

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
"INTERNAL MEDICINE"**

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

Field of knowledge: 22 «Health care»

Specialty: 221 «Dentistry»

Educational and professional program: Dentistry

The working program is compiled on the basis of the educational and professional program "Dentistry" for the training of specialists of the second (master's) level of higher education in the specialty 221 "Dentistry" of the field of knowledge 22 "Health care", approved by the Academic Council of ONMedU (minutes No. 9 dated 23/06/2023).

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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 .

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Approved by the guarantor of
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Approved by the subject-cycle methodological commission for therapeutic of ONMedU
Minutes No. 1 dated 31/08/2023

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: 3 Hours: 90 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: 3</i>
		<i>Semester VI</i>
		<i>Lectures (8 hours)</i>
		<i>Seminar (0 hours)</i>
		<i>Practical (42 hours)</i>
		<i>Laboratory (0 hours)</i>
		<i>Independent work (40 hours) including individual assignments (0 hours)</i>
<i>Form of final control - differential 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 in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Methodological bases of clinical examination of a patient, patient examination schemes and writing a medical history in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Methodological basis for interviewing and physical examination of the patient - examination, palpation, percussion, auscultation in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- The most important symptoms and syndromes in the clinic of internal diseases and their semiological interpretation in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.

- Clinical and diagnostic interpretation of the most important laboratory and instrumental studies in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Basic principles and methods of prevention in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, and rheumatic diseases.

To be able to:

- Conduct a survey and physical examination of patients and analyze their results in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Create a patient examination plan for a typical course of the most common diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, and rheumatic diseases.
- Analyze the results of basic laboratory and instrumental methods of research in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Determine the leading symptoms and syndromes in diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Demonstrate the ability to methodically correctly present the results of a patient's examination in the form of a medical history with a justification of the diagnosis of diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Determine a plan of preventive measures for diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Determine a plan of treatment for diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.
- Demonstrate the ability to evaluate the effectiveness of preventive and therapeutic measures for diseases of the respiratory system, cardiovascular system, digestive system, blood and hematopoietic organs, rheumatic diseases.

3. Content of the discipline

Content module №1

Diseases of the respiratory system

Topic 1: Bronchial asthma. Etiology. Pathogenesis. Clinic, diagnosis.

Modern treatment. The role of the dentist in prevention.

Definition, etiology, pathogenesis of bronchial asthma. Classification of bronchial asthma. The main complaints and physical examination findings of patients with bronchial asthma. Syndrome of bronchial obstruction, mucociliary insufficiency and increased airflow. Basic methods of instrumental diagnostics. Spirography and its importance for the diagnosis of bronchial asthma. Laboratory signs of bronchial asthma according to complete blood count and sputum examination. The main clinical manifestations at different stages of bronchial asthma, respiratory failure syndrome with bronchial obstruction. Principles and methods of prevention and treatment at different stages of bronchial asthma. Diagnosis and emergency care in case of bronchial asthma attack, asthmatic condition.

Topic 2. COPD, emphysema of the lungs. Etiology. Pathogenesis. Clinic. Treatment. The role of the dentist in prevention.

The concept of chronic obstructive pulmonary disease. Definition of COPD (chronic bronchitis, pulmonary emphysema). Etiology and pathogenesis of COPD. Classification of COPD. Main complaints and physical examination of patients with COPD. Bronchial obstruction syndrome, mucociliary insufficiency and increased airflow. Basic methods of instrumental diagnostics. The concept of impaired external respiratory function. Spirography and its importance for the diagnosis of COPD. Laboratory signs of COPD according to blood test and sputum examination. The main clinical manifestations at different stages of COPD, respiratory failure syndrome with bronchial obstruction. Principles and methods of prevention and treatment at different stages of COPD.

Topic 3. Pneumonia. Etiology. Pathogenesis. Clinic. Treatment. The role of the dentist in prevention.

Definition, etiology and pathogenesis of pneumonia. Basic mechanisms of lung tissue inflammation. Modern classification of pneumonia (hospital, community-acquired, aspiration, pneumonia in immunocompromised individuals), classification by severity, nature of lung damage (pleuropneumonia, bronchopneumonia, interstitial pneumonia), localization. The main etiologic factors of pneumonia. Patients' complaints and features of physical examination of patients with lobar and focal pneumonia. Lung tissue compaction syndrome. Criteria for severe pneumonia. Possibilities of instrumental diagnostics of lung tissue compaction. Laboratory signs of inflammatory syndrome in pneumonia. Principles and methods and treatment of pneumonia depending on the etiology, severity. Principles and methods of pneumonia prevention.

Topic 4. Pleurisy. Pleural syndrome. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.

Etiology and pathogenesis of pleurisy. Classification of pleurisy. Causes of pleural effusion. Ways of formation and circulation of intrapleural fluid in normal and pathological conditions. Features of patient complaints in dry and exudative pleurisy, differences in physical examination data (palpation, percussion, lung auscultation) in different forms of pleurisy. Fluid accumulation syndrome in the pleural cavity. Possibilities of instrumental diagnostics. Pleural puncture: examination of the contents of the pleural cavity. Difference between exudate and transudate according to physical and laboratory examination. Principles and methods of prevention and treatment of dry and exudative pleurisy.

**Content module #2
Diseases of the circulatory system**

Topic 5. Hypertensive disease. Symptomatic arterial hypertension. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.

WHO/IMHA definitions for arterial hypertension, essential hypertension (hypertension) and symptomatic hypertension. The main risk factors for hypertension and mechanisms of its development. Classification of hypertension by blood pressure level and by target organ damage. The main complaints of a patient with hypertension, data of examination, palpation of the precardiac area, percussion of the boundaries of cardiac dullness and auscultation of the heart. ECG signs of myocardial changes in hypertension. Echocardiography and ECG signs of hypertrophy and left ventricle.

Symptomatic arterial hypertension. Complicated and uncomplicated hypertensive crises.

Cardiovascular risk stratification in hypertension and symptomatic arterial hypertension. Principles and methods of prevention and treatment at different degrees and stages of hypertension. Emergency care in case of hypertensive crisis.

Topic 6: Atherosclerosis. Ischemic heart disease. Classification. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment. Acute coronary death. Principles of cardiopulmonary resuscitation.

Atherosclerosis. Definition. Etiology and pathogenesis of atherosclerosis. Classification. Stages of atherosclerosis development. Clinical (subjective and objective) symptoms of atherosclerosis depending on the localization of the lesion. Diagnostic value of laboratory, instrumental research methods. Definition and clinical significance of hypercholesterolemia and dyslipidemia. Principles and methods of prevention and treatment of atherosclerosis.

Definition of the term "coronary heart disease" (CHD). The main etiologic factors and pathogenetic mechanisms and risk factors of CHD. Modern classification of CHD. Definition of acute coronary death. Definition and main clinical manifestations of angina pectoris. Functional classes of angina pectoris. Methods of subjective and objective diagnosis of angina pectoris (ECG, daily ECG monitoring, stress tests, coronary angiography, cardiac scintigraphy). Unstable angina, the concept of acute coronary syndrome. Principles and methods of prevention and treatment of angina depending on the clinical course. Indications for invasive cardiac intervention and surgical treatment.

Emergency care in case of angina pectoris, acute coronary syndrome.

Topic 7. Acute heart failure (left and right ventricular) and acute vascular insufficiency. Chronic heart failure. Etiology.

Pathogenesis. Clinic. Principles of diagnosis and treatment.

Causes of heart failure. Stages of chronic heart failure. Functional class of chronic heart failure. Interpretation of ECG, echocardiography and other instrumental and laboratory methods of examination in patients with heart failure. Differential diagnosis of systolic and diastolic dysfunction. Tactics of managing a patient with heart failure. The main groups of drugs used in patients with heart failure

**Content module #3
Rheumatic diseases**

Topic 8: Rheumatic disease. Acute rheumatic fever. Rheumatic heart disease. Etiology. Pathogenesis. Clinic. Diagnosis. Modern treatment. Prevention. The role of the dentist in prevention. Diffuse connective tissue diseases. Systemic vasculitis. Features of the dentist's tactics in patients with rheumatic diseases, infective endocarditis and heart disease.

Definition of rheumatic disease. Etiology. Pathogenesis. Pathomorphological changes in connective tissue in rheumatic disease. Definition of acute rheumatic fever (ARF), chronic rheumatic heart disease (CRHD). Clinical manifestations according to subjective objective examination. Data of laboratory, instrumental, radiological methods of examination in acute rheumatic fever. Diagnostic criteria for Kisel-Jones acute rheumatic fever. Definition of the concept of "carditis". ECG signs of atrio-ventricular block. Morgagnia-Adams-Stokes attacks, their cause and clinical manifestations. Intraventricular blocks, differentiation of blockade of the left and right bundle branchial plexus. ECG and clinical signs of atrial fibrillation and

flutter. Modern principles of treatment and prevention of ORL and CRPS. The role of the dentist in the prevention of ORL, CRCS.

Topic 9: Infectious endocarditis. Etiology. Pathogenesis. Clinic. Diagnosis. Modern treatment. Complications. The role of the dentist in prevention.

Infectious endocarditis. Definition, etiology, pathogenesis. Modern classification. Clinical manifestations according to subjective objective examination. Data of laboratory, instrumental, radiological methods of examination in infective endocarditis. The role of microbiological research methods. The role of echocardiography in diagnostics. Diagnostic criteria for infective endocarditis. Treatment of infective endocarditis depending on the classification category. Indications for surgical treatment.

The role of the dentist in the prevention of infective endocarditis in heart disease (secondary infective endocarditis).

Definition of the concept of autoimmune diseases, diffuse connective tissue diseases, systemic vasculitis, inflammatory arthropathy. Etiology, pathogenesis of autoimmune diseases, diffuse connective tissue diseases, systemic vasculitis. Modern classification. Clinical manifestations of systemic lupus erythematosus, systemic vasculitis according to subjective and objective examination. Data of laboratory, instrumental, radiological methods of examination. The role of determination of antinuclear antibodies and antibodies to neutrophil cytoplasmic antigens in diagnosis. Diagnostic criteria for systemic lupus erythematosus and systemic vasculitis. Principles of treatment of systemic lupus erythematosus and systemic vasculitis depending on the classification category.

Content module #4
Diseases of the gastrointestinal tract

Topic 10. Gastritis. Gastric ulcer and duodenal ulcer. Clinic. Diagnosis. Treatment. The role of the dentist in prevention.

Definition and modern classification of gastritis and peptic ulcer of the stomach and 12 duodenum. The main etiologic factors of these diseases. Prevalence of helicobacteriosis, conditions of damage to the mucous membrane of the stomach and 12 duodenum. The main complaints of patients with chronic gastritis and peptic ulcer. Features of the pain syndrome depending on the localization of the pathological focus and the state of the acid-producing function of the stomach. Manifestations of dyspeptic syndrome in chronic gastritis and peptic ulcer of the stomach and 12 duodenum. Possibilities of instrumental and laboratory examination of patients. The main complications of peptic ulcer of the stomach and 12 duodenum. Gastric bleeding syndrome.

Principles and methods of prevention and treatment of gastritis, gastric ulcer and duodenal ulcer. Features of conservative treatment depending on the type of ulcer, stage of the disease. Indications for surgical treatment.

The role of the dentist in the eradication of *Helicobacter pylori* and the prevention of exacerbation of gastritis and gastric ulcer and duodenal ulcer.

Topic 11: Intestinal diseases (chronic enteritis, colitis, ulcerative colitis). Pancreatitis. Cholecystitis. Gallstone disease. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.

Chronic enteritis, colitis, nonspecific inflammatory bowel disease (IBD) (ulcerative colitis, granulomatous colitis (Crohn's disease)). Definition, etiology, pathogenesis. Modern classification. Clinical manifestations according to subjective objective examination. Data of

laboratory, instrumental, radiological methods of examination in chronic enteritis, colitis, IBD. The role of microbiological research methods. Diagnostic criteria for IBD. Principles and tactics of treatment depending on the classification category. Indications for surgical treatment.

The role of the dentist in the prevention of infective endocarditis in chronic enteritis, colitis, and IBD.

Pancreatitis. Cholecystitis. Gallstone disease. Definition, etiology, pathogenesis. Modern classification. Clinical manifestations according to subjective objective examination. Data of laboratory, instrumental, radiological methods of examination.

Features of conservative treatment depending on the stage of the disease. Indications for surgical treatment.

Topic 12: Chronic hepatitis. Cirrhosis of the liver. Clinic. Diagnosis. Treatment. The role of the dentist in prevention.

Definition and principles of modern classification of chronic hepatitis and liver cirrhosis. The main etiological factors of hepatitis and cirrhosis. Mechanism of liver damage in hepatitis of viral etiology. The main complaints of patients with hepatitis and cirrhosis of the liver, features of the results of the examination and physical examination. Morphological and biochemical signs of liver damage.

The main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis.

Identification of the main syndromes in liver pathology. Portal hypertension syndrome, liver failure and hepatoliver syndrome in liver disease. Detection of ascites. The main manifestations of jaundice and cholestasis syndrome, their laboratory signs. Differential diagnosis of jaundice. The main complications of liver cirrhosis.

Principles and methods of prevention and treatment of chronic hepatitis and liver cirrhosis depending on the etiology, stage, and degree of compensation.

Content module #5 Diseases of the kidneys

Topic 13. Glomerulonephritis. Acute and chronic glomerulonephritis. Nephrotic syndrome. The concept of chronic kidney disease. Pyelonephritis. Urolithiasis. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. Disorders of phosphorus-calcium metabolism, the importance of osteodensitometry in the diagnosis of these disorders. The role of the dentist in prevention.

Definition and modern classification of glomerulonephritis. The main mechanisms of glomerulonephritis development. Patient complaints in kidney damage and results of physical examination of patients with glomerulonephritis. Edema syndrome and arterial hypertension syndrome in glomerulonephritis. Possibilities of instrumental diagnostics of glomerulonephritis. Laboratory examination of urine, analysis and interpretation of the results of general clinical urinalysis, urinalysis by Nechyporenko, Amburge, Adis-Kakovsky, Zimnitsky. Urinary and nephrotic syndromes in glomerulonephritis. Results of biochemical blood tests in glomerulonephritis. Syndromes of renal failure and renal colic. Definition and classification of chronic kidney disease.

Interrogation. Examination, percussion, palpation. Functional examination of the kidneys, determination of glomerular filtration rate by the Rehberg test and the CKD-EPI formula.

Radiographic examination of the kidneys. Scanning of the kidneys.

Radioisotope nephrography, kidney biopsy. Clinical significance of general urinalysis, functional (Zimnitsky, Rehberg test) and quantitative tests (Amburge, Nechyporenko test).

Principles and methods of prevention and treatment depending on the etiology, stage, degree of compensation.

Definition and modern classification of pyelonephritis. The main mechanisms of pyelonephritis development. Complaints of patients with kidney damage and results of physical examination of patients with pyelonephritis. Edema syndrome and hypertension syndrome in pyelonephritis. Possibilities of instrumental diagnostics of pyelonephritis. Laboratory examination of urine, analysis and interpretation of the results of general clinical urinalysis, urinalysis by Nechyporenko, Amburge, Adis-Kakovsky, Zimnitsky. Urinary syndrome in pyelonephritis. Inflammatory syndrome in pyelonephritis. Biochemical blood tests in pyelonephritis. Syndromes of renal failure and renal colic. Definition and classification of chronic kidney disease. X-ray examination in pyelonephritis. Intravenous and retrograde pyelography. Scanning of the kidneys. Clinical significance of general urinalysis, functional (Zimnitsky, Rehberg test) and quantitative tests (Amburge, Nechiporenko test) in pyelonephritis.

Principles and methods of prevention and treatment depending on the etiology and stage.

Content module #6

Allergic diseases

Topic 14: Allergic diseases. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Anaphylactic shock, urticaria. Angioedema, angioedema.

Allergic diseases. Definition. Etiology, pathogenesis. The concept of types of allergic reactions. The main mechanisms of development. Clinical manifestations according to subjective objective examination. Data of laboratory methods of examination and their clinical significance.

Modern principles of treatment and prevention.

Anaphylactic shock, urticaria. Angioedema is an angioedema. Definition. Etiology. Pathogenesis. Clinical manifestations according to subjective objective examination. Data of laboratory methods of examination and their clinical significance. Principles and methods of prevention and treatment. Emergency care.

Content module #7

Diseases of the hematopoietic organs

Topic 15. Iron deficiency anemia. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Megaloblastic anemia. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.

Definition and modern classification of anemia. Basic laboratory criteria for anemia. The mechanism of development of iron deficiency in the body and the occurrence of iron deficiency anemia. The main clinical manifestations of sideropenic and circulatory anemia syndromes in iron deficiency anemia. Laboratory criteria for iron deficiency anemia. Analysis and interpretation of a general clinical blood test.

Principles and methods of prevention and treatment depending on the etiology of iron deficiency and the degree of anemia. Indications for replacement therapy with blood products.

Causes and pathogenesis of B₁₂- and₁₂ folate deficiency anemia. Manifestations of generalized anemia, digestive system disorders, funicular myelosis and peripheral blood disorders in B₁₂ -folic acid deficiency anemia. Main laboratory signs of B₁₂ -and folate

deficiency anemia. Clinical features and differential diagnosis of B12 deficiency and folate deficiency anemia. Palpation of lymph nodes, liver, spleen. Clinical interpretation of complete blood count. Principles and methods of prevention and treatment depending on the etiology of vitamin B12 or PP deficiency, the degree of anemia. Indications for replacement therapy with blood products.

Topic 16. Hypo-, aplastic anemias. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Pathognomonic symptoms in the oral cavity.

Hypo-, aplastic anemia. Etiology. Pathogenesis. Clinical manifestations according to subjective objective examination. Basic laboratory criteria for hypo-, aplastic anemia and features of hematopoiesis disorders. Clinical significance of the bone marrow puncture examination. Palpation data of lymph nodes, liver, spleen. Analysis and interpretation of a general clinical blood test.

Topic 17. Hemato-oncological diseases. Modern views on etiology and pathogenesis. WHO classification. General principles of treatment. The role of the dentist in the diagnosis, treatment of manifestations and complications of hemato-oncological diseases.

Definition of hemoblastosis. Modern classification. Etiology. Pathogenesis. Clonal theory of hemoblastosis. Clinical manifestations according to subjective objective examination. The main syndromes: leukemic proliferation syndrome, anemic, hemorrhagic, cytopenic syndromes in hemoblastosis. Clinical interpretation of complete blood count in hemoblastosis. Clinical significance of bone marrow puncture examination. The importance of genetic studies. Acute myeloblastic and lymphoblastic leukemia, chronic myelo- and lymphocytic leukemia. Definition of hematosarcoma (lymphoma). Lymphogranulomatosis. Basic principles of prevention and treatment. The concept of targeted drugs for the treatment of hemoblastosis. The role of the dentist in the early diagnosis of hemoblastosis.

Topic 18: Thrombocytopenias and thrombocytopathies. . Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.

Concept and definition of hemorrhagic diatheses. The main components of the blood coagulation system. The main types of bleeding. Factors of bleeding and causes of hemorrhagic syndromes - thrombocytopenia, coagulopathy, hemorrhagic vasculitis. Characteristics of hemorrhagic syndrome in hemophilia, thrombocytopenic purpura. Basic methods of laboratory diagnosis of hemorrhagic syndromes. Clinical manifestations according to subjective objective examination in thrombocytopenia and thrombocytopenic purpura (Werlhoff's disease).

Basic principles of prevention and treatment.

Topic 19: Hemophilia A, B, C. Willebrand's disease. Etiology, pathogenesis, clinic, diagnosis and principles of treatment.

Definition of coagulopathy. Characteristics of hemorrhagic syndrome in coagulopathy. Clinical manifestations according to subjective objective examination in coagulopathy, in particular Hemophilia A, B, C. Von Willebrand disease. Basic methods of laboratory diagnosis of coagulopathies. Principles Basic principles of prevention and treatment. Methods for determining the dose of factor VIII concentrate to replace the deficiency, depending on

the level of deficiency and the clinical situation (bleeding, hemarthrosis, hematoma, the need for surgery (depending on the volume).

Topic 20: Secondary immunodeficiencies. Dental aspects of diseases of the immune system.

Secondary immunodeficiencies. Definition of the concept. The concept of primary immunodeficiencies. Modern classification (by etiologic factor, type of immune disorder, course). Etiology. Pathogenesis. Risk factors. Clinical manifestations according to subjective objective examination. Basic methods of laboratory diagnostics. Basic principles of prevention and treatment.

Topic 21: Differentiated credit.

4. Structure of the discipline

Topics to be covered	Number of hours					
	Total	including				
		lectures	seminars	practical	laboratory	SRS
Bronchial asthma. Etiology. Pathogenesis. Clinic, diagnosis. Modern treatment. The role of the dentist in prevention.	4	0	0	2	0	2
COPD, pulmonary emphysema. Etiology. Pathogenesis. Clinic. Treatment. The role of the dentist in prevention.	4	0	0	2	0	2
Pneumonia. Etiology. Pathogenesis. Clinic. Treatment. The role of the dentist in prevention.	4	0	0	2	0	2
Pleurisy. Pleural syndrome. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.	4	0	0	2	0	2
Hypertensive disease. Symptomatic arterial hypertension. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.	5	1	0	2	0	2

Atherosclerosis. Ischemic heart disease. Classification. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment. Acute coronary death. Principles of cardiopulmonary resuscitation.	5	1	0	2	0	2
Acute heart failure (left and right ventricular) and acute vascular insufficiency. Chronic heart failure. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.	4	0	0	2	0	2
Rheumatic disease. Acute rheumatic fever. Rheumatic heart disease. Etiology. Pathogenesis. Clinic. Diagnosis. Modern treatment. Prevention. The role of the dentist in prevention. Diffuse connective tissue diseases. Systemic vasculitis. Features of the dentist's tactics in patients with rheumatic diseases, infective endocarditis and heart disease.	6	2	0	2	0	2
Infectious endocarditis. Etiology. Pathogenesis. Clinic. Diagnosis. Modern treatment. Complications. The role of the dentist in prevention.	5	0	0	2	0	3
Gastritis. Gastric ulcer and duodenal ulcer. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.	5	1	0	2	0	2

<p>Intestinal diseases (chronic enteritis, colitis, ulcerative colitis). Pancreatitis. Cholecystitis. Gallstone disease. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.</p>	6	1	0	2	0	3
<p>Chronic hepatitis. Cirrhosis of the liver. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.</p>	5	0	0	2	0	3
<p>Glomerulonephritis. Acute and chronic glomerulonephritis. Nephrotic syndrome. The concept of chronic kidney disease. Pyelonephritis. Urolithiasis. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. Disorders of phosphorus-calcium metabolism, the importance of osteodensitometry in the diagnosis of these disorders. The role of the dentist in prevention.</p>	4	0	0	2	0	2
<p>Allergic diseases. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Anaphylactic shock, urticaria. Angioedema.</p>	4	0	0	2	0	2
<p>Iron deficiency anemia. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Megaloblastic anemia.</p>	2	0	0	2	0	0

Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.						
Hypo-, aplastic anemias. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Pathognomonic symptoms in the oral cavity.	2	0	0	2	0	0
Hemato-oncological diseases. Modern views on etiology and pathogenesis. WHO classification. General principles of treatment. The role of the dentist in the diagnosis, treatment of manifestations and complications of therapy of hemato-oncological diseases.	2	0	0	2	0	0
Thrombocytopenias and thrombocytopathies. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.	4	1	0	2	0	1
Hemophilia A, B, C. Willebrand's disease. Etiology, pathogenesis, clinic, diagnosis and principles of treatment.	5	1	0	2	0	2
Secondary immunodeficiencies. Dental aspects of diseases of the immune system.	4	0	0	2	0	2
Differentiated credit.	6	0	0	2	0	4
<i>Together</i>	90	8	0	42	0	40

<i>Individual tasks</i>	0	0	0	0	0	0
Total hours	90	8	0	42	0	40

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

5.1. Topics of lecture classes

№	Topic title	Number of hours
1.	Arterial hypertension. Hypertension (essential arterial hypertension). Symptomatic arterial hypertension. Etiology. Pathogenesis. Hypertensive crises. Principles of prevention and treatment. Changes in the oral cavity in hypertension.	2
2.	Gastritis. Gastric ulcer and duodenal ulcer. Intestinal diseases (chronic enteritis, colitis, ulcerative colitis). Pancreatitis. Cholecystitis. Gallstone disease. Chronic hepatitis. Liver cirrhosis. The role of the dentist in prevention.	2
3.	Rheumatic diseases. Rheumatic heart disease. Systemic vasculitis. Diffuse connective tissue diseases. Features of the tactics of a dentist.	2
4.	Hemostasis disorders. Hemophilia. Thrombocytopenic syndromes. Pathogenesis. Diagnosis. Clinical management. Complications. Principles of treatment. The role of the dentist in early diagnosis and prevention. Emergency conditions in the practice of a dentist.	2
	Together	8

5.2. Topics of seminar sessions

Seminar classes are not provided.

5.3. Topics of practical classes

№	Topic title	Number of hours
1.	Bronchial asthma. Etiology. Pathogenesis. Clinic, diagnosis. Modern treatment. The role of the dentist in prevention.	2
2.	COPD, pulmonary emphysema. Etiology. Pathogenesis. Clinic. Treatment. The role of the dentist in prevention.	2
3.	Pneumonia. Etiology. Pathogenesis. Clinic. Treatment. The role of the dentist in prevention.	2

4.	Pleurisy. Pleural syndrome. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.	2
5.	Hypertensive disease. Symptomatic arterial hypertension. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.	2
6.	Atherosclerosis. Ischemic heart disease. Classification. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment. Acute coronary death. Principles of cardiopulmonary resuscitation.	2
7.	Acute heart failure (left and right ventricular) and acute vascular insufficiency. Chronic heart failure. Etiology. Pathogenesis. Clinic. Principles of diagnosis and treatment.	2
8.	Rheumatic disease. Acute rheumatic fever. Rheumatic heart disease. Etiology. Pathogenesis. Clinic. Diagnosis. Modern treatment. Prevention. The role of the dentist in prevention. Diffuse connective tissue diseases. Systemic vasculitis. Features of the dentist's tactics in patients with rheumatic diseases, infective endocarditis and heart disease.	2
9.	Infectious endocarditis. Etiology. Pathogenesis. Clinic. Diagnosis. Modern treatment. Complications. The role of the dentist in prevention.	2
10.	Gastritis. Gastric ulcer and duodenal ulcer. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.	2
11.	Intestinal diseases (chronic enteritis, colitis, ulcerative colitis). Pancreatitis. Cholecystitis. Gallstone disease. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.	2
12.	Chronic hepatitis. Cirrhosis of the liver. Clinic. Diagnostics. Treatment. The role of the dentist in prevention.	2
13.	Glomerulonephritis. Acute and chronic glomerulonephritis. Nephrotic syndrome. The concept of chronic kidney disease. Pyelonephritis. Urolithiasis. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. Disorders of phosphorus-calcium metabolism, the importance of osteodensitometry in the diagnosis of these disorders. The role of the dentist in prevention.	2
14.	Allergic diseases. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.	2
	Anaphylactic shock, urticaria. Angioedema.	2
15.	Iron deficiency anemia. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Megaloblastic anemia. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.	2
16.	Hypo-, aplastic anemias. Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention. Pathognomonic symptoms in the oral cavity.	2

17.	Hemato-oncological diseases. Modern views on etiology and pathogenesis. WHO classification. General principles of treatment. The role of the dentist in the diagnosis, treatment of manifestations and complications of therapy of hemato-oncological diseases.	2
18.	Thrombocytopenias and thrombocytopathies. . Etiology, pathogenesis, clinic, diagnosis and principles of treatment. The role of the dentist in prevention.	2
19.	Hemophilia A, B, C. Willebrand's disease. Etiology, pathogenesis, clinic, diagnosis and principles of treatment.	2
20.	Secondary immunodeficiencies. Dental aspects of diseases of the immune system.	2
21.	Differentiated credit.	2
	Together	42

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 and endocrine systems - palpation of lymph nodes - ECG analysis 	3 3 3 3 3 3 3
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 Electrocardiographic examination in case of combined heart rhythm disorders Instrumental methods of studying the cardiovascular system Instrumental and laboratory methods of examination of the gastrointestinal tract Heart failure syndrome: basic clinical and instrumental methods of examination. 	3 3 3 3 3
3.	Preparing for differential testing	4
	Together	40

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.

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) justification 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

Assessment.	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, electrocardiograms, 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 applicant for higher education 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 did not fulfill the tasks of the exam 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 grades 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: a 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. Bronchial asthma: etiology, classification, clinical data, main syndromes, complications, principles of treatment.

2. Croupy pneumonia: etiology, classification, clinical examination findings, main syndromes, complications and principles of treatment.
3. Bronchopneumonia: etiology, classification, clinical examination findings, main syndromes, complications and principles of treatment.
4. Acute and chronic bronchitis (COPD): etiology, classification, clinical data, main syndromes, complications, principles of treatment.
5. Pleurisy: etiology, clinical examination findings, main syndromes, complications, principles of treatment.
6. Respiratory failure: etiology, clinical examination results, complications, principles of treatment.
7. Coronary and non-coronary pain in the heart: causes and mechanism of their occurrence, details and their diagnostic value. Differences between coronary and non-coronary pain.
8. Hypertension and symptomatic arterial hypertension. Clinical picture. Classification. Laboratory and instrumental diagnostic methods. Principles of treatment.
9. Atherosclerosis: etiology, classification, clinical data, major syndromes, complications, principles of treatment.
10. Coronary artery disease: acute and chronic coronary insufficiency syndrome: definition. Main complaints and results of examination of patients with angina pectoris. Instrumental and laboratory diagnostic methods in angina syndrome. Principles of treatment.
11. IHD: myocardial infarction. Clinical picture. Classification. Methods of diagnosis. Principles of treatment.
12. Chronic heart failure syndrome. Definition, clinical picture, classification by stages and functional classes, diagnostic methods. Principles of treatment.
13. Rheumatic disease, acute rheumatic fever: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
14. Chronic rheumatic heart disease: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
15. Diffuse connective tissue diseases: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
16. Infectious endocarditis: etiology, classification, clinical data, main syndromes, complications, principles of treatment. The role of the dentist in prevention.
17. Acute and chronic gastritis: classification, main symptoms and syndromes, clinical, laboratory and instrumental diagnostic methods.
18. Peptic ulcer of the stomach and duodenum: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
19. Intestinal diseases (chronic enteritis, colitis, ulcerative colitis): etiology, classification, clinical data, main syndromes, complications, principles of treatment.
20. Cholecystitis, cholelithiasis: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
21. Chronic hepatitis: etiology, classification, clinical data, main syndromes, complications, principles of treatment.

22. Cirrhosis of the liver: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
23. Acute and chronic pyelonephritis: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
24. Acute and chronic glomerulonephritis: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
25. Urolithiasis: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
26. Allergic diseases: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
27. Angioedema and anaphylactic shock: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
28. Iron deficiency and B12 and folic deficiency anemia: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
29. Hypo- and aplastic anemias: etiology, classification, clinical data, main syndromes, complications, principles of treatment. Pathognomonic symptoms in the oral cavity.
30. Hemoblastosis. Definition of the concept. Clinical picture. The main syndromes. Changes in blood and oral cavity tests in hemoblastosis (chronic myeloid and lymphocytic leukemia).
31. Thrombocytopenia and thrombocytopathies: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
32. Hemophilia A, B, C: etiology, classification, clinical data, major syndromes, complications, principles of treatment.
33. Willebrand's disease: etiology, classification, clinical data, main syndromes, complications, principles of treatment.
34. Secondary immunodeficiencies: etiology, classification, clinical data, main syndromes, complications, principles of treatment. Dental aspects of immune system diseases
35. Principles of patient care in an internal medicine clinic. Provision of first aid.

A LIST OF PRACTICAL SKILLS:

1. Interpretation of the ECG. Interpretation of the changes found.
2. Evaluate the clinical blood test.
3. Evaluate the clinical urinalysis.
4. Evaluate the clinical analysis of sputum.
5. Methods of examination and palpation of the chest.
6. Method of comparative lung percussion.
7. Method of topographic lung percussion.
8. Determination of lower lung excursion
9. Method of lung auscultation.
10. Methods of performing lung bronchophonies

11. Method of palpation of the precardiac region.
12. Methodology for estimating the apical impulse
13. Methods for assessing heart rate
14. Method of heart percussion. Determination of the limits of relative heart dullness.
15. Method of heart percussion. Determination of the limits of absolute heart dullness.
16. Heart percussion technique. Determination of the boundaries of the vascular bundle
17. Method of heart auscultation.
18. Methods of studying the arterial pulse. Properties of the pulse.
19. Methods of measuring blood pressure.
20. Method of superficial abdominal palpation.
21. Deep abdominal palpation technique.
22. Method of determining the lower border of the stomach.
23. Methodology for determining the boundaries of the liver by Kurlov.
24. Method of palpation of the liver.
25. Method of palpation of the kidneys.
26. Percussion of the kidneys - Pasternak's symptom and its diagnostic value
27. Determination of spleen size by percussion
28. Method of palpation of the spleen.
29. Methods of palpation of lymph nodes, determination of edema.
30. Method of palpation of the thyroid gland.

12. Recommended literature

Main:

1. 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>