

MINISTRY OF HEALTH OF UKRAINE

ODESA NATIONAL MEDICAL UNIVERSITY

Department of Propaedeutics of Internal Diseases and therapy

CONFIRMED by
Rector for scientific and pedagogical work

Eduard BURIACHKIVSKYI

29.08. 2023

**WORKING PROGRAM IN THE DISCIPLINE
"PROPAEDEUTIC OF INTERNAL MEDICINE"**

Level of higher education: second (master's degree)

Field of knowledge: 22 «Health care»

Specialty: 221 «Dentistry»

Educational and professional program: Dentistry

2023


The working program is compiled on the basis of the educational and professional program "Medicine" for the training of specialists of the second (master's) level of higher education in the specialty 222 "Medicine" of the field of knowledge 22 "Health care", approved by the Academic Council of ONMedU (minutes No. 8 dated 29/06/2023).

Authors:

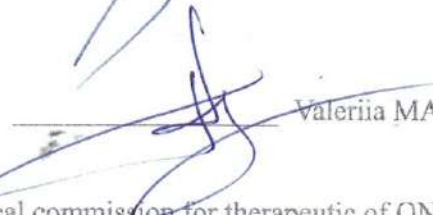
Head of the department, Doctor in Medicine, Professor Yakimenko Olena
Doctor in Medicine, Associate Professor Sebov Denis
PhD of Medicine, Assistant Professor Maznichenko Iegor
Assistant Professor Smal Valery
Assistant Professor Zakrytov Denis

The working program is approved at the meeting of the department of propaedeutic of internal medicine Minutes No. 1 dated 30/08/2023.

Head of the department


_____ Olena YAKIMENKO

Approved by the guarantor of
the educational and professional program


_____ Valeriia MARICHEREDA

Approved by the subject-cycle methodological commission for therapeutic of ONMedU
Minutes No. 1 dated 31/08/2022

Head of the subject-cycle methodological commission
for therapeutic of ONMedU


_____ Olena VOLOSHYNA

Revised and approved at the meeting of the department of propaedeutic of internal medicine
Minutes No. __ dated __/__/20__.

Head of the department

_____ Olena YAKIMENKO

Revised and approved at the meeting of the department of propaedeutic of internal medicine
Minutes No. __ dated __/__/20__.

Head of the department

_____ Olena YAKIMENKO

1. Description of the discipline:

Name of indicators	Field of study, specialty, specialization, level of higher education	Characteristics of the discipline
Total number: Credits: 2 Hours: 60 Content modules: 7	Field of expertise 22 "Healthcare" Specialty. 221 "Dentistry" Level of higher education second (master's) degree	<i>Full-time form of study</i>
		<i>Mandatory discipline</i>
		<i>Year of preparation: 2</i>
		<i>Semester IV</i>
		<i>Lectures (8 hours)</i>
		<i>Seminar (0 hours)</i>
		<i>Practical (32 hours)</i>
		<i>Laboratory (0 hours)</i>
		<i>Independent work (20 hours)</i>
	<i>including individual assignments (0 hours)</i>	
	<i>Form of final control - differentiated credit</i>	

2. Purpose and objectives of the discipline, competencies, program learning outcomes.

Objective: Mastering by the applicant of higher education of knowledge and formation of elements of professional competencies of examination of the patient and assessment of the main manifestations of diseases of the endocrine system and improvement of skills and competencies acquired in the study of previous disciplines to achieve the main final goals defined in the Standard of training of a specialist in the specialty 221 "Dentistry".

Objectives:

1. conduct interviews and clinical examinations of patients with major diseases of the endocrine system and analyze their results;
2. identify etiological and pathogenetic factors of the most common diseases of the endocrine system;
3. analyze a typical clinical picture, identify clinical variants and complications of the most common diseases of the endocrine system;
4. to establish preliminary diagnosis of the most common diseases of endocrine system;
5. prescribe laboratory and instrumental examination of patients with the most common diseases of the endocrine system;
6. based on the evaluation of laboratory and instrumental examination results, to make a differential diagnosis, substantiate and establish a clinical diagnosis of the most common diseases of the endocrine system;
7. determine the necessary work and rest regimen in the treatment of the most common diseases of the endocrine system;

8. determine the necessary therapeutic nutrition in the treatment of the most common diseases of the endocrine system;
9. determine the principles and nature of treatment in the treatment of the most common diseases of the endocrine system;
10. prescribe treatment, including prognosis-modifying treatment, for the most common diseases of the endocrine system and their complications;
11. determine the tactics of emergency medical care based on the diagnosis of an emergency;
12. carry out primary and secondary prevention of the most common diseases of the endocrine system;
13. assess the prognosis and performance of patients with the most common diseases of the endocrine system;
14. perform medical manipulations;
15. Maintain medical records;
16. comply with the requirements of ethics, bioethics and deontology in their professional activities.

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

Integral competence (level 7) according to the requirements of the NQF:

The ability to solve typical and complex specialized tasks and problems in the field of health care in the specialty "Dentistry", in professional activities or in the process of study, which involves research and/or innovation and is characterized by complexity and uncertainty of conditions and requirements.

● **General (GC):**

GC2. Knowledge and understanding of the subject area and understanding of professional activities.

GC3. Ability to apply knowledge in practical activities.

GC7. Ability to search, process and analyze information from various sources.

GC8. Ability to adapt and act in a new situation.

GC9. Ability to identify, formulate and solve problems.

GC11. Ability to work in a team.

GC13. Ability to act in a socially responsible and conscious manner.

● **Special (SC):**

SC1. Ability to collect medical information about the patient and analyze clinical data.

SC2. Ability to interpret the results of laboratory and instrumental studies.

SC3. Ability to diagnose: determine the preliminary, clinical, final, concomitant diagnosis, emergency conditions, diseases of organs and tissues of the oral cavity and maxillofacial of the facial area.

SC6. Ability to determine the rational mode of work, rest, diet in patients in the treatment of diseases of organs and tissues of the oral cavity and maxillofacial region.

SC7. Ability to determine the tactics of managing patients with diseases of the organs and tissues of the oral cavity and maxillofacial region with concomitant somatic diseases.

SC8. Ability to perform medical and dental procedures.

evacuation measures.

SC11. Ability to determine the tactics, methods and provision of emergency medical care.

SC14. Ability to maintain regulatory medical records.

SC18. Ability to provide pre-hospital care according to tactical medicine protocols.

Program learning outcomes (PLOs):

PLO2. Collect information about the general condition of the patient, assess the patient's psychomotor and physical development, the condition of the maxillofacial organs, and evaluate information about the diagnosis based on the results of laboratory and instrumental studies (according to list 5).

PLO3. To prescribe and analyze additional (mandatory and optional) examination methods (laboratory, radiological, functional and/or instrumental) according to the list 5, patients with diseases of organs and tissues of the oral cavity and maxillofacial region for differential diagnosis of diseases (according to the list 2).

PLO4. Determine the final clinical diagnosis in accordance with the relevant ethical and legal standards, by making an informed decision and logical analysis of the obtained subjective and objective data of clinical, additional examination, differential diagnosis under the supervision of the attending physician in the conditions of the medical institution (according to list 2.1).

PLO9. Determine the nature of the work, rest and necessary diet in the treatment of dental diseases (according to list 2) on the basis of a preliminary or final clinical diagnosis by making an informed decision using existing algorithms and standardized schemes.

PLO10. Determine the tactics of managing a dental patient with somatic pathology (according to list 3) by making an informed decision according to existing algorithms and standard schemes.

PLO19. To comply with the requirements of ethics, bioethics and deontology in their professional activities.

PLO21. Perform medical manipulations on the basis of preliminary and/or final clinical diagnosis (according to lists 2, 2.1) for different population groups and in different conditions (according to list 6).

As a result of studying the discipline, a higher education student must:

Know:

- The most important etiological and pathogenetic factors in the formation of pathological processes in the human body.
- Methodological bases of clinical examination of the patient, patient examination schemes and writing a medical history.
- Methodical bases of interviewing and physical examination of the patient - examination, palpation, percussion, auscultation.
- The most important symptoms and syndromes in the clinic of internal diseases and their semiological interpretation.
- Clinical and diagnostic interpretations of the most important laboratory and instrumental studies.

To be able to:

- Conduct interviews and physical examinations of patients and analyze their results in the clinic of internal medicine.
- Draw up a plan for examining a patient with a typical course of the most common therapeutic diseases.

- Analyze the results of basic laboratory and instrumental research methods.
- Identify the leading symptoms and syndromes in the clinic of internal medicine.
- Demonstrate the ability to methodically correctly present the results of a patient's examination in the form of a medical history with justification of a syndromic diagnosis.

3. Content of the discipline

Content module №1

Introduction to propedeutics of internal medicine

Topic 1: Introduction to the clinic of internal medicine. Methods of interviewing and physical examination of the patient. Additional methods of examination. Scheme of medical history.

Propedeutics of internal medicine as an introduction to clinical practice. The main goals and objects of study of propedeutic medicine. The main methods of examination of patients in the clinic of internal medicine: physical, instrumental, laboratory. Medical history: its main sections and rules of preparation. Methods of questioning the patient, its diagnostic value, systematic conduct, taking into account the individual, intellectual and psychological characteristics of the patient. The main structural parts of the anamnesis (passport part, patient's complaints, medical history, questioning about organs and systems, life history). Additional methods of examination of the patient (laboratory and instrumental). Main sections of the medical history

Content module #2

Examination of the respiratory system

Topic 2. General examination of the patient. Examination of individual parts of the body. Methods of studying the respiratory system. Questioning and general examination of a patient with a pathology of the respiratory system.

Determination of the general condition of the patient (types of general conditions of the patient and their criteria), assessment of the state of consciousness (types of impairment of consciousness), posture, gait (types of posture and gait in various pathologies), position in bed (active, passive, forced, their types). Body structure and basic criteria for normal constitutional types. Skin, its properties (color, elasticity, humidity, temperature, rash elements, nevi, scars, scars) and pathological changes; assessment of hair and nails. Subcutaneous tissue (fatness, distribution, types of obesity), musculoskeletal system condition. The sequence of palpation of the lymph nodes. Diagnostic value of symptoms obtained during the general examination of the patient.

Methods and sequence of examination of the head and neck, extremities and trunk, abdomen and chest. Diagnostic value of symptoms obtained during the examination of individual parts of the patient's body.

The sequence of clarification and detailing of the most important subjective symptoms and their semiological assessment. Peculiarities of finding out the history of the disease and life. Methods of static and dynamic chest examination. Determination of topographic areas and physiological formations on the chest and their diagnostic value. Physiological and pathological forms of the chest, their criteria. Pathological forms of breathing (Cheyne-Stokes, Biot, Kussmaul, Grocco), their characteristics and causes. The sequence of chest palpation, determination of vocal tremor and semiological assessment of its results.

Methods of chest percussion. The importance of comparative and topographic percussion in the diagnostic process. Methods of lung auscultation

Topic 3: The main syndromes in lung pathology based on the results of the survey and physical examination.

The main complaints and characteristic changes during examination, palpation, percussion and auscultation in patients with lung tissue compaction syndrome, fluid or air in the pleural cavity syndrome, lung cavity syndrome, bronchoobstructive syndrome, emphysematous syndrome and respiratory failure syndrome. Plan of additional examinations of patients with these lung disease syndromes

Content module #3

Examination of cardiovascular system organs

Topic 4. Examination of patients with cardiovascular disease (interview, physical examination, assessment of pulse and blood pressure). Additional research methods (laboratory and instrumental).

The sequence of clarification and detailing of complaints of a patient with cardiovascular disease. Conducting a general examination of a cardiac patient. Rules and sequence of pulse assessment on the radial artery. Rules for measuring blood pressure. Examination of the precordial area, palpation, percussion of the heart, auscultation of the heart. Drawing up a plan for additional examinations (laboratory and instrumental).

Topic 5. The main syndromes in diseases of the cardiovascular system.

Identification of the leading syndrome based on the patient's complaints, medical history, lifestyle, and objective examination (examination, palpation, percussion of the heart borders, and auscultation). Clinical characteristics and manifestations of anginal syndrome, heart rhythm disturbance syndrome (tachycardia and bradycardia), arterial hypertension, acute vascular insufficiency syndrome and chronic heart failure.

Content module #4

Examination of the gastrointestinal tract and hepatobiliary system

Topic 6: Examination of patients with pathology of the digestive system. Survey and general examination of patients with pathology of the digestive system. Additional research methods.

Complaints and their details in patients with gastrointestinal pathology. Medical and life history. Changes in the patient's appearance in various pathologies of the gastrointestinal tract. Sequence of abdominal examination (shape, size, symmetry, condition of the skin and navel, body weight, condition of subcutaneous vessels, nature of hair growth). The concept of topographic zones and topographic lines on the surface of the abdomen. Methods of conducting superficial and deep abdominal palpation, its diagnostic value in identifying certain symptoms. The importance and possibilities of additional research methods in diseases of the digestive system (laboratory and instrumental).

Topic 7. The main symptoms and syndromes in gastroenterology based on physical examination. Changes in the oral cavity in diseases of the gastrointestinal tract (GIT).

Characteristic complaints and results of physical examination in patients with the main syndromes in gastrointestinal pathology (abdominal pain syndrome, vomiting syndrome,

ulcerative necrotic syndrome, dyspepsia syndrome, anemia syndrome, secretory function disorder, asthenovegetative syndrome, intoxication-inflammatory syndrome, motor function disorder of the stomach, small and large intestine, gastrointestinal bleeding syndrome). Characteristic changes in the oral cavity in some syndromes in patients with gastrointestinal pathology

Topic 8: Interview and examination of a patient with liver and biliary tract pathology.

Methods of interviewing a patient with liver disease. The main complaints. Examination of a patient with pathology of the liver and biliary tract. Determination of the size and boundaries of the liver by the methods of Obraztsov and Kurlov. Causes of increase and decrease in the size of the liver. Methods of deep sliding palpation of the liver. Characteristics of the normal palpation picture and possible changes in the lower edge of the liver in pathology. Determination of the size of the spleen, the main causes of its increase. Palpation of the spleen.

Topic 9: Main symptoms and syndromes of liver and biliary tract diseases (portal hypertension syndrome, hepatoliver syndrome, jaundice syndrome).

Characterization of clinical manifestations, typical changes in laboratory and instrumental methods of research in patients with liver and biliary tract pathology. Characteristic clinical manifestations of jaundice syndrome, peculiarities of laboratory changes in suprahepatic, subhepatic and parenchymal jaundice. Clinical and laboratory signs of liver failure syndrome, mesenchymal inflammatory syndrome, cholestasis syndrome. Signs of splenomegaly and hypersplenism syndrome. Astheno-vegetative syndrome in liver diseases and its clinical manifestations. Features of the hemorrhagic syndrome in liver pathology. Clinical manifestations of portal hypertension syndrome.

Content module #5

Examination of patients with kidney and urinary tract diseases

Topic 10. Methods of examination of patients with pathology of urinary organs.

Laboratory and instrumental methods of examination of the urinary system.

The main complaints of patients with kidney disease. Characteristic changes in the examination of patients with kidney disease. The diagnostic value of the Pasternatsky symptom. Palpation of the kidneys. The diagnostic value of instrumental methods of studying the kidneys.

Clinical interpretation of general urinalysis, functional tests (Zimnitsky test) and quantitative tests (Amburge, Nechiporenko test). Diagnostic capabilities of instrumental research methods (X-ray, ultrasound, radioisotope)

Topic 11: Major syndromes in nephrology. Changes in the oral cavity in kidney disease.

Definition of urinary syndrome and typical changes in urinalysis in some diseases of the kidneys and urinary tract. Typical clinical signs of edema syndrome in renal pathology.

Nephrotic syndrome, its characteristics, symptoms and diagnosis. Arterial hypertension syndrome in kidney disease, clinical features in contrast to hypertension. Acute nephrotic syndrome (its manifestations and diagnostics).

Content module #6

Examination of patients with blood diseases

Topic 12: Methods of studying patients with pathology of the hematopoietic organs. Interview and general examination of patients with pathology of the blood system. Clinical interpretation of complete blood count. Analysis of coagulogram.

The main complaints of patients with pathology of the blood system. General examination data. Characteristic changes in the oral cavity in blood diseases. The main types of bleeding. Characteristic clinical manifestations of the main types of bleeding. Methods of assessing the condition of the lymph nodes, spleen and liver.

Normal values of the complete blood count (the number of red blood cells, white blood cells, platelets, morphological changes in red blood cells in certain diseases, hemoglobin, hematocrit, blood color, leukocyte formula in normal and in certain pathologies. ESR). The importance of some coagulation parameters in recognizing the type of bleeding.

Topic 13. The main syndromes in hematology. Manifestations of blood diseases on the part of the oral mucosa and dentition.

Definition of anemia syndrome. Clinical and laboratory signs in different types of anemia. The concept of hemorrhagic syndrome. Clinical signs of different types of bleeding. Determination of the type of bleeding using laboratory methods. The concept of lymphoproliferative syndrome. Clinical and laboratory signs of lymphoproliferative syndrome.

Content module #7

Examination of patients in case of emergency

Topic 14. Research methods and semiotics of allergy manifestations. Auxiliary research methods in allergology. The main syndromes in allergology.

Characterization and classification of different types of allergic reactions. The main complaints of patients with allergies. Clinical symptoms and manifestations of allergic reactions (skin rash, hay fever or pollenosis, atopic dermatitis, Quincke's edema, bronchial asthma, the concept of "drug allergy", anaphylactic shock). Allergy syndromes (skin, edema, respiratory, acute cardiovascular failure syndrome). Diagnostic methods. Emergency care in case of anaphylactic shock

Topic 15: Principles of patient care in the clinic of internal diseases and the provision of first aid and pre-hospital care.

Principles of general and special care for therapeutic patients. Organization of work of inpatient departments of therapeutic profile. Determination of the main indicators of vital signs (body temperature, respiratory rate, pulse, blood pressure). First aid in case of poisoning, bleeding, electric shock, burns, frostbite.

Topic 16. Differential credit.

4. Structure of the discipline

Topics to be covered	Number of hours				
	Total	including			
		lectures	seminars	practical	laboratory

Introduction to the clinic of internal medicine. Methods of interviewing and physical examination of the patient. Additional methods of examination. Scheme of medical history	4	1	0	2	0	1
General examination of the patient. Examination of individual parts of the body. Methods of studying the respiratory system. Questioning and general examination of a patient with a pathology of the respiratory system.	6	1	0	2	0	3
The main syndromes in lung pathology based on the results of the survey and physical examination.	5	1	0	2	0	2
Examination of patients with cardiovascular disease (interview, physical examination, assessment of pulse and blood pressure). Additional research methods (laboratory and instrumental).	5	1	0	2	0	2
The main syndromes in diseases of the cardiovascular system.	4	0	0	2	0	2
Examination of patients with pathology of the digestive system. Survey and general examination of patients with pathology of the digestive system.	4	1	0	2	0	1

Additional research methods.						
The main symptoms and syndromes in gastroenterology based on physical examination. Changes in the oral cavity in diseases of the gastrointestinal tract (GIT).	4	1	0	2	0	1
Interview and examination of a patient with liver and biliary tract pathology.	3	0	0	2	0	1
The main symptoms and syndromes of liver and biliary tract diseases (portal hypertension syndrome, hepatoliver syndrome, jaundice syndrome).	3	0	0	2	0	1
Methods of examination of patients with pathology of urinary organs. Laboratory and instrumental methods of urinary system examination.	3	0	0	2	0	1
The main syndromes in nephrology. Changes in the oral cavity in kidney disease.	2	0	0	2	0	0
Methods of examination of patients with pathology of the hematopoietic organs. Interview and general examination of patients with pathology of the blood system. Clinical interpretation of complete blood count. Analysis of coagulogram.	4	1	0	2	0	1

The main syndromes in hematology. Manifestations of blood diseases on the part of the oral mucosa and dentoalveolar system.	3	1	0	2	0	0
Research methods and semiotics of allergy manifestations. Auxiliary research methods in allergology. The main syndromes in allergology.	2	0	0	2	0	0
Principles of patient care in an internal medicine clinic and first aid and pre-hospital care.	2	0	0	2	0	0
Differential credit	6	0	0	2	0	4
<i>Together</i>	90	8	0	40	0	42
<i>Individual tasks</i>	0	0	0	0	0	0
Total hours	90	8	0	40	0	42

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lecture classes

№	Topic title	Number of hours
1.	Actual lecture Scheme of examination of the patient. Examination of patients with diseases of the cardiovascular system. The main clinical syndromes in cardiology and rheumatology.	2
2.	Examination of patients with respiratory diseases. The main syndromes in patients with respiratory diseases. Changes in the oral cavity in patients with diseases of the respiratory system. Examination of patients with manifestations of allergy and immunodeficiency. The main clinical syndromes in allergology and immunology. Changes in the oral cavity in patients with manifestations of allergy and immunodeficiency.	2
3.	Examination of patients with diseases of the gastrointestinal tract. The main clinical syndromes in gastroenterology. Changes in the oral cavity in patients with diseases of the gastrointestinal tract. Examination of patients with diseases of the urinary system. The main syndromes. Urine analysis. Changes in the oral cavity in patients with kidney disease.	2

4.	Examination of patients with diseases of the hematopoietic organs. Clinical blood test. Coagulogram analysis. The main clinical syndromes in hematology. Changes in the oral cavity in patients with hematologic diseases. Examination of patients with diseases of the endocrine system. Analysis of blood glucose content. The main clinical syndromes in endocrinology. Changes in the oral cavity in patients with diseases of the endocrine system.	2
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	Together	8
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5.2. Topics of seminar sessions

Seminar classes are not provided.

5.3. Topics of practical classes

№	Topic title	Number of hours
1.	Introduction to the clinic of internal medicine. Methods of interviewing and physical examination of the patient. Additional methods of examination. Scheme of medical history	2
2.	General examination of the patient. Examination of individual parts of the body. Methods of studying the respiratory system. Questioning and general examination of a patient with a pathology of the respiratory system.	2
3.	The main syndromes in lung pathology based on the results of the survey and physical examination.	2
4.	Examination of patients with cardiovascular disease (interview, physical examination, assessment of pulse and blood pressure). Additional research methods (laboratory and instrumental).	2
5.	The main syndromes in diseases of the cardiovascular system.	2
6.	Examination of patients with pathology of the digestive system. Survey and general examination of patients with pathology of the digestive system. Additional research methods.	2
7.	The main symptoms and syndromes in gastroenterology based on physical examination. Changes in the oral cavity in diseases of the gastrointestinal tract (GIT).	2
8.	Interview and examination of a patient with liver and biliary tract pathology.	2

9.	The main symptoms and syndromes of liver and biliary tract diseases (portal hypertension syndrome, hepatoliver syndrome, jaundice syndrome).	2
10.	Methods of examination of patients with pathology of urinary organs. Laboratory and instrumental methods of urinary system examination.	2
11.	The main syndromes in nephrology. Changes in the oral cavity in kidney disease.	2
12.	Methods of examination of patients with pathology of the hematopoietic organs. Interview and general examination of patients with pathology of the blood system. Clinical interpretation of complete blood count. Analysis of coagulogram.	2
13.	The main syndromes in hematology. Manifestations of blood diseases on the part of the oral mucosa and dentoalveolar system.	2
14.	Research methods and semiotics of allergy manifestations. Auxiliary research methods in allergology. The main syndromes in allergology.	2
15.	Principles of patient care in an internal medicine clinic and first aid and pre-hospital care.	2
16.	Differential credit	2
	Together	32

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work of a higher education student

№	Name of the topic / types of tasks	Number of hours
1.	Preparation for practical classes - theoretical and working out methods of physical examination of the patient: <ul style="list-style-type: none"> - interview and general examination of the patient - physical examination of the respiratory system - physical examination of the circulatory system - physical examination of the digestive system - physical examination of the urinary system, blood-forming organs 	2 2 2 2 2
2.	Independent study of topics that are not included in the classroom plan: <ul style="list-style-type: none"> Instrumental methods of examination of respiratory organs Instrumental methods of studying the cardiovascular system Instrumental and laboratory methods of examination of the gastrointestinal tract 	2 2 2
3.	Preparing for differential testing	4
	Together	20

7. Teaching methods

Practical classes: conversation, role-playing games, solving clinical situational tasks, practicing patient questioning skills, practicing physical examination skills, instruction and practice of skills on simulation models, training exercises on diagnosing the most common diseases of internal organs.

Independent work: independent work with the recommended basic and supplementary literature, with electronic information resources, independent work with the bank of test tasks of the Krok-2 type, independent development of algorithms for communicating with the patient, independent development of practical skills in physical examination of the patient.

8. Forms of control and evaluation methods (including criteria for assessing learning outcomes)

Current control: oral questioning, assessment of practical skills, level of theoretical knowledge, passing the analysis of the results of the patient's examination, assessment of communication skills during a role-playing game, solving situational clinical problems, assessment of activity in the classroom, assessment of differential diagnosis and prescribed treatment.

Final control: differential credit.

Assessment of current learning activities in a practical class:

1. Assessment of theoretical knowledge on the topic of the class:
 - Methods: survey, solving a situational clinical problem
 - maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.
2. Assessment of practical skills and manipulations on the topic of the lesson:
 - Methods: assessment of the correctness of practical skills
 - maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.
3. Evaluation of work with a patient on the topic of the lesson:
 - Methods: assessment of: a) communication skills with the patient and his/her parents, b) correctness of prescription and evaluation of laboratory and instrumental studies, c) compliance with the algorithm of differential diagnosis, d) substantiation of the clinical diagnosis, e) preparation of a treatment plan;
 - maximum grade - 5, minimum grade - 3, unsatisfactory grade - 2.

The grade for one practical lesson is the arithmetic mean of all components and can only have an integer value (5, 4, 3, 2), which is rounded according to the statistical method.

Criteria for the current assessment in the practical class

Assess ment.	Evaluation criteria
"5"	The applicant for higher education is fluent in the material, actively participates in the discussion and solution of a situational clinical problem, confidently demonstrates practical skills during the examination of the patient and interpretation of clinical, laboratory and instrumental research data, expresses his/her opinion on the topic of the class, demonstrates clinical thinking.
"4"	The applicant for higher education has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates

	practical skills during the examination of the patient and interpretation of clinical, laboratory and instrumental research data with some errors, expresses his/her opinion on the topic of the class, demonstrates clinical thinking.
"3"	The applicant for higher education has insufficient knowledge of the material, is not confident in discussing and solving a situational clinical problem, demonstrates practical skills in examining a patient and interpreting data from clinical, laboratory and instrumental studies with significant errors.
"2"	The applicant for higher education does not know the material, does not participate in the discussion and solution of a situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.

A higher education applicant is allowed to take differential credit if he or she fulfills the requirements of the curriculum and if he or she has received at least 3.00 points for the current academic activity.

Assessment of learning outcomes during the final control

Content of the activity being evaluated	Number of points
Solving a clinical problem with the evaluation of laboratory and instrumental studies.	1
Answers to theoretical questions.	2
Evaluation of X-rays, general blood and urine tests, etc.	1
A practical task of the OSCE type.	1

Criteria for assessing the learning outcomes of higher education students at the exam

Assessment.	Evaluation criteria
Excellent	The higher education applicant has correctly, accurately and fully completed all the tasks of the examination paper, clearly and logically answered the questions posed by the examiners. He/she has a thorough and comprehensive knowledge of the content of theoretical questions, is fluent in professional and scientific terminology. He/she thinks logically and constructs an answer, freely uses the acquired theoretical knowledge in the analysis of practical tasks. When solving a clinical problem, he/she correctly interpreted the anamnesis data, the results of clinical, laboratory and instrumental studies, correctly answered all the questions asked and convincingly justified his/her point of view, could propose and justify an alternative solution to certain issues. When solving a practical task of the OSCE type, he/she correctly demonstrated the performance of practical skills, accurately followed the algorithm for their implementation.
Okay.	The applicant for higher education has sufficiently completed all the tasks of the examination paper, clearly and logically answered the questions posed by the examiners. He/she knows the content of theoretical questions deeply and comprehensively enough, knows professional and scientific terminology. He/she thinks logically and constructs answers, uses the acquired theoretical knowledge in analyzing practical tasks. However, some questions lack sufficient depth and argumentation, make minor mistakes that are eliminated by the higher education student when pointed out by the examiner. When

	solving a clinical problem, the applicant made minor mistakes or inaccuracies in the interpretation of anamnesis data, results of clinical, laboratory and instrumental studies, answered all the questions without significant errors, fully justified his/her point of view, but the proposal of an alternative option causes difficulties. When solving a practical task of the OSCE type, he made minor errors in the algorithm and technique of performing the skill, corrected at the instruction of the teacher.
Satisfactory	The higher education applicant has not fully completed all the tasks of the examination paper, the answers to additional and leading questions are unclear and vague. He/she has the basic amount of theoretical knowledge, uses professional and scientific terminology inaccurately. Has significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in analyzing practical tasks. There are significant errors in the answers. When solving a clinical problem, he/she interpreted the anamnesis data, results of clinical, laboratory and instrumental studies with errors, did not know certain details, made inaccuracies in answering questions, did not properly justify his/her answers and interpreted the wording, has difficulties in completing tasks and suggesting alternative options. When solving a practical task of the OSCE type, he made significant errors in the algorithm and technique of performing the skill.
Unsatisfactory	The applicant for higher education did not fulfill the tasks of the examination ticket, in most cases did not answer additional and leading questions of the examiners. He/she has not mastered the main body of theoretical knowledge and has shown a low level of proficiency in professional and scientific terminology. Answers to the questions are fragmentary, inconsistent, illogical, and unable to apply theoretical knowledge in analyzing practical tasks. There are a significant number of gross errors in the answers. When solving a clinical problem, he/she could not interpret the obtained anamnesis data, the results of clinical, laboratory and instrumental studies, answer the questions posed, or made significant errors in the answers; could not justify his/her decisions or did not do so convincingly. No alternative options were offered. When solving a practical task of the OSCE type, he/she did not demonstrate or made gross errors and mistakes in the algorithm and technique of the skill.

9. Distribution of points received by higher education students

The obtained grade point average for the discipline for students who have successfully completed the work program of the discipline is converted from the traditional four-point scale to points on a 200-point scale, as shown in the table:

Table of converting a traditional grade into a multi-point scale

Traditional four-point scale	Multipoint 200-point scale
Excellent ("5")	185 - 200
Good ("4")	151 - 184
Satisfactory ("3")	120 - 150
Unsatisfactory ("2")	Below 120

A multi-point scale (200-point scale) characterizes the actual performance of each

student in mastering the educational component. The conversion of the traditional grade (grade point average for a discipline) into a 200-point scale is performed by the University's Information Technology Department.

According to the points received on a 200-point scale, the achievements of applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows to evaluate the achievements of applicants in the educational component who study in the same course of one specialty, according to the points they received.

The ECTS scale is a relative and comparative rating system that establishes the applicant's belonging to the group of the best or worst among the reference group of fellow students (faculty, specialty). Grade A on the ECTS scale cannot be equal to grade A, and grade B cannot be equal to grade B, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" on the ECTS scale do not coincide with the limits of grades "5", "4", "3" on the traditional scale. Applicants who have received grades "FX" and "F" ("2") are not included in the list of ranked applicants. The grade "FX" is assigned to applicants who have scored the minimum number of points for current academic activities, but who have not been credited with the final control. The grade "F" is assigned to applicants who have attended all classes in the discipline, but have not gained an average score (3.00) for the current academic activity and are not allowed to take the final control.

Applicants studying in the same course (one specialty), based on the number of points gained in the discipline, are ranked on the ECTS scale as follows:

Conversion of traditional grade in the discipline and the sum of points to the ECTS scale

Evaluation on the ECTS scale	Statistical indicator
A	Top 10% of applicants
B	The next 25% of applicants
C	The next 30% of applicants
D	The next 25% of applicants
E	The next 10% of applicants

10. Methodological support

- Work program of the discipline
- Silabus
- Methodological developments for practical classes
- Guidelines for independent work of higher education students
- Multimedia presentations
- Situational clinical tasks
- Role-playing scenarios (if necessary)
- Electronic bank of test tasks by subdivisions in the discipline

Educational and methodological literature:

1. Internal diseases: a textbook / OO Yakymenko, VV Klochko, OE Kravchuk et al. eds. 2nd ed: ONMedU, 2023. 436 p.
2. Methods of objective examination in the clinic of internal diseases: textbook / O.O. Yakymenko, O.E. Kravchuk, V.V. Klochko et al. - Odesa: ONMedU, 2013. 154 p.

3. Electrocardiography: a manual / O. Yakymenko, S. Kolomiets, V. Smal et al: ONMedU, 2022. - 120 p.

11. Questions to prepare for the final control

1. Aims and objectives of propedeutics of internal diseases. Scheme of medical history.
2. The procedure for interviewing a patient. Basic and additional complaints of the patient. The importance of anamnesis in the study of the patient. General examination of the patient. Assessment of the general condition of the patient. Assessment of consciousness. Variants of impairment of consciousness, and their clinical signs, diagnostic value.
3. General examination. Position of the patient in bed. Evaluation criteria and clinical characteristics of constitutional types. Evaluation criteria for skin and visible mucous membranes. Examination of the skin in normal and in diseases of internal organs and their diagnostic value. Assessment of lymph nodes, diagnostic significance of changes.
4. Complaints of patients with respiratory diseases: chest pain, cough, shortness of breath and choking - details of complaints, diagnostic value. General examination of the chest, types of breathing. Pathological types of breathing, their diagnostic significance. Options for changing the shape of the chest.
5. Chest palpation - vocal tremor: definition of the concept and mechanism of occurrence. Variants of vocal tremor in pathology and their diagnostic value.
6. Percussion of the lungs. Topographic and comparative. Normal and pathologically altered percussion sounds over the lungs.
7. Auscultation of the lungs. Main and side respiratory noises: mechanism of occurrence. Changes in vesicular respiration in pathology.
8. The main syndromes in lung pathology based on the results of physical examination.
9. The main complaints in diseases of the circulatory system and their diagnostic significance.
10. Coronary and non-coronary heart pain: causes and mechanism of their occurrence, details and their diagnostic value. Differences between coronary and non-coronary pain.
11. Examination of patients with pathology of the cardiovascular system. Examination of the precardiac region. Diagnostic value. Palpation of the heart. Diagnostic value of heart palpation.
12. Auscultation of the heart. Basic tones and heart sounds.
13. Properties of the pulse. Characterization of the properties of the pulse. Changes in the pulse in pathology and their diagnostic value.
14. Methods of measuring blood pressure, standards for BO3. The concept of mild, moderate, severe, systolic hypertension and the definition of hypotension.
15. Methods of laboratory and instrumental diagnostics of cardiovascular diseases and their diagnostic capabilities.

16. Arterial hypertension syndrome: patients' complaints, results of clinical examination of patients. Complications.
17. Chronic heart failure syndrome. Definition, clinical picture, classification by stages and functional classes, diagnostic methods. Principles of treatment.
18. The main complaints of patients with diseases of the gastrointestinal tract, their characteristics and semiological significance.
19. Examination data of patients with gastrointestinal pathology and their semiological significance. Examination of the oral cavity, abdomen, their clinical significance.
20. Abdominal palpation. Goals and objectives of superficial and deep abdominal palpation. Dividing the abdomen into anatomical areas.
21. Main symptoms and syndromes in diseases of the liver and biliary tract.
22. Jaundice syndrome, pathogenetic classification, methods of detection. Laboratory diagnostics. Differential diagnosis of jaundice.
23. The main complaints of patients with urinary diseases, the mechanism of their development and semiological significance.
24. Characteristic signs in the examination of patients with pathology of the urinary system. Results of palpation and percussion of the kidneys.
25. Major syndromes in nephrology. Mechanism of occurrence, clinical and laboratory signs
26. Chronic renal failure syndrome. Etiology, clinical signs. Diagnosis of CKD syndrome.
27. Typical complaints and physical examination findings in diseases of the hematopoietic organs. Palpation and percussion of the spleen.
28. Anemia syndrome. Clinical and laboratory signs of anemia.
29. Hemorrhagic syndrome. Types of bleeding. Laboratory diagnosis of hemorrhagic diathesis.
30. The main syndromes in allergology. Mechanism of occurrence, clinical manifestations.
31. Principles of patient care and first aid.

A LIST OF PRACTICAL SKILLS:

1. Evaluate the clinical blood test.
2. Evaluate the clinical urinalysis.
3. Methods of examination and palpation of the chest.
4. Method of comparative lung percussion.
5. Method of lung auscultation.
6. Methodology for estimating the apical impulse
7. Method of heart percussion. Determination of the limits of relative heart dullness.
8. Method of heart auscultation.
9. Methods of studying the arterial pulse. Properties of the pulse.
10. Methods of measuring blood pressure.
11. Method of superficial abdominal palpation.
12. Deep abdominal palpation technique.

13. Method of liver palpation.
14. Methods of palpation of lymph nodes, determination of edema.

12. Recommended literature

Main:

1. Propaedeutic of internal medicine: textbook / Y.I. Detsyk, O.G. YavorSCy, E.M. Neiko, etc.; edited by O.G. Yavorscy. – 6th ed., ed. and reported – K.: VSV "Medicine", 2020. – 552 p. + 12 p. color.
2. Methods of objective examination in the clinic of internal diseases: textbook posib. / O.O. Yakymenko, O.E. Kravchuk, V.V. Klochko and others. – Odessa, 2013. – 154 p.
3. Diagnostic methods in the clinic of internal medicine: textbook / A.S.Svintsitscy. - K.: VSV "Medicine", 2019. – 1008 p. + 80 p. color.

Additional:

1. Methods of examination of a therapeutic patient: textbook. posib. / S.M. Andreichyn, N.A. Bilkevych, T.Yu.Chernets. – Ternopil: TSMU, 2016. – 260 p.
2. Inquiry and physical examination of the patient of therapeutic profile: Textbook for students of III-IV courses of medical universities / V.E. Neiko, I.V. Tymkiv, M.V. Bliznyuk [et al.]. – Iv.-FrankivSC : IFNMU, 2016. – 142 p.
3. Yepishyn A.V. Propaedeutic of internal diseases with care for therapeutic patients /AB. Yepishin K. - 2015. 768s.
4. Kovaleva OM. Propaedeutic of internal medicine / OM. Kovaleva, NA Safargalin-Kornilova // K.: Medicine 2010 - 750s.
5. Macleod's Clinical Examination / Ed. G.Douglas, F.Nicol, C.Robertson.– 13th ed.– Elsevier. 2013. – 471 p.
6. Bates' Guide to Physical Examination and History Taking /Ed. Lynn S. Bickley, Peter G. Szilagyi. – Wolters Kluwer, 2017. – 1066 p.

13. Electronic information resources

1. <http://moz.gov.ua> – Ministry of Health of Ukraine
2. www.ama-assn.org – American Medical Association / American Medical Association
3. www.who.int – World Health Organization
4. www.dec.gov.ua/mtd/home/ - State Expert Center of the Ministry of Health of Ukraine
5. <http://bma.org.uk> – British Medical Association
6. www.gmc-uk.org - General Medical Council (GMC)
7. www.bundesaerztekammer.de – German Medical Association
8. <https://onmedu.edu.ua/>
9. <https://onmedu.edu.ua/kafedra/propedevtiki-vnutrishnih-hvorob-ta-terapii/>
10. <http://pvb.odessa.ua/index.html>