arterial hypertension.**

Differential diagnosis of arterial hypertension: essential and secondary (renal, endocrine, geodynamic, central genesis, etc.). Risk stratification of cardiovascular complications and determination of prognosis. Drawing up an examination plan. Patient management tactics depending on the risk group.

Topic 2. **Management of a patient with arterial hypertension.**

Principles of non-drug and drug treatment of arterial hypertension. Drugs of the first and second line of treatment. Modern recommendations for the selection of antihypertensive drugs. There are standards of treatment. Monotherapy and combined therapy. Side effects of hypotensive agents. Hypertensive crises, peculiarities of treatment tactics. Primary and secondary prevention. Forecast and performance.

Topic 3. **Management of a patient with arterial hypotension and fainting** .

Differential diagnosis of arterial hypotension: vasodepressor fainting, translational orthostatic hypotension, iatrogenic hypotension, fainting in heart, endocrine and nervous diseases,

metabolic disorders, hysterical neurosis. Drawing up an examination plan and patient management tactics. Laboratory and instrumental methods of additional examination. Vasopressors.

Topic 4. **Management of a patient with cardiac pain** .

Differential diagnosis of angina pectoris and cardiac pain in diseases of the heart, respiratory, digestive, musculoskeletal system, etc. Drawing up an examination plan, additional laboratory and instrumental examination methods. Tactics of patient management depending on the genesis of cardialgia.

Topic 5. **Management of a patient with a heart rhythm disorder.**

Differential diagnosis of atrial and ventricular extrasystoles, atrial fibrillation, sinus node weakness and Wolff-Parkinson-White syndromes. Drawing up an examination plan, additional laboratory and instrumental examination methods (ECG, 24-hour Holter monitoring, Echo-KG, electrophysiological examination). Tactics of patient management. The main classes of antiarrhythmic agents, indications for their use, side effects. There are standards of treatment. Electropulse therapy. Surgical methods of treating arrhythmias. Primary and secondary prevention. Forecast and performance.

Topic 6. **Management of a patient with impaired cardiac conduction** .

Violation of atrioventricular conduction, AV blocks of various degrees (Mobitz 1 and 2). Federick's syndrome. ECG diagnosis of bundle branch block. Patient management tactics , additional laboratory and instrumental examination methods. Drug treatment and cardiac stimulation. Artificial rhythm drivers. Primary and secondary prevention. Forecast and performance.

Topic 7. **Management of a patient with stable angina pectoris.**

Typical and atypical angina pectoris, diagnostic criteria. Drawing up an examination plan, additional laboratory and instrumental methods of examination (ECG with physical load, daily Holter monitoring, stress-Echo-KG, coronary angiography). Patient management tactics depending on the functional class. There are standards of treatment. Endovascular and surgical methods of treatment. Primary and secondary prevention. Forecast and performance.

Topic 8. **Management of a patient with painless myocardial ischemia** .

Risk of sudden coronary death. Drawing up an examination plan, additional laboratory and instrumental methods of examination (ECG with physical load, daily Holter monitoring, stress-Echo-KG, coronary angiography). Patient management tactics. Primary and secondary prevention. Forecast and performance.

Topic 9. **Management of a patient with unstable angina.**

Types of unstable angina, risk of myocardial infarction. Assistance at the pre-hospital and hospital stages. Drawing up an examination plan, additional laboratory and instrumental methods of examination (biochemical markers, ECG with exercise, daily Holter monitoring, stress-Echo-KG, coronary angiography) and patient management tactics depending on ECG changes. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 10. **Management of a patient with shortness of breath** .

Differential diagnosis of shortness of breath and dyspnea. Drawing up an examination plan, additional laboratory and instrumental methods of examination (standard ECG and ECG with physical load, Echo-KG, daily Holter monitoring, X-ray of the lungs and heart, functional breathing tests). Patient management tactics depending on the genesis of shortness of breath. Non-drug, drug and surgical treatment Primary and secondary prevention. Forecast and performance.

Topic 11. **Management of a patient with cardiomegaly** .

Differential diagnosis of cardiomegaly in heart defects, myocarditis, cardiomyopathies, coronary artery disease. Drawing up an examination plan, additional instrumental methods of examination (x-ray of the lungs and heart, ECG, Echo-CG, coronary angiography). Patient management tactics. Non-drug, drug and surgical treatment Primary and secondary prevention. Forecast and performance.

Topic 12. **Management of a patient with acrocyanosis** .

Differential diagnosis of cyanosis in heart and lung diseases. Drawing up an examination plan, additional laboratory and instrumental methods of examination (x-rays of the lungs and heart, ECG, echocardiography, coronary angiography, functional breathing tests). Patient management tactics. Primary and secondary prevention. Forecast and performance.

Topic 13. **Management of a patient with heart failure.**

Right ventricular, left ventricular and biventricular heart failure. Differential diagnosis depending on the leading cause. Drawing up an examination plan, additional instrumental methods of examination (x-ray of the lungs and heart, ECG, Echo-CG, coronary angiography).

Topic 14. **Management of a patient with heart failure.**

Patient management tactics depending on the genesis, functional class and stage of heart failure. Non-drug, drug and surgical treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 15. **Management of a patient with heart murmurs** .

Differential diagnosis of functional and organic, systolic and diastolic murmurs. Drawing up an examination plan, additional instrumental methods of examination (x-ray of the lungs and heart, ECG, Echo-CG, coronary angiography).

Topic 16. **Management of a patient with heart murmurs** .

Patient management tactics depending on the cause of the heart murmur, severity of cardiomegaly, presence of heart failure and other complications. Non-drug, drug and surgical treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN OF PRACTICAL CLASSES

Content section 1. " Management of patients in the cardiology clinic "

No. z/p	***Topic***
1	1. Management of a patient with arterial hypertension.
3	2. Principles of non-drug and drug treatment of arterial hypertension. 3. Management of a patient with arterial hypotension and fainting.
4	4. Management of a patient with cardiac pain. Management of a patient with stable angina pectoris. 5. Management of a patient with painless myocardial ischemia.
5	6. Management of a patient with unstable angina.
6	7. Management of a patient with shortness of breath. 8. Management of a patient with cardiomegaly. 9. Management of a patient with acrocyanosis.
7	10. Management of a patient with heart murmurs.
8	11. Management of a patient with a heart rhythm disorder.
9	11. Management of a patient with a heart rhythm disorder.
10	12. Management of a patient with impaired cardiac conduction. **Test control of knowledge according to content module 1 "Admission of patients in the cardiology clinic ".**

Content section 2. " ***Admission of patients in the rheumatology clinic "***

Specific goals:

Students must:

- Conduct interviews and physical examinations of patients with major rheumatologic syndromes
- To justify the use of the main invasive and non-invasive diagnostic methods used in rheumatology, to determine indications and contraindications for their implementation, possible complications
- Identify different course options and complications of rheumatological diseases
- To draw up a plan of examination of patients with rheumatological diseases

- Carry out a differential diagnosis, justify and formulate a diagnosis in the main rheumatological syndromes based on the analysis of laboratory and instrumental examination data
- Prescribe treatment, determine prognosis, carry out primary and secondary prevention in rheumatological diseases
- Be able to interpret laboratory indicators in rheumatological diseases (rheumatological tests, autoimmune markers, etc.)
- Be able to interpret the data of echocardiographic examination and radiographic examination of joints and spine
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 17. **Management of a patient with pain in the limbs and back.**

Differential diagnosis of pain in the limbs and back. Drawing up an examination plan, additional laboratory and instrumental examination methods (rheumatological tests, radiography, CT, NMR-tomography, arthroscopy). Patient management tactics. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 18. **Management of a patient with arthralgias/myalgias.**

Differential diagnosis of arthralgia and myalgia. Drawing up an examination plan, additional laboratory and instrumental methods of examination (rheumatological tests, autoimmune markers, biopsy, radiography, Echo-CG). Patient management tactics depending on the underlying cause. Primary and secondary prevention. Forecast and performance.

Topic 19. **Management of a patient with joint syndrome.**

Differential diagnosis in articular syndrome. Drawing up an examination plan, additional laboratory and instrumental examination methods (rheumatological tests, autoimmune markers, radiography, arthroscopy, Echo-CG, NMR). Patient management tactics depending on the underlying cause. There are standards of treatment. Effectiveness and disadvantages of NSAIDs. Indications and contraindications for the use of steroids. Primary and secondary prevention. Forecast and performance.

Topic 20. **Management of a patient with hemorrhagic syndrome.**

Differential diagnosis in hemorrhagic syndrome. Drawing up an examination plan, additional laboratory and instrumental examination methods (general analyses, rheumatic tests, autoimmune markers, coagulogram, blood cultures). Patient management tactics depending on the underlying cause. Primary and secondary prevention. Forecast and performance.

Topic 21. **Management of a patient with arthrosis.**

Differential diagnosis of arthritis and arthrosis. Drawing up an examination plan, additional laboratory and instrumental examination methods (rheumatological tests, autoimmune markers, radiography, arthroscopy, NMR). Patient management tactics. There are standards of treatment. Side effects of NSAIDs and steroids. Intra-articular use of drugs. Surgical methods of treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN OF PRACTICAL CLASSES

Content section 2. " ***Admission of patients in a rheumatology clinic "***

No. z/p	***Topic***
1	17. Management of a patient with pain in the limbs and back. 18. Management of a patient with arthralgias/myalgias. 19. Management of a patient with joint syndrome. 21 Management of a patient with arthrosis.
2	20. Management of a patient with hemorrhagic syndrome. **Test control of knowledge according to content module 2 "Management of patients in a rheumatology clinic".**

Content section 3. " ***Eating patients in a gastroenterological clinic "***

Specific goals

Students must:

- Conduct interviews and physical examinations of patients with major gastroenterological syndromes
- To draw up a plan for the examination of patients with the main gastroenterological syndromes
- To justify the use of invasive and non-invasive diagnostic methods used in gastroenterology, to determine indications and contraindications for their implementation, possible complications
- Carry out a differential diagnosis, justify and formulate a diagnosis for the main gastroenterological syndromes based on the analysis of laboratory and instrumental examination data
- Identify the main variants of the course and complications of diseases of the digestive tract, hepatobiliary system and pancreas
- Prescribe treatment, determine prognosis, carry out primary and secondary prevention in diseases of the digestive tract, hepatobiliary system and pancreas
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 22. **Management of a patient with gastric dyspepsia.**

Definition, organic and functional dyspepsia, main causes and differential diagnosis. Red flag symptoms. Drawing up an examination plan, additional laboratory and instrumental examination methods (upper endoscopy, ultrasound, general and biochemical analyses). Special examination methods (breathing tests, pH-metry, video capsule endoscopy, X-ray methods). Patient management tactics depending on the underlying cause. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 23. **Management of a patient with dysphagia.**

Differential diagnosis of dysphagia. Red flag symptoms. Drawing up an examination plan, additional laboratory and instrumental examination methods (x-ray, upper endoscopy, biopsy, ultrasound, general and biochemical analyses). Patient management tactics depending on the cause. Conservative and surgical treatment. Primary and secondary prevention. Forecast and performance.

Topic 24. **Management of a patient with heartburn.**

The role of gastroesophageal reflux in the development of esophagitis and Barrett's esophagus. Classification. Erosive and non-erosive GERD. Differential diagnosis of esophagitis. Drawing up an examination plan, PPI test, additional instrumental examination methods (x-ray, upper endoscopy, biopsy, ultrasound, general and biochemical analyses). Patient management tactics depending on the presence of esophagitis. There are standards of treatment. Long-term conservative, surgical and endoscopic treatment. Primary and secondary prevention. Forecast and performance.

Topic 25. **Management of a patient with abdominal pain.**

Differential diagnosis of chronic abdominal pain. Drawing up an examination plan, additional laboratory and instrumental examination methods (X-rays of the gastrointestinal tract, upper and lower endoscopy, ultrasound, general and biochemical analyses). Patient management tactics depending on the cause. Conservative and surgical treatment. Primary and secondary prevention. Forecast and performance.

Topic 26. **Management of a patient with chronic diarrheal syndrome.**

Differential diagnosis of diarrheal syndrome. Secretory, exudative, dysmotor and functional diarrhea. The role of intolerance of food components, enzymopathies and immune factors. Syndromes of malabsorption and maldigestion. Drawing up an examination plan, the role

of radiological, instrumental and functional examination methods (passage through the small intestine, irrigoscopy, colonoscopy, video capsule endoscopy, breathing tests, stool tests, fecal elastase). Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 27. **Management of a patient with constipation.**

Constipation in intestinal diseases, intestinal obstruction, anorectal diseases, endocrine and metabolic disorders, neurogenic and psychogenic disorders, nutritional disorders, situational and drug-induced constipation. Drawing up an examination plan, the role of radiological, instrumental and functional examination methods (irigoscopy, colonoscopy, breathing tests, stool analysis). Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 28. **Management of a patient with jaundice.**

Differential diagnosis of subhepatic, hepatic and suprahepatic jaundice. Drawing up an examination plan, the role of instrumental and laboratory methods of examination (ultrasound, endosonography, CT, liver tests, viral markers). Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 29. **Management of a patient with ascites.**

Differential diagnosis of ascites in diseases of the abdominal cavity, malignant tumors, heart and kidney failure. Drawing up an examination plan, the role of instrumental and laboratory examination methods (ultrasound, dopplerography, CT, liver tests, viral markers). Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Principles of prescribing diuretics. Indications for laparocentesis, surgical treatment. Primary and secondary prevention. Forecast and performance.

Topic 30. **Management of a patient with hepatomegaly and hepato-lienal syndrome.**

Differential diagnosis of hepato-lienal syndrome in diseases of the liver, liver vessels, and blood. Drawing up an examination plan, the role of instrumental and laboratory methods of examination (ultrasound, Doppler, CT, liver biopsy, liver tests, viral markers). Patient management tactics depending on the cause, differentiated therapy. Hepatoprotectors and antiviral therapy. There are standards of treatment. Indications for surgical treatment. Primary and secondary prevention. Forecast and performance.

Topic 31. **Management of a patient with portal hypertension.**

Differential diagnosis of conditions leading to the development of portal hypertension. Drawing up an examination plan, the role of instrumental and laboratory methods of examination (endoscopy, ultrasound, dopplerography, CT, liver biopsy, liver tests, viral markers). Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Indications for endoscopic and surgical treatment (shunting operations, liver transplantation). Primary and secondary prevention. Forecast and performance.

Topic 32. **Management of a patient with hepatic encephalopathy.**

Differential diagnosis of conditions leading to the development of hepatic encephalopathy. Stages of hepatic encephalopathy. Drawing up an examination plan, the role of instrumental and laboratory examination methods (endoscopy, ultrasound, liver tests, viral markers). Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Efferent methods of treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN OF PRACTICAL LESSONS
Content section 3. " *Eating patients in a gastroenterological clinic"*

No. z/p	*Topic*
1	22. Management of a patient with gastric dyspepsia. 23. Management of a patient with dysphagia. 24. Management of a patient with heartburn.
2	25. Management of a patient with abdominal pain. 26. Management of a patient with chronic diarrheal syndrome. 27. Management of a patient with constipation.
3	28. Management of a patient with jaundice. 29. Management of a patient with ascites. 30. Management of a patient with hepatomegaly and hepato-lienal syndrome.
4	31. Management of a patient with portal hypertension. 32. Management of a patient with hepatic encephalopathy. **Test control of knowledge according to content module 2 "Management of patients in a rheumatology clinic".**

Content section 4. " ***Admission of patients in the pulmonology clinic "***

Specific goals:

Students must:

- Conduct interviews and physical examinations of patients with major pulmonary syndromes
- To draw up a plan for the examination of patients with the main pulmonary syndromes
- To justify the use of the main invasive and non-invasive diagnostic methods used in pulmonology, to determine indications and contraindications for their implementation, possible complications
- Based on the analysis of laboratory and instrumental examination data, carry out a differential diagnosis in the main pulmonary syndromes, substantiate and formulate a diagnosis in the main diseases of the respiratory organs
- Prescribe treatment, determine the prognosis and carry out primary and secondary prevention for the main diseases of the respiratory organs
- Diagnose and provide assistance with respiratory failure
- To justify the necessity of pleural puncture
- Perform peak flowmetry
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 33. **Management of a patient with broncho-obstructive syndrome.**

Differential diagnosis of conditions accompanied by broncho-obstructive syndrome: bronchial asthma and COPD. Drawing up an examination plan, the role of instrumental and laboratory methods of examination (peak fluorimetry, spirography, radiography, bronchography, CT, bronchoscopy). Patient management tactics depending on the cause, differentiated therapy. Indications for transferring the patient to the intensive care unit. Drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 34. **Management of a patient with chronic cough.**

The main causes of chronic cough, differential diagnosis of cough in lung, heart, gastroenterological, ENT diseases. Drawing up an examination plan, the role of instrumental and laboratory methods of examination (peak fluorimetry, spirography, radiography, bronchography, CT, bronchoscopy, ECG, EGDS). Patient management tactics depending on the cause, differentiated therapy. Drug and non-drug treatment. Primary and secondary prevention. Forecast and performance.

Topic 35. **Management of a patient with infiltrative darkening in the lungs** .

Differential diagnosis of conditions accompanied by the presence of pulmonary infiltrate. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of

examination (x-ray, bronchography, CT, bronchoscopy, biopsy, sputum cultures). Patient management tactics depending on the cause, differentiated therapy. Indications for consultations by other specialists (phtisiatrist, oncologist, etc.). Drug and non-drug treatment. Primary and secondary prevention. Forecast and performance.

Topic 36. **Management of a patient with fever of unknown origin.**

Differential diagnosis of conditions accompanied by the presence of prolonged fever. There are diagnostic algorithms. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, bronchography, CT, bronchoscopy, ultrasound, general and biochemical analyses, cultures of blood, urine, bile, sputum). Patient management tactics depending on the cause, differentiated therapy. Indications for consultations by other specialists (phthisia doctor, oncologist, rheumatologist, infectious disease specialist, septologist). Drug and non-drug treatment.

Topic 37. **Management of a patient with hemoptysis.**

Differential diagnosis of conditions accompanied by the presence of hemoptysis (bronchiectasis, tumors, tuberculosis, pneumonia, mitral stenosis, lung infarction, etc.). There are diagnostic algorithms. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, bronchography, CT, bronchoscopy, ultrasound, echocardiogram, coagulogram, general and biochemical analyses). Patient management tactics depending on the cause, differentiated therapy. Indications for consultations by other specialists (phtisiatrist, oncologist, surgeon, etc.). Drug and non-drug treatment.

Topic 38. **Management of a patient with suffocation and asphyxia.**

Differential diagnosis of conditions accompanied by the presence of suffocation and asphyxia (bronchial asthma, obstructive bronchitis, bronchial tumors, foreign bodies, thromboembolism of pulmonary artery branches, hypertensive crisis, myocardial infarction, acute arrhythmias, nodular periarteritis, etc.). There are diagnostic algorithms. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, bronchography, CT, bronchoscopy, ultrasound, echocardiography, coagulogram, rheumatic tests, general and biochemical analyses). Patient management tactics depending on the cause, differentiated therapy. Drug and non-drug treatment.

Topic 39. **Management of a patient with pleural effusion.**

Differential diagnosis of conditions accompanied by the presence of pleural effusion (tuberculosis, bronchial tumors, pulmonary embolism, heart failure, acute pancreatitis, liver cirrhosis, injuries, diffuse connective tissue diseases, etc.). There are diagnostic algorithms. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, bronchography, CT, bronchoscopy, ultrasound, echocardiography, rheumatic tests, general and biochemical analyses). Patient management tactics depending on the cause, differentiated therapy. Relative and absolute indications for pleural puncture. Drug and non-drug treatment.

Topic 40. **Management of a patient with respiratory failure** .

The main causes of respiratory failure. Diagnosis and differential diagnosis, the role of research on the function of external breathing. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination. Patient management tactics depending on the cause, differentiated therapy. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 41. **Management of a patient with community-acquired pneumonia** .

Differential diagnosis of bacterial, viral, allergic pneumonia, differential diagnosis of pneumonia with tuberculosis, lung tumors, lung infarction, etc. There are algorithms for diagnosing pneumonia. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, bronchography, CT, bronchoscopy, general and biochemical analyses, sputum cultures). Patient management tactics depending on the cause, differentiated therapy. Indications for consultations by other specialists (phtisiatrist, oncologist,

etc.). Drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 42. **Management of a patient with hospital-acquired pneumonia.**

Definition, **differential** diagnosis of pneumonia of different etiology and genesis. There are algorithms for diagnosing pneumonia. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, bronchography, CT, bronchoscopy, general and biochemical analyses, sputum cultures). Patient management tactics depending on microflora resistance, differentiated therapy. First and second line antibiotics. Drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 43. **Management of a patient with a lung abscess.**

The main causes of lung abscess. Differential diagnosis of abscess, lung gangrene, bronchiectasis, tuberculosis, tumor, pleural empyema. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (x-ray, CT, bronchoscopy, sputum cultures). Patient management tactics depending on the cause, differentiated therapy. Drug and non-drug treatment. Indications for surgical treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN OF PRACTICAL LESSONS

Content section 4. " ***Eating patients in a pulmonology clinic "***

No. z/p	***Topic***
1	33. Management of a patient with broncho-obstructive syndrome. 34. Management of a patient with a chronic cough.
2	35. Management of a patient with infiltrative darkening in the lungs. 36. Management of a patient with hemoptysis. 37. Management of a patient with suffocation and asphyxia. 38. Management of a patient with pleural effusion. 39. Management of a patient with respiratory failure.
3	40. Management of a patient with fever of unknown origin. 41. Management of a patient with community-acquired pneumonia. 42. Management of a patient with hospital-acquired pneumonia. 43. Management of a patient with a lung abscess. **Test control of knowledge according to content module 4 "Management of patients in a pulmonology clinic".**

Content section 5. " ***Management of patients in the endocrinological clinic "***

Specific goals:

Students must:

- Conduct interviews and physical examinations of patients with major endocrinological syndromes
- To justify the use of the main invasive and non-invasive diagnostic methods used in endocrinology, to determine indications and contraindications for their implementation, possible complications
- To draw up a plan for the examination of patients with the main endocrine syndromes
- Carry out a differential diagnosis, justify and formulate a diagnosis for the main endocrine syndromes
- Prescribe treatment, determine prognosis, carry out primary and secondary prevention for major endocrine diseases
- Diagnose and provide assistance in emergency situations in endocrinology
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 44. **Management of a patient with chronic complications of diabetes.**

Diabetic angiopathies and neuropathies. Classification. Diabetic nephropathy, stages of development, diagnosis, differential diagnosis, treatment and prevention. Diabetic retinopathy: stages of the process, diagnosis, prevention and treatment. Diabetic neuropathy, classification, diagnosis and treatment. Diabetic foot: classification, diagnosis, treatment. Principles of treatment of pregnant women with diabetes. Peculiarities of urgent and planned surgical interventions in patients with diabetes. Regime of insulin therapy: traditional and intensified insulin therapy. Complications of insulin therapy: hypoglycemic states, insulin allergy, post-injection lipodystrophy, insulin resistance, chronic insulin overdose (Somoji syndrome), insulin edema.

Topic 45. **Management of a patient with uncompensated forms of diabetes (ketoacidosis).**

Diagnostic criteria for diabetes and other categories of hyperglycemia (WHO, 1999). Indications and rules for the glucose tolerance test. Diagnostic value of determination of glycated hemoglobin, fructosamine, C-peptide, glucosuria, ketonuria. Criteria for compensation of metabolism, achievement of normoglycemia. Ketoacidotic conditions in diabetes. Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment. Lactic acidosis. The main methods of treatment of diabetes, diet therapy, dosed physical activity, sugar-lowering pharmacotherapy, teaching the patient self-control.

Topic 46. **Management of a patient with goitre syndrome.**

Determination of the size of the thyroid gland. The definition is "goiter". The concept of endemic non-toxic and nodular forms of goiter. Diseases accompanied by thyrotoxicosis. Clinical differences of nodular toxic goiter. Justification of the diagnosis of thyrotoxicosis. Medicinal and surgical treatment of toxic goiter, use of 131-iodine for therapeutic purposes. Differential diagnosis of thyroiditis with acute and subacute clinical course. Chronic thyroiditis. Justification of the diagnosis of autoimmune thyroiditis. Nodular forms of goiter. Monitoring of patients with thyroid nodules. Pathomorphological classification of tumors of the thyroid gland. Justification of the diagnosis of thyroid cancer.

Topic 47. **Management of a patient with arterial hypertension syndrome in endocrinological practice.**

Classification, criteria for diagnosis and differential diagnosis of secondary arterial hypertension of endocrine origin (with Kohn's syndrome, pheochromocytoma, Ishchenko-Cushing syndrome, hyperthyroidism, etc.). Drawing up an examination plan, the role of instrumental and laboratory examination methods. Patient management tactics, drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 48. **Management of a patient with metabolic syndrome.**

Definition, classification, diagnostic criteria, relevance of the problem throughout the world. Drawing up an examination plan, the role of instrumental and laboratory examination methods. Patient management tactics depending on glycemia, body mass index, blood pressure level. Drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN OF PRACTICAL LESSONS

Content section 5. " ***Management of patients in the endocrinology clinic "***

No. z/p	***Topic***
1	44. Management of a patient with chronic complications of diabetes. 45. Management of a patient with uncompensated forms of diabetes (ketoacidosis).
2	46. Management of a patient with goitre syndrome.
3	47. Management of a patient with arterial hypertension syndrome in endocrinological practice. 48. Management of a patient with metabolic syndrome.

No. z/p	*Topic*
	Test control of knowledge according to content module 5 "Eating patients in the endocrinological clinic ".

Content section 6. " ***Management of patients in the nephrology clinic"***

Specific goals:

Students must:

- Conduct interviews and focused physical examinations of patients with major nephrologic syndromes
- Know the main invasive and non-invasive diagnostic methods used in nephrology, indications and contraindications for their use, possible complications
- Identify the main and atypical variants of the course and complications of diseases of the urinary system
- To draw up a plan for the examination of patients with the main nephrological syndromes
- Based on the analysis of laboratory and instrumental examination data, make a differential diagnosis, substantiate and formulate a diagnosis for diseases of the urinary system
- Prescribe treatment, determine the prognosis, carry out primary and secondary prevention for diseases of the genitourinary system
- Diagnose and provide care for kidney failure
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 49. **Management of a patient with urinary syndrome.**

Definition and characteristics of components of urinary syndrome. Differential diagnosis with hematuria, leukocyturia, proteinuria. Drawing up an examination plan, the role of radiological, instrumental and laboratory methods of examination (ultrasound, pyelography, radiography, CT, scintigraphy, general and biochemical analyses, urine analyzes according to Zimnytskyi, Nechyporenko). Patient management tactics depending on the cause, differentiated therapy. Drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 50. **Management of a patient with edematous syndrome.**

Differential diagnosis in edemas of various genesis (cardiac, renal, alimentary, etc.). Drawing up an examination plan, the role of instrumental and laboratory methods of examination (ultrasound, radiography, ECG, general and biochemical tests, urine tests according to Zimnytskyi, Nechyporenko). Patient management tactics depending on the cause, differentiated therapy. Drug and non-drug treatment. Advantages and disadvantages of diuretic therapy. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 51. **Management of a patient with chronic renal failure.**

Definition and classification. Etiological factors. The concept of "chronic kidney disease". Classification. Pathogenesis of lesions of organs and systems, their clinical manifestations. Clinic and changes in laboratory indicators depending on the stage. Differential treatment at different stages. Renal replacement therapy: hemodialysis, kidney transplantation. Indications and contraindications for hemodialysis, complications. Primary and secondary prevention. Forecast and performance.

Topic 52. **Management of a patient with renal arterial hypertension.**

Classification, diagnostic criteria and differential diagnosis of secondary arterial hypertension of renal genesis (in renoparenchymal and renovascular diseases). Drawing up an examination plan, the role of instrumental and laboratory examination methods. Patient management tactics, drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 53. **Management of a patient with nephrotic syndrome.**

Definition, etiology, pathogenesis of nephrotic syndrome. Clinical manifestations. Drawing up an examination plan, the role of instrumental and laboratory examination methods. Diagnostic criteria and differential diagnosis. Patient management tactics, drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN

Content section 6. " ***Management of patients in the nephrology clinic"***

No. z/p	***Topic***
1	49. Management of a patient with urinary syndrome. 50. Management of a patient with edematous syndrome. 51. Management of a patient with chronic renal failure.
2	52. Management of a patient with renal arterial hypertension. 53. Management of a patient with nephrotic syndrome. **Test control of knowledge according to content module 6 "Eating patients in a nephrology clinic ".**

Content section 7. " ***Admission of patients in the hematology clinic"***

Specific goals:
Students must:

- Conduct interviews and physical examinations of patients with major hematologic syndromes
- To justify the use of the main invasive and non-invasive diagnostic methods used in hematology, indications and contraindications for their use, possible complications
- Identify the typical and atypical clinical picture of the main diseases of the blood and hematopoietic organs
- Draw up a plan for the examination of patients with the main hematological diseases
- Based on the analysis of laboratory and instrumental examination data, carry out a differential diagnosis, justify and formulate a diagnosis in the main diseases of the blood and hematopoietic organs
- Prescribe treatment, determine the prognosis, carry out primary and secondary prevention for the main diseases of the blood and hematopoietic organs
- Diagnose and provide assistance with bleeding due to diseases of the blood and hematopoietic organs
- Determine the blood group, transfuse blood components and blood substitutes
- Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Topic 54 **. Management of a patient with anemia.**

Definition, classification, diagnostic criteria and differential diagnosis of iron-deficient and B_{12}-deficient anemia. The main causes of iron deficiency. Drawing up an examination plan, the role of laboratory examination methods in iron-deficiency and B_{12}-deficiency anemias. Patient management tactics, drug and non-drug treatment. Indications for hemotransfusion. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 55. **Management of a patient with anemia.**

Differential diagnosis of hemolytic, hypoplastic, posthemorrhagic anemia. Mechanisms of intravascular and intracellular hemolysis. Features of clinic and laboratory diagnostics of various forms. Complication. Tactics of treatment of various forms. Transfusion of blood components and components. Primary and secondary prevention. Forecast and performance.

Topic 56. Management of a patient with a leukemic reaction and leukemia .

Definition, main reasons, classification. Differential diagnosis of leukemia and leukemoid reaction. Principles of differentiated treatment. Bone marrow transplantation. Supportive therapy. Primary and secondary prevention. Forecast and performance.

Topic 57. **Management of a patient with polycythemia.**

Definition and classification Differential diagnosis of true, symptomatic and relative polycythemia. Existing standards of diagnosis and treatment. Primary and secondary prevention. Forecast and performance.

Topics 58. **Management of a patient with purpura.**

Definition. Etiology and pathogenesis, main clinical syndromes. Diagnosis criteria. Differential diagnosis of thrombocytopenic and non-thrombocytopenic purpura. Patient management tactics, drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

Topic 59. **Management of a patient with lymphadenopathy.**

The main causes of lymphadenopathy. Differential diagnosis of Hodgkin's and non-Hodgkin's lymphomas, enlargement of lymph nodes in other diseases (tuberculosis, sarcoidosis, metastases, SLE, etc.). Patient management tactics, drug and non-drug treatment. There are standards of treatment. Primary and secondary prevention. Forecast and performance.

THEMATIC PLAN OF PRACTICAL LESSONS
Content section 7. " ***Eating patients in a hematology clinic"***

No. z/p	***Topic***
1	54. Management of a patient with anemia. 55. Iron deficiency and B $_{12}$ deficiency anemia. 56. Hemolytic, hypoplastic, posthemorrhagic anemia. 57. Management of a patient with purpura.
2	58. Management of a patient with a leukemic reaction and leukemia.
3	59. Management of a patient with polycythemia. 60. Management of a patient with lymphadenopathy. **Test control of knowledge according to content module 7 "Eating patients in the hematology clinic ".**

The structure of credit credit - section 3 : "Modern practice of internal medicine"

Topic	**Lectures**	**Practical training**	**Independent work of students**	
			SRS	**Individual work**
Content section 1. " ***Introduction of patients in the cardiology clinic "***				
1. Management of a patient with arterial hypertension.		6	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history
2. Principles of non-drug and drug treatment of arterial hypertension. 3. Management of a patient with arterial hypotension and fainting.		6	1	
4. Management of a patient with cardiac pain. Management of a patient with stable angina pectoris. 5. Management of a patient with painless myocardial ischemia.		6	1	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 1. " ***Introduction of patients in the cardiology clinic "***				
6. Management of a patient with unstable angina.		5	1	of a patient at a practical session • Writing theses, articles
7. Management of a patient with shortness of breath. 8. Management of a patient with cardiomegaly. 9. Management of a patient with acrocyanosis.		6	1	
10. Management of a patient with heart murmurs.		5	1	
11. Management of a patient with a heart rhythm disorder.		8	2	
12. Management of a patient with impaired cardiac conduction.		5	1	
13. Management of a patient with heart failure.		8	2	
Individual work			11	1
Total hours – 67		**55**	**12**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 2. " ***Admission of patients in the rheumatology clinic "***				
17. Management of a patient with pain in the limbs and back. 18. Management of a patient with arthralgias/myalgias. 19. Management of a patient with joint syndrome. 21. Management of a patient with arthrosis.		6	4	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
20. Management of a patient with hemorrhagic syndrome.		7	2	
Individual work			6	1
Total hours – 20		**13**	**7**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 3. " ***Eating patients in a gastroenterological clinic "***				
22. Management of a patient with gastric dyspepsia. 23. Management of a patient with dysphagia. 24. Management of a patient with heartburn.		5	2	• Presentation of the essay at the practical session • Report at clinical conferences of

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 3. " ***Eating patients in a gastroenterological clinic*** **"**				
25. Management of a patient with abdominal pain. 26. Management of a patient with chronic diarrheal syndrome. 27. Management of a patient with constipation.		6	2	department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
28. Management of a patient with jaundice. 29. Management of a patient with ascites. 30. Management of a patient with hepatomegaly and hepato-lienal syndrome.		5	2	
31. Management of a patient with portal hypertension. 32. Management of a patient with hepatic encephalopathy.		7	1	
Individual work			7	1
Total hours - 31		**23**	**8**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 4. " ***Admission of patients in the pulmonology clinic*** **"**				
33. Management of a patient with broncho-obstructive syndrome. 34. Management of a patient with a chronic cough.		6	2	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
35. Management of a patient with infiltrative darkening in the lungs. 36. Management of a patient with hemoptysis. 37. Management of a patient with suffocation and asphyxia. 38. Management of a patient with pleural effusion. 39. Management of a patient with respiratory failure.		6	3	
40. Management of a patient with fever of unknown origin. 41. Management of a patient with community-acquired pneumonia. 42. Management of a patient with hospital-acquired pneumonia. 43. Management of a patient with a lung abscess.		6	4	
Individual work			9	1
Total hours – 28		**18**	**10**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 5. " ***Admission of patients in the endocrinological clinic*** **"**				
44. Management of a patient with chronic complications of diabetes. 45. Management of a patient with uncompensated forms of diabetes (ketoacidosis).		4	2	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
46. Management of a patient with goitre syndrome.		4	2	
47. Management of a patient with arterial hypertension syndrome in endocrinological practice. 48. Management of a patient with metabolic syndrome.		3	4	
Individual work			8	1
Total hours – 20		**11**	**9**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 6. " ***Admission of patients in the nephrology clinic*** **"**				
49. Management of a patient with urinary syndrome. 50. Management of a patient with edematous syndrome. 51. Management of a patient with chronic renal failure.		5	3	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
52. Management of a patient with renal arterial hypertension. 53. Management of a patient with nephrotic syndrome.		5	2	
Individual work			5	1
Total hours – 16		**10**	**6**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 7. " ***Admission of patients in the hematology clinic*** **"**				
54. Management of a patient with anemia. 55. Iron deficiency and B $_{12}$ deficiency anemia. 56. Hemolytic, hypoplastic, posthemorrhagic anemia. 57. Management of a patient with purpura.		6	4	• Presentation of the essay at the practical session • Report at clinical conferences of department bases
58. Management of a patient with a leukemic reaction and leukemia.		5	1	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 7. " ***Admission of patients in the hematology clinic "***				
59. Management of a patient with polycythemia. 60. Management of a patient with lymphadenopathy.		5	2	• A report on the medical history of a patient at a practical session • Writing theses, articles
Individual work			7	1
Total hours 24		16	8	
Total hours		**146**	**8**	
Final control		**4**		
Total hours 240		**150**	**60**	
ECTS credits – 8				

List of questions
to prepare students for the final examination
Section 3 (6th year, XI semester).
Modern practice of internal medicine

1. Management of a patient with arterial hypertension: existing algorithms and standards of diagnosis and treatment
2. Management of a patient with arterial hypotension and fainting: existing diagnostic and treatment algorithms
3. Management of a patient with cardiac pain: existing diagnostic and treatment algorithms
4. Management of a patient with a heart rhythm disorder: existing algorithms and standards for diagnosis and treatment
5. Management of a patient with impaired cardiac conduction: existing algorithms and standards of diagnosis and treatment
6. Management of a patient with stable angina pectoris: existing algorithms and standards of diagnosis and treatment
7. Management of a patient with painless myocardial ischemia: existing algorithms and standards of diagnosis and treatment
8. Management of a patient with unstable angina pectoris: existing algorithms and standards of diagnosis and treatment
9. Management of a patient with shortness of breath: existing diagnostic and treatment algorithms
10. Management of a patient with cardiomegaly: existing diagnostic and treatment algorithms
11. Management of a patient with cyanosis: existing diagnostic and treatment algorithms
12. Management of a patient with heart failure: existing algorithms and standards of diagnosis and treatment
13. Management of a patient with heart murmurs: existing diagnostic and treatment algorithms
14. Management of a patient with pain in the limbs and back: existing algorithms for diagnosis and treatment
15. Management of a patient with arthralgias/myalgias: existing diagnostic and treatment algorithms
16. Management of a patient with joint syndrome: existing algorithms and standards of diagnosis and treatment

17. Management of a patient with hemorrhagic syndrome: existing diagnostic and treatment algorithms
18. Management of a patient with arthrosis: existing algorithms and standards of diagnosis and treatment
19. Management of a patient with gastric dyspepsia: existing algorithms and standards of diagnosis and treatment
20. Management of a patient with dysphagia: existing algorithms and standards of diagnosis and treatment
21. Management of a patient with heartburn: existing algorithms and standards of diagnosis and treatment
22. Management of a patient with abdominal pain: existing diagnostic and treatment algorithms
23. Management of a patient with chronic diarrhea syndrome: existing diagnostic and treatment algorithms
24. Management of a patient with constipation: existing diagnostic and treatment algorithms
25. Management of a patient with jaundice: existing diagnostic and treatment algorithms
26. Management of a patient with ascites: existing diagnostic and treatment algorithms
27. Management of a patient with hepatomegaly and hepato-lineal syndrome: existing diagnostic and treatment algorithms
28. Management of a patient with portal hypertension: existing algorithms for diagnosis and treatment
29. Management of a patient with hepatic encephalopathy: existing algorithms and standards of diagnosis and treatment
30. Management of a patient with broncho-obstructive syndrome: existing algorithms and standards of diagnosis and treatment
31. Management of a patient with chronic cough: existing diagnostic and treatment algorithms
32. Management of a patient with infiltrative darkening in the lungs: existing diagnostic and treatment algorithms
33. Management of a patient with fever of unknown origin: existing diagnostic and treatment algorithms
34. Management of a patient with hemoptysis: existing diagnostic and treatment algorithms
35. Management of a patient with suffocation and asphyxia: existing algorithms and standards of diagnosis and treatment
36. Management of a patient with pleural effusion: existing diagnostic and treatment algorithms
37. Management of a patient with respiratory failure: existing diagnostic and treatment algorithms
38. Management of a patient with community-acquired pneumonia: existing algorithms and standards of diagnosis and treatment
39. Management of a patient with hospital-acquired pneumonia: existing algorithms and standards of diagnosis and treatment
40. Management of a patient with a lung abscess: existing algorithms and standards of diagnosis and treatment
41. Management of a patient with chronic complications of diabetes: existing algorithms and standards of diagnosis and treatment
42. Management of a patient with uncompensated forms of diabetes (ketoacidosis): existing algorithms and standards of diagnosis and treatment
43. Management of a patient with goitre syndrome: existing algorithms and standards of diagnosis and treatment
44. Management of a patient with arterial hypertension syndrome in endocrinological practice: existing algorithms and standards of diagnosis and treatment
45. Management of a patient with metabolic syndrome: existing algorithms and standards of diagnosis and treatment
46. Management of a patient with urinary syndrome: existing diagnostic and treatment algorithms
47. Management of a patient with edema syndrome: existing diagnostic and treatment algorithms

48. Management of a patient with chronic renal failure: existing algorithms and standards of diagnosis and treatment
49. Management of a patient with renal arterial hypertension: existing algorithms and standards of diagnosis and treatment
50. Management of a patient with nephrotic syndrome: existing algorithms and standards of diagnosis and treatment
51. Management of a patient with anemia: existing algorithms and standards of diagnosis and treatment
52. Management of the patient with leukemic reaction and leukemia: existing algorithms for diagnosis and treatment
53. Management of a patient with polycythemia: existing algorithms and standards of diagnosis and treatment
54. Management of a patient with purpura: existing algorithms for diagnosis and treatment
55. Management of a patient with lymphadenopathy: existing diagnostic and treatment algorithms

List of practical works and tasks for final control

Section 3 (6th year, XI semester).

Modern practice of internal medicine

1. Conduct interviews and physical examinations of patients with major cardiac syndromes
2. Draw up a plan for the examination of patients with heart diseases, justify the use of the main invasive and non-invasive diagnostic methods used in cardiology, determine the indications and contraindications for their implementation, possible complications
3. Identify different course options and complications of heart diseases
4. Carry out a differential diagnosis, substantiate and formulate a diagnosis for the main cardiac syndromes based on the analysis of laboratory and instrumental examination data
5. Prescribe treatment, determine prognosis, carry out primary and secondary prevention of heart diseases
6. Record and interpret 12-lead ECG
7. Measure and interpret blood pressure
8. Diagnose and provide assistance in case of fainting
9. Diagnose and provide assistance in case of hypertensive crisis
10. Diagnose and provide assistance with arterial hypotension
11. Diagnose and provide assistance with paroxysmal heart rhythm disorders
12. Diagnose and provide care for Morgana-Edems-Stokes syndrome
13. Perform cardiopulmonary resuscitation
14. Conduct interviews and physical examinations of patients with major rheumatologic syndromes
15. To justify the use of the main invasive and non-invasive diagnostic methods used in rheumatology, to determine indications and contraindications for their implementation, possible complications
16. Identify different course options and complications of rheumatological diseases
17. To draw up a plan of examination of patients with rheumatological diseases
18. Carry out a differential diagnosis, justify and formulate a diagnosis in the main rheumatological syndromes based on the analysis of laboratory and instrumental examination data
19. Prescribe treatment, determine prognosis, carry out primary and secondary prevention in rheumatological diseases
20. Be able to interpret laboratory indicators in rheumatological diseases (rheumatological tests, autoimmune markers, etc.)
21. Be able to interpret the data of echocardiographic examination and radiographic examination of joints and spine

22. Conduct interviews and physical examinations of patients with major gastroenterological syndromes
23. To draw up a plan for the examination of patients with the main gastroenterological syndromes
24. To justify the use of invasive and non-invasive diagnostic methods used in gastroenterology, to determine indications and contraindications for their implementation, possible complications
25. Carry out a differential diagnosis, justify and formulate a diagnosis for the main gastroenterological syndromes based on the analysis of laboratory and instrumental examination data
26. Identify the main variants of the course and complications of diseases of the digestive tract, hepatobiliary system and pancreas
27. Prescribe treatment, determine prognosis, carry out primary and secondary prevention in diseases of the digestive tract, hepatobiliary system and pancreas
28. Conduct interviews and physical examinations of patients with major pulmonary syndromes
29. To draw up a plan for the examination of patients with the main pulmonary syndromes
30. To justify the use of the main invasive and non-invasive diagnostic methods used in pulmonology, to determine indications and contraindications for their implementation, possible complications
31. Based on the analysis of laboratory and instrumental examination data, carry out a differential diagnosis in the main pulmonary syndromes, substantiate and formulate a diagnosis in the main diseases of the respiratory organs
32. Prescribe treatment, determine the prognosis and carry out primary and secondary prevention for the main diseases of the respiratory organs
33. Diagnose and provide assistance with respiratory failure
34. To justify the necessity of pleural puncture
35. Perform peak flowmetry
36. Conduct interviews and physical examinations of patients with major endocrinological syndromes
37. To justify the use of the main invasive and non-invasive diagnostic methods used in endocrinology, to determine indications and contraindications for their implementation, possible complications
38. To draw up a plan for the examination of patients with the main endocrine syndromes
39. Carry out a differential diagnosis, justify and formulate a diagnosis for the main endocrine syndromes
40. Prescribe treatment, determine prognosis, carry out primary and secondary prevention for major endocrine diseases
41. Diagnose and provide assistance in emergency situations in endocrinology
42. Conduct interviews and focused physical examinations of patients with major nephrologic syndromes
43. Know the main invasive and non-invasive diagnostic methods used in nephrology, indications and contraindications for their use, possible complications
44. Identify the main and atypical variants of the course and complications of diseases of the urinary system
45. To draw up a plan for the examination of patients with the main nephrological syndromes
46. Based on the analysis of laboratory and instrumental examination data, make a differential diagnosis, substantiate and formulate a diagnosis for diseases of the urinary system
47. Prescribe treatment, determine the prognosis, carry out primary and secondary prevention for diseases of the genitourinary system
48. Diagnose and provide care for kidney failure
49. Conduct interviews and physical examinations of patients with major hematologic syndromes
50. To justify the use of the main invasive and non-invasive diagnostic methods used in hematology, indications and contraindications for their use, possible complications

51. Identify the typical and atypical clinical picture of the main diseases of the blood and hematopoietic organs
52. Draw up a plan for the examination of patients with the main hematological diseases
53. Based on the analysis of laboratory and instrumental examination data, carry out a differential diagnosis, justify and formulate a diagnosis in the main diseases of the blood and hematopoietic organs
54. Prescribe treatment, determine the prognosis, carry out primary and secondary prevention for the main diseases of the blood and hematopoietic organs
55. Diagnose and provide assistance with bleeding due to diseases of the blood and hematopoietic organs
56. Determine the blood group, transfuse blood components and blood substitutes
57. Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination

Section 4 (6th course, 12th semester).
Emergency conditions in the clinic of internal medicine
Total hours - 120 / 4 credits (practical classes - 90, SRS - 30)

The ultimate goals of the chapter

Students must:

- Determine the level of examination and treatment of patients with urgent conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent conditions in a hospital
- Carry out in practice the differential diagnosis of the main syndromes found in the clinic of emergency conditions
- Master the methods of treatment of emergency conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of patients in the emergency clinic

Students must conduct curation of patients (new or those already treated) with the following diseases:

- Complicated hypertensive crisis - 2
- Acute left ventricular failure - 2
- Acute coronary syndrome - 2
- Paroxysmal rhythm disturbances - 2
- Acute myocardial infarction - 1
- Cardiogenic shock - 1
- Thromboembolism of the pulmonary artery - 1
- Fainting/collapse - 1
- Stopping blood circulation and breathing - 1
- Acute arthritis - 1
- Asthmatic status - 2
- Anaphylactic shock - 1
- Edema of the larynx/Angioedema - 1
- Severe pneumonia - 2

- Acute abdominal pain - 2
- Gastrointestinal bleeding - 2
- Acute liver failure - 1
- Severe anemia - 2
- Agranulocytosis -1
- Thyrotoxic crisis - 1
- Hypoglycemic coma - 1
- Hyperglycemic (ketoacidonemic) coma - 1
- Acute adrenal insufficiency - 1
- Acute renal failure - 1

The organization of the educational process should ensure the participation of students in the management of at least 2/3 of hospitalized patients. If it is not possible to access patients in any category, students complete a medical history with the diagnoses/problems of the appropriate category. The necessity of writing such a history is determined by the assistant/associate professor (head of the department) on the basis of a weekly review of data on the availability of relevant patients in the departments.

The course is held in hospitals that work in emergency care. Each student must work with 2-3 new/undifferentiated patients weekly in the hospital setting. During the entire course, students examine 6-10 patients who are under dynamic observation or permanent patients every week. If, for any reason, the student sees less than 2 patients per day (which are dynamically observed), the treatment of previously admitted patients is raised and studied. The number of patients for which the student is responsible is determined by the complexity of the cases and the student's demonstrated willingness to participate in the treatment of additional patients.

Didactic classes are held during morning tests, lectures and practical classes. The assessment of the student's filling in the medical history and discharges is performed by the teacher in the process of working with the patient.

Content section 1. " *Emergencies in cardiology"*

Specific goals:
Students must:

- Determine the level of examination and treatment of patients with urgent cardiac conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent cardiac conditions in a hospital
- To carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of emergency cardiac conditions
- Master the methods of treatment of emergency cardiac conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of cardiac patients in the emergency clinic

Topic 1. **Treatment of a patient with complicated hypertensive crisis.**

There are standards for diagnosis and emergency treatment at the pre-hospital and hospital stage. Treatment tactics depending on the damage to the target organs. Further management of patients.

Treatment of a patient with cardiac asthma and pulmonary edema. There are standards for diagnosis and emergency treatment at the pre-hospital and hospital stage. Tactics of treatment depending on the level of blood pressure. Further management of patients.

Topic 2. **Treatment of a patient with acute coronary syndrome.**

Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage. Treatment tactics depending on ST segment elevation. Further management of patients.

Topic 3. **Curation of a patient with a myocardial infarction.**

Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage. Treatment tactics depending on the elevation of the ST segment and the presence of a pathological Q wave. Further management of patients.

Treatment of a patient with cardiogenic shock. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage. Treatment tactics depending on the blood pressure level and the stage of shock. Further management of patients.

Topic 4. **Treatment of a patient with pulmonary embolism.**

Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage. Treatment tactics depending on the level of embolization. Further management of patients.

Treatment tactics for sudden cardiac death. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage. Technique of resuscitation measures. Defibrillation. Tactics of further treatment and management of patients.

Topic 5. **Treatment of a patient with paroxysmal rhythm and conduction disorders.**

Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage. Treatment tactics depending on the type of arrhythmia or blockade. Electropulse therapy and electrostimulation. Further management of patients.

THEMATIC PLAN OF PRACTICAL CLASSES
Content section 1. " *Emergencies in cardiology"*

No. z/p	***Topic***
1	1. Treatment of a patient with a complicated hypertensive crisis.
2	Treatment of a patient with cardiac asthma and pulmonary edema.
3	2. Treatment of a patient with acute coronary syndrome. 3. Treatment of a patient with a myocardial infarction. Treatment of a patient with cardiogenic shock.
4	4. Treatment of a patient with pulmonary embolism.
5	4. Treatment tactics for sudden cardiac death.
6	5. Treatment of a patient with paroxysmal rhythm and conduction disorders.
7	5. Treatment of a patient with paroxysmal rhythm and conduction disorders.
8	5. Treatment of a patient with paroxysmal rhythm and conduction disorders. **Test control of knowledge according to meaningful module 1 " *Emergencies in cardiology"***

Content section 2. " *Emergencies in rheumatology"*

Specific goals:
Students must:

- To determine the level of examination and treatment of patients with urgent rheumatological conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent rheumatological conditions in a hospital
- To carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of urgent rheumatological conditions
- Master the methods of treatment of urgent rheumatological conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of rheumatological patients in the emergency clinic

Topic 6. **Treatment of a patient with acute reactive arthritis.**

Existing standards of diagnosis and treatment. Tactics of treatment depending on the nature of localization and damage to the joint. The role of instrumental and laboratory methods of additional examination. Further management of patients.

Topic *7.* Treatment of a patient with thrombocytopenic purpura.

Existing standards of diagnosis and treatment. Treatment tactics depending on severity and spread. The role of instrumental and laboratory methods of additional examination. Further management of patients.

Topic 8. **Treatment of a patient with acute back pain.**

Existing standards of diagnosis and treatment. Treatment tactics depending on the nature of localization and damage. The role of X-ray and laboratory methods of follow-up examination. Further management of patients.

THEMATIC PLAN OF PRACTICAL LESSONS

Content section 2. " *Emergencies in rheumatology"*

No. z/p	***Topic***
1	6. Treatment of a patient with acute reactive arthritis.
2	7. Treatment of a patient with thrombocytopenic purpura.
3	8. Treatment of a patient with acute back pain. **Test control of knowledge according to content module 2 " *Emergencies in rheumatology"***

Content section 3. " *Emergencies in pulmonology and allergology"*

Specific goals:

Students must:

- Determine the level of examination and treatment of patients with urgent pulmonological and allergic conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent pulmonological and allergological conditions in a hospital
- Carry out in practice the differential diagnosis of the main syndromes found in the clinic of urgent pulmonological and allergic conditions
- Master the methods of treatment of urgent pulmonological and allergic conditions, the effectiveness of which is proven by the data of evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of patients in the clinic of pulmonological and allergological emergencies

Topic 9. **Curation of a patient with severe community-acquired and hospital-acquired pneumonia.**

Treatment of a patient with total pleural effusion and pneumothorax.

Existing standards of diagnosis and treatment. Treatment tactics depending on severity and spread. The role of X-ray, instrumental and laboratory methods of follow-up examination. Indications for pleural puncture. Indications for transfer to the intensive care unit, artificial lung ventilation. Further management of patients.

Topic 10. **Curation of a patient with asthmatic status.**

Existing standards of diagnosis and treatment. Treatment tactics depending on the stage. The role of X-ray, instrumental and laboratory methods of follow-up examination. Indications for transfer to the intensive care unit, artificial lung ventilation. Further management of patients.

Topic 11. **Treatment of a patient with anaphylactic shock and Quincke's edema.**

Existing standards of diagnosis and treatment. Treatment tactics depending on the cause and severity. Further management of patients.

THEMATIC PLAN OF PRACTICAL LESSONS
Content section 3. " *Emergencies in pulmonology and allergology"*

No. z/p	***Topic***
1	9. Treatment of a patient with severe non-hospital and hospital-acquired pneumonia.
2	9. Treatment of a patient with total pleural effusion and pneumothorax.
3	10. Treatment of a patient with asthmatic status.
4	11. Treatment of a patient with anaphylactic shock and Quincke's edema. **Test control of knowledge according to meaningful module 3 " *Emergencies in pulmonology and allergology"***

Content section 4. " *Emergencies in gastroenterology"*

Specific goals:
Students must:

- Determine the level of examination and treatment of patients with urgent gastroenterological conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent gastroenterological conditions in a hospital
- Carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of emergency gastroenterological conditions
- Master the methods of treatment of urgent gastroenterological conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of patients in the gastroenterological emergency clinic

Topic 12. **Treatment of a patient with acute liver failure.**

Existing standards of diagnosis and treatment. Treatment tactics depending on the cause and stage. The role of instrumental and laboratory methods of additional examination. Indications for pleural puncture. Indications for transfer to the intensive care unit, efferent therapy. Further management of patients.

Topic 13. **Treatment of a patient with acute abdominal pain.**

Existing standards of diagnosis and management of patients. Patient management tactics depending on the cause. The role of instrumental and laboratory methods of additional examination. Indications for urgent surgical treatment. Indications for transfer to the surgical department or intensive care unit. Further management of patients.

Topic 14. **Treatment of a patient with gastrointestinal bleeding** .

Existing standards of diagnosis and management of patients. Patient management tactics depending on the cause. The role of endoscopic, instrumental and laboratory methods of additional examination. Conservative treatment, indications for hemotransfusion. Indications for endoscopic hemostasis or urgent surgical treatment. Further management of patients.

THEMATIC PLAN OF PRACTICAL LESSONS
Content section 4. " *Emergencies in gastroenterology"*

No. z/p	***Topic***
1	12. Treatment of a patient with acute liver failure.
2	13. Treatment of a patient with acute abdominal pain.
3	13. Treatment of a patient with acute abdominal pain.
	14. Treatment of a patient with gastrointestinal bleeding.

No. z/p	*Topic*
	Test control of knowledge according to meaningful module 4 " *Emergencies in gastroenterology"*

Z komentarzem [ŁS1]: Section czy module?

Content section 5. " *Emergencies in endocrinology "*

Specific goals:
Students must:

- Determine the level of examination and treatment of patients with emergency endocrinological conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent endocrinological conditions in a hospital
- To carry out in practice the differential diagnosis of the main syndromes found in the clinic of urgent endocrine conditions
- Master the methods of treatment of emergency endocrinological conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of patients in the clinic of endocrinological emergencies

Topic 15. **Treatment of a patient with hypoglycemic coma.**

Existing standards of diagnosis and management of patients. Differential diagnosis with hyperglycemic coma. Patient management tactics.

Topic 16. **Treatment of a patient with hyperglycemic (ketoacidemic) coma.**

Existing standards of diagnosis and management of patients. Differential diagnosis with hypoglycemic coma. Patient management tactics.

Topic 17. **Treatment of a patient with thyrotoxic crisis.**
Treatment of a patient with acute adrenal insufficiency.

Existing standards of diagnosis and management of patients. Differential diagnosis. Patient management tactics.

THEMATIC PLAN OF PRACTICAL LESSONS
Content section 5. " *Emergencies in endocrinology "*

No. z/p	*Topic*
1	15. Treatment of a patient with hypoglycemic coma.
2	16. Treatment of a patient with hyperglycemic (ketoacidemic) coma.
3	17. Treatment of a patient with thyrotoxic crisis.
	17. Treatment of a patient with acute adrenal insufficiency. **Test control of knowledge according to content module 5 " *Emergencies in endocrinology "***

Content section 6. " *Emergencies in hematology "*

Specific goals:
Students must:

- Determine the level of examination and treatment of patients with urgent hematological conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent hematological conditions in a hospital
- To carry out in practice the differential diagnosis of the main syndromes found in the clinic of urgent hematological conditions

- Master the methods of treatment of urgent hematological conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of patients in the hematological emergency clinic

Topic 18. **Treatment of a patient with severe anemia.**

Existing standards of diagnosis and management of patients. Patient management tactics depending on the cause. The role of endoscopic, instrumental and laboratory methods of additional examination. Conservative treatment, indications for hemotransfusion. Further management of patients.

Topic 19. **Treatment of a patient with agranulocytosis.**

Existing standards of diagnosis and management of patients. Patient management tactics depending on the cause. The role of instrumental and laboratory methods of additional examination. Conservative treatment, indications for hemotransfusion. Indications for bone marrow transplantation. Further management of patients.

Topic 20. **Treatment of a patient with purpura.**

Treatment of a patient with acute thrombosis.

Existing standards of diagnosis and management of patients. Patient management tactics depending on the cause. The role of instrumental and laboratory methods of additional examination. Conservative treatment, indications for thrombolytic therapy. Further management of patients.

THEMATIC PLAN OF PRACTICAL LESSONS

Content section 6. " *Emergencies in hematology "*

No. z/p	***Topic***
1	20. Treatment of a patient with severe anemia.
2	21. Treatment of a patient with agranulocytosis. **Test control of knowledge according to meaningful module 6 " *Emergencies in hematology "***

Content module 7 *" Emergencies in nephrology "*

Specific goals:
Students must:

- Determine the level of examination and treatment of patients with urgent nephrological conditions in a hospital
- Apply in practice the algorithms of examination and management of patients with urgent nephrological conditions in a hospital
- To carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of urgent nephrological conditions
- Master the methods of treatment of urgent nephrological conditions, the effectiveness of which is proven by evidence-based medicine
- Apply in practice the standards of diagnosis and treatment of patients in the nephrological emergency clinic

Topic 21. **Curation of a patient with acute renal failure.**

Existing standards of diagnosis and management of patients. Patient management tactics depending on the cause. The role of instrumental and laboratory methods of additional examination. Conservative treatment, indications for hemodialysis. Further management of patients.

THEMATIC PLAN OF PRACTICAL LESSONS

Content section 7 *" Emergencies in nephrology "*

No. z/p	*Topic*
1	22. Treatment of a patient with acute renal failure.
2	23. Treatment of a patient with purpura.
	24. Treatment of a patient with acute thrombosis. **Test control of knowledge according to meaningful chapter 7 *" Emergencies in nephrology "***

The structure of credit credit:
" Emergencies in the clinic of internal medicine "

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 1. " *Emergencies in cardiology"*				
1. Treatment of a patient with a complicated hypertensive crisis.		3	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
Treatment of a patient with cardiac asthma and pulmonary edema.		3		
2. Treatment of a patient with acute coronary syndrome. 3. Treatment of a patient with a myocardial infarction. Treatment of a patient with cardiogenic shock.		4	1	
4. Treatment of a patient with pulmonary embolism.		3	1	
5. Treatment tactics for sudden cardiac death.		3	1	
6. Treatment of a patient with paroxysmal rhythm and conduction disorders.		3	1	
7. Treatment of a patient with paroxysmal rhythm and conduction disorders.		3		
8. Treatment of a patient with paroxysmal rhythm and conduction disorders.		3		
Individual work			5	1
Total hours – 31		**25**	**6**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 2. " *Emergencies in rheumatology"*				
9. Treatment of a patient with acute reactive arthritis.		3	1	• Presentation of the essay at the practical session
10. Treatment of a patient with thrombocytopenic purpura.		3	1	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 2. " *Emergencies in rheumatology"*				
11. Treatment of a patient with acute back pain.		3	1	• Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
Individual work			3	1
Total hours – 13		**9**	**4**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 3. " *Emergencies in pulmonology and allergology"*				
12. Treatment of a patient with severe non-hospital and hospital-acquired pneumonia.		4	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
13. Treatment of a patient with total pleural effusion and pneumothorax.		4	1	
14. Treatment of a patient with asthmatic status.		3	1	
15. Treatment of a patient with anaphylactic shock and Quincke's edema.		3	1	
Individual work			4	1
Total hours - 19		**14**	**5**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 4. " *Admission of patients in the gastroenterology clinic "*				
16. Management of a patient with gastric dyspepsia. 17. Management of a patient with dysphagia. 18. Management of a patient with heartburn.		4	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session
19. Management of a patient with abdominal pain. 20. Management of a patient with chronic diarrheal syndrome. 21. Management of a patient with constipation.		4	1	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 4. " ***Admission of patients in the gastroenterology clinic "***				
22. Management of a patient with jaundice. 23. Management of a patient with ascites. 24. Management of a patient with hepatomegaly and hepato-lienal syndrome.		4	1	• Writing theses, articles
25. Management of a patient with portal hypertension. 26. Management of a patient with hepatic encephalopathy.		3	1	
Individual work			4	1
Total hours – 20		**15**	**5**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 5. " ***Emergencies in endocrinology"***				
27. Treatment of a patient with hypoglycemic coma.		3	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
28. Treatment of a patient with hyperglycemic (ketoacidemic) coma.		3		
29. Treatment of a patient with thyrotoxic crisis.		3	1	
30. Treatment of a patient with acute adrenal insufficiency.		2	1	
Individual work			3	1
Total hours – 15		**11**	**4**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 6. " ***Emergencies in hematology"***				
31. Treatment of a patient with severe anemia.		2	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
32. Treatment of a patient with agranulocytosis.		2		
Individual work			1	1
Total hours - 6		**4**	**2**	

Topic	Lectures	Practical training	Independent work of students	
			SRS	Individual work
Content section 7. *"Emergencies in nephrology "*				
33. Treatment of a patient with acute renal failure.		3	1	• Presentation of the essay at the practical session • Report at clinical conferences of department bases • A report on the medical history of a patient at a practical session • Writing theses, articles
34. Treatment of a patient with purpura.		2	1	
35. Treatment of a patient with acute thrombosis.		3	1	
Individual work			3	1
Total hours – 12		**8**	**4**	
Total hours module		**86**	**30**	
Final control of credit utilization		**4**		
Total hours 120		**90**	**30**	
Credits 4				

List of questions
to prepare students for the final examination
Section (6th year, 12th semester).

Emergency conditions in the clinic of internal medicine

1. Treatment of a patient with complicated hypertensive crisis. There are standards for diagnosis and emergency treatment at the pre-hospital and hospital stage.
2. Treatment of a patient with cardiac asthma and pulmonary edema. There are standards for diagnosis and emergency treatment at the pre-hospital and hospital stage.
3. Treatment of a patient with acute coronary syndrome. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage.
4. Treatment of a patient with myocardial infarction. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage.
5. Treatment of a patient with cardiogenic shock. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage.
6. Treatment of a patient with pulmonary embolism. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage.
7. Treatment tactics for sudden cardiac death. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage.
8. Treatment of a patient with paroxysmal rhythm and conduction disorders. Existing standards of urgent diagnosis and emergency treatment at the pre-hospital and hospital stage.
9. Treatment of a patient with acute reactive arthritis. Existing standards of diagnosis and treatment.
10. Treatment of a patient with thrombocytopenic purpura. Existing standards of diagnosis and treatment.
11. Treatment of a patient with acute back pain. Existing standards of diagnosis and treatment.

Z komentarzem [ŁS2]: Tu nie wiem czy nie pozamieniać na module zamiat section bo jest pojebane to

12. Treatment of a patient with severe community-acquired and hospital-acquired pneumonia. There are standards for diagnosis and emergency treatment.
13. Treatment of a patient with total pleural effusion and pneumothorax. Existing standards of diagnosis and treatment.
14. Treatment of a patient with asthmatic status. Existing standards of diagnosis and treatment.
15. Treatment of a patient with anaphylactic shock and Quincke's edema. Existing standards of diagnosis and treatment.
16. Treatment of a patient with acute liver failure. Existing standards of diagnosis and treatment.
17. Treatment of a patient with acute abdominal pain. Existing standards of diagnosis and management of patients.
18. Treatment of a patient with gastrointestinal bleeding. Existing standards of diagnosis and management of patients.
19. Treatment of a patient with hypoglycemic coma. Existing standards of diagnosis and management of patients.
20. Treatment of a patient with hyperglycemic (ketoacidemic) coma. Existing standards of diagnosis and management of patients.
21. Treatment of a patient with thyrotoxic crisis. Existing standards of diagnosis and treatment.
22. Treatment of a patient with acute adrenal insufficiency. Existing standards of diagnosis and management of patients.
23. Treatment of a patient with severe anemia. Existing standards of diagnosis and management of patients.
24. Treatment of a patient with agranulocytosis. Existing standards of diagnosis and management of patients.
25. Treatment of a patient with purpura. Existing standards of diagnosis and treatment.
26. Treatment of a patient with acute thrombosis. Existing standards of diagnosis and management of patients.
27. Treatment of a patient with acute renal failure. Existing standards of diagnosis and management of patients.

List of practical works and tasks for final control

Section 4 (6th year, 12th semester).

Emergency conditions in the clinic of internal medicine

1. Determine the level of examination and treatment of patients with urgent cardiac conditions in a hospital
2. Apply in practice the algorithms of examination and management of patients with urgent cardiac conditions in a hospital
3. To carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of emergency cardiac conditions
4. Master the methods of treatment of emergency cardiac conditions, the effectiveness of which is proven by evidence-based medicine
5. Apply in practice the standards of diagnosis and treatment of cardiac patients in the emergency clinic
6. To determine the level of examination and treatment of patients with urgent rheumatological conditions in a hospital
7. Apply in practice the algorithms of examination and management of patients with urgent rheumatological conditions in a hospital
8. To carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of urgent rheumatological conditions
9. Master the methods of treatment of urgent rheumatological conditions, the effectiveness of which is proven by evidence-based medicine

10. Apply in practice the standards of diagnosis and treatment of rheumatological patients in the emergency clinic
11. Determine the level of examination and treatment of patients with urgent pulmonological and allergic conditions in a hospital
12. Apply in practice the algorithms of examination and management of patients with urgent pulmonological and allergological conditions in a hospital
13. Carry out in practice the differential diagnosis of the main syndromes found in the clinic of urgent pulmonological and allergic conditions
14. Master the methods of treatment of urgent pulmonological and allergic conditions, the effectiveness of which is proven by the data of evidence-based medicine
15. Apply in practice the standards of diagnosis and treatment of patients in the clinic of pulmonological and allergological emergencies
16. Determine the level of examination and treatment of patients with urgent gastroenterological conditions in a hospital
17. Apply in practice the algorithms of examination and management of patients with urgent gastroenterological conditions in a hospital
18. Carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of emergency gastroenterological conditions
19. Master the methods of treatment of urgent gastroenterological conditions, the effectiveness of which is proven by evidence-based medicine
20. Apply in practice the standards of diagnosis and treatment of patients in the gastroenterological emergency clinic
21. Determine the level of examination and treatment of patients with emergency endocrinological conditions in a hospital
22. Apply in practice the algorithms of examination and management of patients with urgent endocrinological conditions in a hospital
23. To carry out in practice the differential diagnosis of the main syndromes found in the clinic of urgent endocrine conditions
24. Master the methods of treatment of emergency endocrinological conditions, the effectiveness of which is proven by evidence-based medicine
25. Apply in practice the standards of diagnosis and treatment of patients in the clinic of endocrinological emergencies
26. Determine the level of examination and treatment of patients with urgent hematological conditions in a hospital
27. Apply in practice the algorithms of examination and management of patients with urgent hematological conditions in a hospital
28. To carry out in practice the differential diagnosis of the main syndromes found in the clinic of urgent hematological conditions
29. Master the methods of treatment of urgent hematological conditions, the effectiveness of which is proven by evidence-based medicine
30. Apply in practice the standards of diagnosis and treatment of patients in the hematological emergency clinic
31. Determine the level of examination and treatment of patients with urgent nephrological conditions in a hospital
32. Apply in practice the algorithms of examination and management of patients with urgent nephrological conditions in a hospital
33. To carry out in practice the differential diagnosis of the main syndromes encountered in the clinic of urgent nephrological conditions
34. Master the methods of treatment of urgent nephrological conditions, the effectiveness of which is proven by evidence-based medicine
35. Apply in practice the standards of diagnosis and treatment of patients in the nephrological emergency clinic

Section 5 (6th course, 12th semester).
Internal medicine practice in primary health care - Family Medicine.
Total hours - 120 / 4 credits (practical classes - 80, SRS - 40)

The ultimate goals of the chapter

Students must:

To know:

- tasks of primary health care (PHC), the role of the family doctor in solving these
- problems,
- principles of organization of medical care at home and in day hospitals,
- sequence of patient management in the system of family doctor's outpatient clinic –
- inpatient – family doctor's outpatient clinic,
- clear indications and contraindications for hospitalization,
- know the psychology of a healthy and sick person and know how to communicate
- with patients, their family members and colleagues;
- rules for maintaining medical and accounting and reporting documentation,
- including in medical information systems;
- issues of examination of temporary and permanent disability and assessment of
- disability and functioning;
- methods and sources of obtaining up-to-date scientifically grounded information;
- methods of clinical decision-making, which are based on evidence-based medicine; methods of
- critical evaluation of publications;
- Fundamentals of Aleology, Forms and Methods of Sanitary and Educational Work,
- Formation of a Healthy Lifestyle;
- Legal and Economic Aspects of the Family Doctor's Activity

Be able to:

- carry out early diagnosis, differential diagnosis, substantiate and formulate a preliminary
- diagnosis of the most common diseases of internal organs;
- draw up a plan for examining the patient and analyze the data of laboratory and instrumental
- examinations in the typical course of the most common therapeutic diseases and their complications (according to the principles of evidence-based and insurance medicine);
- determine the tactics of patient management on an outpatient basis (regimen, diet, treatment,
- rehabilitation) for the most common diseases of internal organs and their complications, develop plans for step-by-step preventive actions;
- assess the prognosis of life and performance in the most common diseases of internal organs;
- diagnose and provide medical care in case of emergencies at the pre-hospital stage;
- draw up a screening and step-by-step rehabilitation program;
- identify types of disability and determine the terms of their provision;
- to select persons for sanatorium-and-spa treatment, taking into account indications and contraindications;
- draw up medical records used by the family doctor;
- assess the patient's health status and monitor it;
- identify risk factors for the occurrence and prevent the most common therapeutic diseases;
- develop measures to introduce a healthy lifestyle among family members;
- draw up a medical and social passport of the patient, analyze and draw up a program for the
- formation and preservation of the health of an individual or family.

Each student must work with 2-3 new/undifferentiated patients weekly in the clinical setting. During the entire course, students examine 6-10 patients who are under dynamic observation or permanent patients every week. If, for any reason, the student sees less than 5 patients per day, the treatment of previously admitted patients is raised and studied. The number of patients for which the student is responsible is determined by the complexity of the cases and the student's demonstrated willingness to participate in the treatment of additional patients.

Section 5 (6th course, 12th semester).
Internal medicine practice in primary health care - Family Medicine.
Total hours - 120 / 4 credits (practical classes - 80, SRS - 40)
The content of the program of the discipline

Module 1. "Organizational Foundations of Family Medicine. Principles of Providing Primary Health Care to the Population on the Basis of Family Medicine"

Content module 1. Organization of out-of-hospital care (continuity of pre-hospital and hospital stages).
1.1 Topic: Principles of providing primary health care to the population on the basis of family medicine. Organization of the family doctor's work, financing issues. Organization of day and home hospitals. Fundamentals of evidence-based medicine in the work of a family doctor. Telemedicine in the practice of a family doctor. Implementation of the Second Revision International Classification of Primary Health Care (ICPC2).
1.2 Topic: Clinical examination, rehabilitation and sanatorium-and-spa selection carried out by a family doctor.
1.3 Theme: Work of a family doctor with special groups of the population (geriatric contingent, children, adolescents, pregnant women).

Content module 2.
Conducting medical and social expertise and organizing the provision of out-of-hospital therapeutic care for the most common therapeutic diseases.
2.1 Topic: General issues of the organization of medical and social examination (MSE) by a family doctor. Examination of temporary disability of patients, issuance of disability certificates by a family doctor. Examination of patients' permanent disability, their referral by a family doctor to a medical and social expert commission. Principles of the modern system of rehabilitation care, biopsychosocial model of disability, implementation of the International Classification of Functioning, Disability and Health (ICF) in Ukraine Psychosomatic and somatopsychiatric conditions in the practice of a family doctor. ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the respiratory and circulatory organs.
2.2 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common respiratory diseases.
2.3 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the circulatory system.
2.4 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the digestive system.
2.5 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the kidneys and urinary system.
2.6 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common connective tissue diseases.
2.7 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the blood system.
2.8 Topic: ITU and the organization of out-of-hospital therapeutic care for the most common

diseases of the endocrine system and metabolism.

Content module 3. Organization of emergency care at the pre-hospital stage in the practice of a family doctor.
3.1 Topic: Organization of emergency medical care in the practice of a family doctor. Methodology for providing emergency care for traumatic death, cardiac arrest, primary respiratory arrest, convulsions and loss of consciousness, pain, stings, bites, electrical injuries, drowning, exposure to low and high temperatures.

Content module 4. Prophylactic-syndromic approach in the practice of a family doctor.
4.1 Topic: Medical and social aspects of public health. Assessment of the quality of life of patients, carried out by a family doctor. The role of a family doctor in promoting a healthy lifestyle and disease prevention. Assessment of the prevalence of risk factors in the development of major chronic noncommunicable diseases and development of preventive measures taking into account the syndromic approach.

Section 5 (6th course, 12th semester).
Internal medicine practice in primary health care - Family Medicine.
Total hours - 120 / 4 credits (practical classes - 80, SRS - 40)
THEMATIC PLAN OF PRACTICAL CLASSES

No.	Module and topic names	Number of hours	
		Practice	SWS
Module 1. „Organizational Foundations of Family Medicine. Principles of Providing Primary Health Care to the Population on the Basis of Family Medicine"			
Content module 1. Organization of out-of-hospital care (continuity of pre-hospital and hospital stages).			
1.	Principles of providing primary health care to the population on the basis of family medicine. Organization of the family doctor's work, financing issues. Organization of the work of day and home hospitals. Fundamentals of evidence-based medicine in the work of a family doctor. Telemedicine in the practice of a family doctor. Implementation of the Second Revision International Classification of Primary Health Care (ICPC2).	7	3
2.	Clinical examination, rehabilitation and 12 sanatorium-and-spa selection carried out by a family doctor.	5	3
3.	Work of a family doctor with special groups of the population (geriatric contingent, children, adolescents, pregnant women).	6	4
Content module 2. Conducting medical and social expertise and providing out-of-hospital therapeutic care for the most common therapeutic diseases.			
4.	General issues of the organization of medical and social examination (MSE) by a family doctor. Examination of temporary disability of patients, issuance of disability certificates by a family doctor. Examination of patients' permanent disability, their	6	3

	referral by a family doctor to a medical and social expert commission. Principles of the modern system of rehabilitation care, biopsychosocial model of disability, implementation of the International Classification of Functioning, Disability and Health (ICF) in Ukraine.		
5.	ITU and the organization of out-of-hospital therapeutic care for the most common respiratory diseases.	6	3
6.	ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the circulatory system.	6	3
7.	ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the digestive system.	6	3
8.	ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the kidneys and urinary system.	6	3
9.	ITU and the organization of out-of-hospital therapeutic care for the most common connective tissue diseases.	6	2
10.	ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the blood system.	6	3
11.	ITU and the organization of out-of-hospital therapeutic care for the most common diseases of the endocrine system and metabolism	6	2
Content module 3. Providing emergency care at the pre-hospital stage in the practice of a family doctor.			
12.	Organization of emergency medical care in the practice of a family doctor. Methodology for providing emergency care for traumatic death, cardiac arrest, primary respiratory arrest, convulsions and loss of consciousness, pain, stings, bites, electrical injuries, drowning, exposure to low and high temperatures.	5	5
Content module 4. Prophylactic-syndromic approach in the practice of a family doctor.			
13.	Medical and social aspects of public health. Assessment of the quality of life of patients, carried out by a family doctor. The role of a family doctor in promoting a healthy lifestyle and disease prevention. Assessment of the prevalence of risk factors in the development of major chronic noncommunicable diseases and development of preventive measures taking into account the syndromic approach.	5	3
Total Hours		76	40
Differentiated credit		4	
Total Hours module 120		80	40

Section 5 (6th course, 12th semester).
Internal medicine practice in primary health care - Family Medicine.
Total hours - 120 / 4 credits (practical classes - 80, SRS - 40)

List of questions to prepare students for the final examination

1. The subject and tasks of general (family) medicine. History and main directions of development.
2. Modern ideas about the structure of primary health care (PHC).
3. Features of the family doctor's work.
4. Principles of Family Health Care.
5. Accounting documentation in family medicine.
6. Organization of the family doctor's work.
7. Functions and content of the work of a family doctor.
8. Deontology and ethics of the family doctor's relationship with the patient and the family.
9. Solving social and medical problems of the family.
10. General Principles of the International Classification of Primary Health Care of the Second Revision (ICPC-2).
11. Evaluation of the performance of family doctor's outpatient clinics.
12. Screening method in family medicine.
13. The main principles of evidence-based medicine.
14. The concept of health□, intermediate state, disease.
15. Functional clinical syndromes in the practice of a family doctor.
16. General principles of health promotion.
17. Classification and significance of risk factors for diseases.
18. Modern views on prevention, clinical examination.
19. Indications and contraindications for the management of patients on an outpatient basis.
20. Advantages of providing medical care in day hospitals.
21. Indications for the management of patients at home, the organization of a hospital at home.
22. Conducting medical, social and labor expertise on an outpatient basis.
23. Compilation of a family tree.
24. Components of a step-by-step program for the prevention of family diseases.
25. Providing emergency care at the pre-hospital stage in the practice of a family doctor.
26. Principles and role of a family doctor in providing emergency care in urban and rural areas.
27. Causes of sudden death.
28. Providing assistance in case of cardiac arrest.
29. Assistance in the initial cessation of external respiration.
30. Providing care to a patient with acute coronary syndrome at the pre-hospital stage.
31. Classification of seizures.
32. Features of care for generalized and local convulsions.
33. Causes of loss of consciousness.
34. Providing emergency care in case of loss of consciousness.
35. Providing emergency care for heart rhythm disorders.
36. Providing emergency care for asthmatic status.
37. Providing emergency care for stings, bites.
38. Providing emergency care for electrical injuries.
39. Providing emergency care for drowning.

40. Providing emergency care when exposed to low and high temperatures.
41. The role of a family doctor in the implementation of national programs of Ukraine to combat diseases (arterial hypertension, diabetes mellitus, etc.).
42. Be able to plan for screening and health monitoring.
43. Be able to draw up a medical and social passport of family health, a program for managing medical problems of the family.
44. Be able to collect complaints, medical and life history, epidemiological history and objective examination of the patient (general examination, percussion, auscultation and palpation of organs) in order to identify the main clinical symptoms and syndromes during initial contact with the patient.
45. Be able to carry out a reasonable differential diagnosis in the most common therapeutic diseases.
46. Be able to determine the required amount of indications and contraindications for laboratory, instrumental and hardware studies, organize the preparation of the patient for the examination.
47. Be able to interpret the results of tests of blood, urine, feces, sputum, cerebrospinal fluid, data of functional studies of the respiratory system, blood circulation, digestion, urination, etc., data of ultrasound and X-ray examinations.
48. Be able to substantiate a clinical diagnosis, determine the tactics of patient management.
49. Be able to justify the plan and indications for medical or surgical treatment of the patient, taking into account his condition in accordance with the standards of evidence-based medicine, determine the indications for hospitalization of patients.
50. Be able to draw up a program of rehabilitation measures for the most common therapeutic diseases.
51. Be able to draw up a program for the prevention of the most common therapeutic diseases, analyze the effectiveness of medical examination, data of automated medical examination.
52. Be able to organize sanitary and educational work in order to promote a healthy lifestyle.
53. Be able to carry out preventive measures during vaccination.
54. Be able to fill out and analyze the accounting documentation of family medicine institutions.
55. Be able to analyze the data of telemetry observation of the functional indicators of patients with cardiovascular diseases (arrhythmias, coronary heart disease, arterial hypertension).
56. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the cardiovascular system.
57. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the bronchopulmonary system.
58. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the digestive system.
59. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the urinary system.
60. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the musculoskeletal system.
61. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common blood diseases – anemias.
62. Be able to quickly assess the patient's condition and provide appropriate emergency medical care in case of cardiac arrest, heart rhythm disturbances, acute coronary syndrome.

63. Be able to quickly assess the patient's condition and provide appropriate emergency medical care in case of initial respiratory arrest.
64. Be able to quickly assess the patient's condition and provide appropriate emergency medical care for convulsions and loss of consciousness.
65. Be able to quickly assess the patient's condition and provide appropriate emergency medical care for asthmatic status.
66. Be able to quickly assess the patient's condition and provide appropriate emergency medical care for stings, bites, electrical injuries, drowning, exposure to low and high temperatures.
67. Be able to fill out the necessary documentation for the Medical Advisory Committee an the Medical and Social Expert Commission.

Section 5 (6th course, 12th semester).
Internal medicine practice in primary health care - Family Medicine.
Total hours - 120 / 4 credits (practical classes - 80, SRS - 40)

List of practical works and tasks for final control

1. Be able to plan screening and health monitoring.
2. Be able to draw up a medical and social passport of family health, a program for managing medical problems of the family.
3. Be able to collect complaints, medical and life history, epidemiological history and objective examination of the patient (general examination, percussion, auscultation and palpation of organs) in order to identify the main clinical symptoms and syndromes during initial contact with the patient.
4. Be able to carry out a reasonable differential diagnosis in the most common therapeutic diseases.
5. Be able to determine the required amount of indications and contraindications for laboratory, instrumental and hardware studies, organize the preparation of the patient for the examination.
6. Be able to interpret the results of tests of blood, urine, feces, sputum, cerebrospinal fluid, data of functional studies of the respiratory system, blood circulation, digestion, urination, etc., data of ultrasound and X-ray examinations.
7. Be able to substantiate a clinical diagnosis, determine the tactics of patient management.
8. Be able to justify the plan and indications for medical or surgical treatment of the patient, taking into account his condition in accordance with the standards of evidence-based medicine, determine the indications for hospitalization of patients.
9. Be able to draw up a program of rehabilitation measures for the most common therapeutic diseases.
10. Be able to draw up a program for the prevention of the most common therapeutic diseases, analyze the effectiveness of medical examination, data of automated medical examination.
11. Be able to organize sanitary and educational work in order to promote a healthy lifestyle.
12. Be able to carry out preventive measures during vaccination.
13. Be able to fill out and analyze the accounting documentation of family medicine institutions.
14. Be able to analyze the data of telemetry observation of functional indicators of patients with cardiovascular diseases (arrhythmias, coronary heart disease, arterial hypertension).
15. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the cardiovascular system.
16. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the bronchopulmonary system.
17. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the digestive system.

18. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the urinary system.
19. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common diseases of the musculoskeletal system.
20. Be able to draw up programs for the management of patients on an outpatient basis in accordance with the standards of evidence-based medicine for the most common blood diseases – anemias.
21. Be able to quickly assess the patient's condition and provide appropriate emergency medical care in case of cardiac arrest, heart rhythm disturbances, acute coronary syndrome.
22. Be able to quickly assess the patient's condition and provide appropriate emergency medical care in case of initial respiratory arrest.
23. Be able to quickly assess the patient's condition and provide appropriate emergency medical care for convulsions and loss of consciousness.
24. Be able to quickly assess the patient's condition and provide appropriate emergency medical care for asthmatic status.
25. Be able to quickly assess the patient's condition and provide appropriate emergency medical care for stings, bites, electrical injuries, drowning, exposure to low and high temperatures.
26. Be able to fill in the necessary documentation for the medical advisory commission and the medical and social expert commission.

Chapter 6 (6th course, 12th semester).
Internship chosen by the student
Total hours 120 / 4 credits (practical classes – 120)

Possible to choose (Each student is limited to selecting only one practice to be included as part of the course)

The ultimate goals of the chapter

The objective of this module is to acquaint and empower the student with knowledge, skills, and social competences pertaining to the following areas: subjective examination in the topic of interest, preventive measures for diseases associated with the chosen subject, maintenance of medical records, preparation of personal medical history, principles of diagnosis and therapeutic procedures for prevalent internal diseases in adults and their associated complications. Education in the field encompasses the acquisition of diagnostic skills and the development of a comprehensive understanding of the range of conditions encountered in patient care. The exercises encompassed novel findings, methods of activation, collaborative efforts, a case study approach, outpatient exercises, and group exercises administered directly at the patient's bedside. During visits to the wards, students have the opportunity to engage in practical exercises and receive examination assistance from specialists. They are also exposed to the presentation of testing equipment, including indications for use, as well as demonstrations and instructions. Students actively participate in the diagnostic and therapeutic processes conducted at the Department, which involves working with patients. Furthermore, they have the opportunity to observe and evaluate medical documentation, collaborate with the therapeutic team, and engage in discussions related to presented case descriptions.

Chapter 6 (6th course, 12th semester).
Internship chosen by the student
Total hours 120 / 4 credits (practical classes – 120)
Possible modules to choose from:

1. **Pulmonology**

2. **Cardiology**
3. **Gastroenterology**
4. **Endocrinology**
5. **Nephrology**
6. **Family medicine**
7. **Infectious Diseases and Tuberculosis**

Literature , which is recommended when studying the discipline "Internal Medicine":
Mandatory:

1. V. G. Perederii, S. M. Tkach. Clinical lectures on internal diseases in 2 volumes. Kyiv, Manuscript, 2014.
2. Sh . M. Ganja, V. M. Kovalenko, N. M. Shuba and others. Internal diseases. K.: Health, 2012. - 992 p.
3. Dzyak G.V., Netyazhenko V.Z., Khomazyuk T.A. etc. Basics of examination of the patient and scheme of medical history (handbook). - Dnsk, Art-press, 2012.
4. Family medicine: in 3 books : / Eds.: O. M. Girina, L. M. Pasieshvili. Kyiv: VSV "Medicine", 2016-2020.
5. Family Medicine: Textbook in 3 Books / ed. O. M. Girina, L. M. Pasieshvili, and G. S. Popik. – Book 3. Special part. Polyprofile of general medical practice: textbook. Kyiv: Medicine, 2017. – 694 p.

Additional literature:

1. N.I. Shvets, A.V. Pidaev, T.M. Benza and others. Benchmarks of practical skills in therapy. Kyiv, Glavmeddruk, 2005, 540 p.
2. N.I.Shvets, A.V.Pidaev, T.M.Benza, etc. Urgent conditions in the clinic of internal medicine. Kyiv, 2006. – 752 pages.
3. P.M. Bodnar, O.M. Prystupyuk, O.V. Shcherbak and others. Endocrinology. K.: Zdorov"ya, 2012. – 512 p.
4. K.M. Amosova. Cardiology (in 2 volumes). Kyiv, Health, 2002.
5. A. S. Svintsitskyi, O. B. Yaremenko, O. G. Puzanova and others. Rheumatic diseases and syndromes. Directory. K.: "Knyga-plus", 2013. - 680 p.
6. Internal diseases. The editor of the first edition was T.Harrison. In 10 books. Trans. with Eng./ Ed. E. Braunvalda et al. M: Medicine. - 2013.
7. Internal medicine. I. Cecil, Russell L. (Russell La Fayette), 1881–2015. II. Goldman, Lee, MD. III. Ausiello, DA IV. Title: Textbook of medicine.
8. Grigoryev P.Ya., Yakovenko E.P. Diagnosis and treatment of chronic diseases of the digestive organs. - M.: Medicine, 1990.
9. Danilov I.P., Makarevich A.E. Chronic bronchitis. – Minsk: Belarus 1989.
10. Degtyareva I.I. Pancreatitis. - K.: Health, 1992.
11. Doshchytsyn V.L. Clinical analysis of electrocardiograms. - M.: Medicine, 1982.
12. Kovalenko N.N. Handbook of differential diagnosis of respiratory diseases. - K.: Zdorovya, 1992.
13. Clinical gastroenterology / Ed. G. I. Burchinsky. - K.: Zdorovya, 1993.
14. Podymova S.D. Liver diseases. - M.: Medicine, 1992.
15. Paleev N.R. Lung disease. - M.: Medicine, 1992.
16. Peleshchuk A.P., Pyatak O.A., Chekman I.S. Handbook of clinical pharmacology and pharmacotherapy. - K.: Zdorovya, 1996.
17. Paleev N.R. The therapist's handbook. - M.: Medicine, 1992.
18. Taylor R.B. Difficult diagnosis. - In 2 volumes - Moscow: Medicine, 1992.
19. Khvorostynka V.N. Guide to practical classes in gastroenterology. - M.: Medicine, 1990.
20. Shved M.I., Grebenyk M.V. Basics of clinical electrocardiography. – Ternopil "Ukrmedknyga", 2002

21. Handbook of clinical endocrinology / Ed. N.T. Starkova. - St. Petersburg: Peter, 1996.
22. Okorokov A.N.. Diagnostics of diseases of internal organs: Practice. manual: In 3 vols. Vol. 2. - Vitebsk, 1998.
23. A.N. Okorokov. Diseases of internal organs: Practice. management: In 3 vols. Vol. 2.- Plural.: Vysh.shk. Belmedkniga, 1997.
24. Endocrinology. Textbook for foreign students / Ed. P.N. Bodnara. - K., 1999.

Forms of control and assessment of students from the academic discipline "Internal Medicine"

Forms of control and the evaluation system are carried out in accordance with the requirements of the discipline program and instructions on the evaluation system of the student's educational activity under the credit-transfer system of the organization of the educational process, approved by the Ministry of Health of Ukraine.

The grade for the discipline is defined as the sum of the average converted score of the current educational activity and the exam grade (in points), which is assigned when evaluating theoretical knowledge and practical skills in accordance with the lists determined by the discipline program.

The maximum number of points assigned to students for mastering each module (credit) is 200, including for the current educational activity - 120 points (60%), according to the results of the final control of knowledge - 80 points (40%).

Current control is carried out in accordance with specific goals at each practical lesson, assimilation of content modules (interim control) - at the last lesson of each content module.

For control, it is recommended to use the following tools for diagnosing the student's level of training: tests, control of the implementation of practical skills in patient examination methods with further interpretation of the obtained data, analysis of the results of instrumental and laboratory tests.

Evaluation of current educational activities:

The current assessment of students on the relevant topics is carried out according to the traditional 4-point system (excellent, good, satisfactory, unsatisfactory).

The grade "excellent" is given in the case when the student knows the content of the class and the lecture material in full, illustrating the answer with various examples; gives exhaustively accurate and clear answers without any leading questions; teaches the material without errors and inaccuracies; freely solves problems and performs practical tasks of varying degrees of complexity.

The grade "good" is given on the condition that the student knows the content of the lesson and understands it well, answers the questions correctly, consistently and systematically, but they are not exhaustive, although the student answers additional questions without mistakes; solves all problems and performs practical tasks, experiencing difficulties only in the most difficult cases.

The grade "satisfactory" is given to the student on the basis of his knowledge of the entire content of the lesson and at a satisfactory level of his understanding. The student is able to solve modified (simplified) tasks with the help of leading questions; solves problems and performs practical skills, experiencing difficulties in simple cases; is not able to give a systematic answer on his own, but answers directly to directly asked questions correctly.

An "unsatisfactory" grade is given in cases where the student's knowledge and skills do not meet the requirements for a "satisfactory" grade.

Evaluation of independent work:

Assessment of independent work of students, which is provided for in the topic along with classroom work, is carried out during the current control of the topic in the corresponding classroom lesson.

The evaluation of topics that are assigned only to independent work and are not included in the topics of classroom training sessions is controlled during the final knowledge control.

One of the types of the student's current educational activity is **the writing** of **a medical history** , which is provided for when studying each of the two modules.

The criteria for evaluating the medical history is carried out as follows:

	Rating
written methodically correctly, without comments	5
it is written methodically correctly, but individual sections are not detailed enough	4
there are separate remarks regarding the detailing and sequence of the description of the sections	3
the scheme and rules of writing medical history are violated	2

In case of receiving a "2" for medical history, the student must rewrite it taking into account the comments.

The minimum number of points that a student can score while studying a discipline is 72

Discipline exam

Students who have completed the curriculum from the 1st and 2nd semesters of the academic year and have received at least 72 points for the current educational activity (the average current success rate is 3.00) are allowed to take the exam at the end of each module.

The exam involves:

1. answer to 2 theoretical questions ,
2. demonstration of practical skills (from the list indicated at the end of the module) ,
3. analysis of the results of instrumental examination of the patient (situational task).

The maximum number of points that a student can get during the module control is 80.
The final test is considered passed if the student scored at least 50 points.

Criteria for evaluating the performance of practical skills in the exam:

	Rating
performed without errors	5
performed with minor deficiencies corrected during performance by the student himself	4
performed with deficiencies corrected by the teacher	3
not done	2

Evaluation of the discipline "Propaedeutics of internal medicine"

The internal medicine propaedeutics grade is given to students who have completed the curriculum from both academic semesters, have a current grade point average in the discipline of at least 3.00, and passed the discipline exam with a traditional grade of "3", "4", "5" .

The objectivity of the assessment of students' educational activity should be checked by statistical methods (correlation coefficient between current academic performance and exam results).

Assessment of discipline
(excerpt from the Regulation on the organization of the educational process at Kyiv Medical University)

According to the decision of the academic council of the university dated August 28, 2015, the university introduced exams in disciplines that are included in the "Step-1" and "Step-2" licensing exams and differential credits in all faculties and courses.

1. For all credits except the last one

The current success rate (PU) is calculated according to *a 120-point scale* - from 72 points (grade 3) to 120 points (grade 5).

Points for the exam correspond to the scale:

Grade "5" - 80-71 points
Grade "4" - 70-61 points
Grade "Z" - 60-50 points

the current academic record (PU) and the exam **in the relevant information of the dean's office** (Form No. H-5.03)

Points (the sum of current performance and final control) for midterm tests are entered by the teacher on the right side of the student's record book.

The current success rate for all *practical classes in the discipline* should be entered in the examination report (differential credit) (Form No. H-5.03) **without changes** according to *the 120-point system* (from 72 points (grade 3) to 120 points (grade 5))

2. The differential assessment should be carried out at the last lesson according to the schedule.

3. The exam is taken by the examination committee consisting of: the examiner (by order), members of the committee (representative of the dean's office or department) and the teacher who last taught in the given group.

4. The obtained points correspond to a fixed rating scale

Grade "5" - 200 - 180 points.
Grade "4" - 179-160 points.
Grade "3" - 159 - 122 points.

The results of the student passing the exam (differential credit) are recorded in the record of success (Form No. H-5.03)

In the score book, the points for the exam (differential score) are entered on the left side of the score book.

The grade in the discipline is assigned only to students who have been enrolled in all types of educational activities in the discipline (practical, classroom classes, semester exam or credit).

The number of points scored by the student in the discipline is defined as the arithmetic average of all current grades from practical classes in the discipline (the sum of current grades is divided by the number of practical classes in the discipline).

According to the decision of the academic council of the university, incentive points may be added to the number of points scored by the student in the discipline for the publication of scientific works, receiving prizes at Olympiads according to the profile of the discipline, etc.

Ranking according to the ECTS credit-transfer system and assignment of categories "A", "B", "C", "D, "E" is carried out for students of certain courses who are studying in one specialty and have successfully completed the study of the discipline.

Grades FX, F ("2") in the discipline are issued to students who did not receive the minimum number of points 72, which corresponds to the national scale "3" for the current performance after completing the study of the discipline and did not pass the exam.

The grade of FX is given to students who have scored the minimum number of points for the current educational activity, but have not passed the exam.

This category of students has the right to retake the semester exam according to the approved schedule during the winter or summer vacation (until July 1 of the current year) within two weeks after the end of the academic year.

According to the current regulatory framework of the Ministry of Education and Culture of Ukraine, retaking the semester exam is allowed no more than twice.

A grade of F is assigned to students who have attended all classroom classes in the discipline, but have not earned the minimum number of points for the current academic activity and are not admitted to the final examination. This category of students has the right to repeat the discipline.

Table

Distribution of points received by students
Grading scale: national on ECTS

The sum of points for all types of educational activities	ECTS assessment	Evaluation on a national scale	
		for an exam, course project (work), practice	for credit
180-200	A	perfectly	
170-179.99	B	fine	counted
160-169.99	C		
141-159.99	D	satisfactorily	
122-140.99	E		
	FX	unsatisfactory with the possibility of reassembly	not counted with the possibility of retaking
	F	unsatisfactory with mandatory repeated study of the discipline	not enrolled with mandatory repeated study of the discipline

The rating on the ECTS scale is included only in the supplement to the diploma of the European model "Diploma saplementa". In addition to the diploma of the national model, points are entered - an assessment for the discipline on a fixed scale.

Forms of control and assessment of students from the academic discipline "Internal Medicine" in the 6th year of the 11th-12th semesters

Assessment is one of the final stages of educational activity and determination of learning success. The grade for the discipline is set as the average of the grades for the modules on which the educational discipline is structured. The grade for the module is defined as the sum of the grades of the current educational activity (in points) and the final module control grade (in points), which is assigned when evaluating theoretical knowledge and practical skills in accordance with the lists determined by the discipline program.

Current educational activities of students are monitored in practical classes according to specific goals. The following means of diagnosing the level of students' training are recommended for use: test control (machine and non-machine), solving situational problems, control of practical skills, in particular - the ability to correctly conduct patient care, prescribe and interpret the results of laboratory and instrumental examination, justify the diagnosis on the basis analysis of clinical and auxiliary examination methods.

The maximum number of points that a student can score when studying each module is 200, including 120 points for the current educational activity, 80 points based on the results of the final module control. Thus, the ratio between the results of the evaluation of the current educational activity and the final module control is chosen to be 60% to 40%.

When evaluating the mastery of each topic of the module, the student is given grades on a 4-point (traditional) scale using the evaluation criteria accepted by the university and approved by the cyclical medical commission. At the same time, all types of works provided for by methodical development for studying the topic are taken into account.

Grades given on a traditional scale are converted into points depending on the number of topics in the module so that the number of points for a "satisfied" rating is 50-60% of the number of points for an "excellent" rating. The weight of each topic within one module must be the same, but may be different for different modules of the same discipline and is determined by the number of topics in the module.

The maximum number of points that a student can score for the current activity while studying the module is calculated by multiplying the number of points corresponding to the grade "5" by the number of topics in the module with the addition of points for the student's individual task.

The minimum number of points that a student must obtain when studying a module for admission to the final module control is calculated by multiplying the number of points corresponding to the grade "3" by the number of topics in the module.

Points for individual tasks are awarded to the student only if they are successfully completed and defended. The number of points awarded for different types of individual tasks depends on their volume and importance, but no more than 10-12 points. They are added to the sum of points scored by the student for the current educational activity.

Independent work of students, which is provided for in the topic along with classroom work, is evaluated during the current control of the topic in the corresponding lesson. Mastering of topics that are assigned only to independent work is monitored during the final modular control.

Final control

It is carried out after completing the study of all the topics of the chapter at the last control session of the chapter. Students are admitted to the final examination who have attended all the classroom training sessions provided for in the curriculum of the discipline, and have scored at least the minimum number of points while studying the section. A student who, for valid reasons, had to miss classes, makes corrections to the individual study plan and is allowed to work off the academic debt by a certain specified time.

The maximum number of points that a student can score when completing the final examination is 80. Final credit- the section is considered passed if the student scored less than 50 points.

The evaluation of the student's success in the discipline is a rating and is presented on a multi-point scale as the average arithmetic evaluation of the mastery of the relevant sections and is defined according to the ECTC system and the traditional scale adopted in Ukraine.

Departments of internal medicine have the right to make changes to the curriculum within 15% depending on organizational and technical capabilities, directions of scientific research, ecological features of the region, but must fulfill the scope of the requirements of the discipline in accordance with the final goals of the OKH and OPP according to the direction of training and the curriculum.

"APPROVED''

В.о.Ректора /Acting Rector **Dmytro GOVSIEIEV**