MINISTRY OF HEALTH OF UKRAINE KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Internal and Occupational Diseases

Academic year 2021-2022

SYLLABUS OF EDUCATIONAL DISCIPLINE

«INTERNAL MEDICINE»

Educational component regulatory

Educational component format full-time

Area of knowledge "22" Health care

Specialty 221 "Dentistry"

Educational and professional program of the second level of higher education

Course 3

The syllabus was approved at the meeting of the Department of Internal and Occupational Diseases

The syllabus was approved by the KhNMU Methodical Committee on problems of professional training of therapeutic profile

Protocol № 1 from «30» August 2021

Protocol № 1 from «31» August 2021

Head of the Department

prof Shelest R O

Head

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Face-to-face consultations: Schedule and venue according to the department's schedule.

Online consultations: Information at the Moodle system on the department page.

Location: <u>classrooms of the Department of Internal and Occupational Diseases on the basis</u> <u>of Research Institute of Occupational Hygiene and Occupational Diseases of KhNMU</u> (Kharkiv, Trinklera Street, 6).

INTRODUCTION

Syllabus of educational discipline «Internal medecine» is compiled in accordance with the educational and professional program (hereinafter - EPP) «Medicine» and the Standard of Higher Education of Ukraine (hereinafter - Standard), the second (Master's) level, area of knowledge 22 «Health care», specialty 221 "Dentistry"

Description of the discipline

Third year.

Third year of study, 6th semester.

Discipline scope:

Number of credits -3.

The total number of hours -90.

Hours for study:

Lectures -10.

Practical classes -40.

<u>Independent student work – 40.</u>

Control type: credit.

The study of the basics of internal medicine is of paramount importance for the training of physicians of all specialties. A physician of any specialty should be able to provide first aid for emergencies, traumatic injuries, bleeding, clinical death, perform injections, punctures, transfusions of blood components and other manipulations.

The program of internal medicine is represented by the main sections of internal medicine (respiratory diseases, circulatory diseases, rheumatic diseases, digestive diseases).

Interdisciplinary links: Internal medicine as a discipline:

a) is based on the study of medical chemistry, biological and bioorganic chemistry, medical and biological physics, pathophysiology, pathomorphology, pharmacology, hygiene and ecology, social medicine, organization and economics of health care, propaedeutic of internal medicine, tuberculosis, dermatology, venereology, psychiatry, narcology, otorhinolaryngology, obstetrics and gynecology, neurology, traumatology and orthopedics, and integrates with these disciplines;

b) lays the foundations of a healthy lifestyle and prevention of dysfunction in the work process.

Link to the discipline page in MOODLE: http://distance.knmu.edu.ua/course/view.php?id=121.

1. THE PURPOSE AND OBJECTIVES OF THE DISCIPLINE

1.1. The purpose of studying the discipline. The purpose of teaching the discipline "Internal Medicine" is the need for dentists to be able to recognize the external signs and history of the most common internal diseases, their complications that threaten the lives of patients; know the tactics of a dentist for patients with somatic pathology; be able to assess the importance of somatic pathology for the occurrence and course of diseases of the oral cavity and the role of pathology of the oral cavity in the development of somatic diseases.

1.2. The main tasks of studying the discipline "Internal medicine" are to:

- master methods of diagnosing pathology of internal organs according to the syndrome and nosological principles;
- master the principles of formulating a clinical diagnosis of diseases that require special tactics of a dentist;
- master the methods of providing emergency medical care for conditions that threaten the life and health of patients according to the list given in the educational and professional program.

1.3. According to the requirements of the Standard, the discipline "Internal medicine" provides students with the acquisition of competencies:

-general:

- 1. Ability to abstract thinking, analysis and synthesis.
- 2. Ability to learn and master modern knowledge.
- 3. Ability to apply knowledge in practical situations.
- 4. Knowledge and understanding of the subject area and understanding of professional activity.
 - 5. Ability to adapt and act in a new situation.
 - 6. Ability to make informed decisions.
 - 7. Ability to work in a team.
 - 8. Interpersonal skills.
 - 9. Ability to communicate in the state language both orally and in writing.
 - 11. Skills in the use of information and communication technologies.
 - 12. Definiteness and perseverance in terms of tasks and responsibilities.
 - 13. The ability to act socially responsibly and consciously.

15. Ability to act on the basis of ethical considerations (motives).

- special (professional, subject):

- 1. Skills of interviewing and clinical examination of the patient.
- 2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
 - 3. Ability to establish a preliminary and clinical diagnosis of the disease.
- 4. Ability to determine the required mode of work and rest during the treatment of diseases.
 - 5. Ability to determine the nature of nutrition in the treatment of diseases.
 - 6. Ability to determine the principles and nature of disease treatment.
 - 7. Ability to diagnose emergencies.
 - 8. Ability to determine the tactics of emergency medical care.
 - 9. Emergency care skills.
 - 11. Skills to perform medical manipulations.
 - 13. Ability to carry out sanitary, hygienic, and preventive measures.
- 15. Ability to determine the tactics of management of persons subject to dispensary supervision.
 - 16. Ability to conduct a performance examination.
 - 17. Ability to keep medical records.
- 18. Ability to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information.
- 19. Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.
- 20. Ability to analyze the activities of a doctor, department, health care institution, to take measures to ensure the quality of medical care and improve the efficiency of medical resources.
- 21. Ability to conduct activities for the organization and integration of medical care and marketing of medical services.

Competence matrix

Special (professional, subject) competencies

1	Collection of medical information about the patient's condition	Know algorithm of patient survey	Be able to interview the patient and identify the main complaints, collect medical history and epidemiological history, pharmaco-therapeutic history, assess the general condition of the patient, formulate a diagnosis	Comply with the requirements of ethics, bioethics and ethics in their professional activities. Make health information to the appropriate person medical records	To be responsible for qualitative implementation delivered tasks
2	Ability to establish a preliminary clinical diagnosis of the disease	Have specialized knowledge about human, his organs and systems; knowledge of standard survey methods; disease diagnosis algorithms; algorithms for the selection of leading symptoms or syndromes (according to list 1); previous and clinical diagnoses (according to list 2); knowledge of methods of laboratory and instrumental examination (according to list 3); knowledge of human condition assessment	Be able to conduct a physical examination of the patient; be able to make an informed decision about the selection of the leading clinical symptom or syndrome; be able to make a preliminary diagnosis	Based on normative documents to keep medical documentation on the patient (outpatient / inpatient card, etc.)	Adhering to ethical and legal norms, be responsible for making informed decisions and actions regarding the correctness of the established preliminary clinical diagnosis of the disease
3	Keeping medical records	Know the rules and standards of medical records	Be able to keep medical records	Use standard approaches to keeping medical records	Be responsible for the accuracy of medical records
4	Ability to evaluate the results of laboratory and instrumental research	Know the standard methods of examinations and laboratory tests in the patient	Be able to analyze the results of laboratory and instrumental studies and on their basis to evaluate information about the leading syndrome in the patient.	Grounded appoint and evaluate the results of examinations and laboratory tests	Be responsible for deciding on the evaluation of examinations and laboratory results
5	Diagnosis emergency conditions	Have specialized knowledge of the diagnosis in a patient emergency conditions	Perform emergency diagnoses according to the standard patient regimen	Determine the tactics of emergency medical care according to the algorithm	Be responsible for the development of professional knowledge and skills
6	Defining tactics and providing emergency medical care (according to the list)	Know the methods of assessing the quality of life of the patient	Be able to provide the necessary assistance according to the standard	Grounded manipulate aid and assess the results of medical procedures	Be responsible for the development of professional knowledge and skills
7	Ability to carry out medical and evacuation measures	Know the stages of medical evacuation in an emergency, including in the field. Know the system of medical and evacuation support;	Be able to organize and perform medical activities during the deployment of stages of medical evacuation in	Be able to organize and perform medical activities during the deployment of stages of medical evacuation	Be responsible for the timely and quality performance of medical duties during the deployment of stages of

		Know the principles of organization and conduct of medical and evacuation measures among the population and servicemen. Know the system of alerting the population in emergency situations; Know the guidelines for the actions of the doctor during the deployment of the stages of medical evacuation	an emergency, including in the field	in an emergency, including in the field	medical evacuation in an emergency and martial law
8	Performing medical manipulations (according to the list)	Have specialized knowledge of medical manipulations and methods of providing emergency medical care, using standard schemes	Perform emergency medical care manipulations using standard schemes under any circumstances based on an emergency diagnosis (according to list 4) for a limited time (according to lists 6)	Be able to reasonably choose methods and conduct individual stages of diagnosis and treatment	Be responsible for mastering the relevant knowledge and skills
9	Determining the tactics of the patient	Know the leading clinical symptoms and syndromes (according to list 1), the peculiarities of their course in the patient; to establish a probable nosological or syndromic preliminary clinical diagnosis	1. Be able to identify and identify the leading clinical symptoms and syndromes (according to list 1) according to standard methods, using preliminary data of the patient's history, patient examination data; to establish a probable nosological or syndromic preliminary clinical diagnosis. 2. To determine the tactics of patient management by making an informed decision according to existing algorithms and standard schemes	Be able to determine the tactics of the patient	Be responsible for mastering the relevant knowledge and skills
10	Assessment of the impact of the environment on the health of the population (individual, family, population)	To know features of influence of environment on a state of health at somatic patients in the conditions of a medical institution by standard methods	Assess the impact of exogenous factors on the patient's health	Be able to explain to the patient the importance of minerals, trace elements for disease prevention	Be responsible for mastering the relevant knowledge and skills
11	Processing of state, social and medical information	Know the methods of processing state, social, medical information	Be able to analyze and evaluate state, social, medical information	Use standard approaches to information evaluation, use computer information technology	Responsible for processing state, social, medical information

2. INFORMATION SCOPE OF THE DISCIPLINE

The discipline program is structured into the following sections:

- 1. Respiratory diseases. 2. Diseases of the circulatory system. 3. Rheumatic diseases.
- 4. Diseases of the digestive system.

1. RESPIRATORY DISEASES.

Topic 1. Bronchial asthma. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Definition. Etiology, features of pathogenesis. Classification by severity and course. Clinical manifestations and changes in the data of instrumental research methods depending on the severity. Complication. Criteria for the severity of bronchial asthma. Emergency care for asthma attacks. Importance of oral rehabilitation for primary and secondary prevention of bronchial asthma. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 2. COPD. Pulmonary emphysema. Pulmonary insufficiency Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Definition. The importance of smoking, environmental, occupational factors and infection in the development of chronic bronchitis and pulmonary emphysema. Classification. Clinical manifestations, changes in the data of additional instrumental research methods depending on the stage (severity). Diagnosis, the role of the study of the function of external respiration. Complication. Primary and secondary prevention. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 3. Pneumonia. Pleural syndrome Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Pneumonia. Definition. The most common etiological factors. Classification. Clinical manifestations and their features in community-acquired, nosocomial, aspiration pneumonia and pneumonia in persons with severe immune defects. Changes in the data of instrumental and laboratory research methods. Complication. Pleural syndrome. Importance of oral rehabilitation for primary and secondary prevention. Changes in the oral cavity. The role of

the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 4 Control class. Importance of oral rehabilitation for primary and secondary prevention of bronchial asthma, COPD. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

2. DISEASES OF THE CIRCULATORY SYSTEM

Topic 5. Hypertension. Symptomatic hypertension. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Definition. The concept of normal blood pressure and hypertension. Primary (essential) arterial hypertension. Classification. Clinical manifestations and data of additional research methods. Defeat of target organs. Risk stratification. Complication. Treatment. Complicated and uncomplicated hypertensive crises, features of treatment tactics. Basic antihypertensive drugs. The role of the dentist in primary and secondary prevention. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 6. Symptomatic hypertension.

Features of the clinic, diagnosis of renal (renovascular, renoparenchymal), endocrine (Itsenko-Cushing's syndrome and disease, pheochromocytoma, Conn's syndrome, diffuse toxic goiter) and hemodynamic hypertension.

Topic 7. Atherosclerosis. CHD. WHO classification. Angina pectoris. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Definition and role of hyperlipidemias, vascular wall damage and platelets in the development of atherosclerosis. Risk factors. Features of clinical manifestations depending on the predominant localization (aorta, coronary, mesenteric and renal arteries, arteries of the lower extremities). The value of laboratory, radiation and other instrumental research methods. Complication. General principles of treatment. Primary and secondary prevention.

Coronary heart disease (CHD). Definition. The role of atherosclerosis, destabilization of atherosclerotic plaque and functional factors in the pathogenesis of various forms of coronary heart disease. WHO classification. Features of the clinical course and diagnosis of different variants of stable angina. Toothache as a variant of angina. Features of the clinical

course and diagnosis of different variants of unstable angina. Complication. Principles of treatment of angina attacks. Primary and secondary prevention.

Topic 8. Sudden cessation of blood circulation. Acute coronary syndrome. Acute myocardial infarction. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid.

Primary cardiac arrest (sudden coronary death). Cardiopulmonary resuscitation technique. The role of the dentist in providing emergency care in the workplace.

Acute coronary syndrome. Acute myocardial infarction. Classification. Features of the clinical course and diagnosis of acute myocardial infarction. Therapeutic tactics. Primary and secondary prevention.

The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 9. Acute heart failure (left and right ventricular) and acute vascular insufficiency. Chronic heart failure. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Determination of acute heart failure. The main reasons. Pathogenesis of disorders of central and peripheral hemodynamics in different forms (left and right heart). Cardiac asthma. Pulmonary edema. Pulmonary artery thromboembolism (PE). Clinical manifestations. Treatment. Primary and secondary prevention.

Acute vascular insufficiency. Arterial hypotension. Fainting, collapse, shock. Definition. Etiology. Pathogenesis. Clinic. Diagnosis. Emergency aid. Primary and secondary prevention.

Determination of chronic heart failure. Etiology and pathogenesis. Classification. Clinical manifestations and their features. Diagnosis. Treatment. Primary and secondary prevention. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 10. Control class.

3. RHEUMATIC DISEASES

Topic 11. Rheumatic disease Infectious endocarditis. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Dental aspects.

Determination of rheumatic disease. Classification. Etiology, pathogenesis. The role of streptococcal infection and immunological reactivity in the development of acute rheumatic fever. Clinical picture. The value of laboratory and instrumental research methods. Diagnostic criteria. Treatment. Chronic rheumatic heart disease. Features of the course. Principles against recurrent treatment of rheumatic disease. Primary and secondary prevention.

Topic 12. Infectious endocarditis. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Dental aspects.

Determination of infectious endocarditis. Etiology, pathogenesis. Features of the course depending on the pathogen. Diagnostic criteria. The value of laboratory methods and echocardiographic examination in diagnosis. Complications (heart failure, embolism, abscesses). Treatment. Antibacterial therapy regimen. Indications for surgical treatment. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 13. Acquired heart defects. Mitral defects. Aortic defects. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Dental aspects.

Definition. Classification. Mitral heart defects - mitral regurgitation, mitral stenosis. Clinical picture. Diagnosis. Treatment. Aortic heart disease - aortic insufficiency and aortic stenosis (stenosis of the mouth of the aorta). Clinical picture. Diagnosis. Treatment.

Changes in the oral cavity. Dental aspects of care for patients with heart defects. The role of the dentist in preventing serious complications and providing emergency care in the workplace. Forecast and efficiency.

Preventive treatment by a dentist of patients at risk with heart defects, patients with heart failure.

Topic 14. Diffuse connective tissue diseases. Systemic vasculitis. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Dental aspects.

Systemic lupus erythematosus (SLE). Definition. Changes in the oral cavity. Clinical manifestations depending on the damage to organs and systems, disease activity. The value of laboratory, including immunological research methods. Diagnostic criteria. Complication. Principles of treatment.

Systemic scleroderma (SCD) and dermatomyositis. Definition. Classification. Clinical picture depending on the damage to organs and systems. Sjogren's syndrome. Diagnostic criteria. Complication. Principles of treatment.

Hemorrhagic vasculitis. Nodular polyarteritis. Etiology and pathogenesis. Clinical manifestations. Diagnostic criteria. Treatment. Prevention.

Topic 15. Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace. Control class.

4. DISEASES OF THE DIGESTIVE SYSTEM

Topic 16. Gastritis. Gastric or peptic ulcer: Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Definition, classification, etiology and pathogenesis of chronic gastritis. The role of N. Pylory in the occurrence of chronic gastritis. Modern approaches to the diagnosis and treatment of various types of chronic gastritis. Primary and secondary prevention.

Definition, classification, etiology and pathogenesis of gastric and duodenal ulcers. The role of N. pylory, acid-peptic factor and drugs in the occurrence of peptic ulcers and their recurrence. Complications (perforation, penetration, bleeding, impaired evacuation-motor function). The value of instrumental and laboratory diagnostic methods. Modern tactics of treatment and management of patients with ulcers. Eradication therapy. Eradication control.

Topic 17. Intestinal diseases (chronic enteritis, colitis, nonspecific ulcerative colitis). Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Definition, etiology, pathogenesis of intestinal diseases. Diagnostic criteria. Treatment. Irritable bowel syndrome. Nonspecific colitis (nonspecific ulcerative colitis and Crohn's disease): definition, etiology, pathogenesis. Features of the clinical course. Diagnostic criteria. Complication.

Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 18. Pancreatitis. Cholecystitis. Gallstone disease. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Pancreatitis. Definition. Classification. Clinic, diagnosis, principles of treatment. Complication.

Cholecystitis. Definition. Classification. Clinic, diagnosis, principles of treatment. Complication.

Topic 19. Chronic hepatitis. Cirrhosis of the liver. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.

Chronic hepatitis. Definition. Classification. Autoimmune hepatitis, drug-induced hepatitis, chronic viral hepatitis. Alcoholic liver disease. Basic clinical and biochemical syndromes. Features of the clinical course and diagnosis of individual forms. Significance of morphological, biochemical and radioisotope diagnostic methods.

Cirrhosis. Definition. Classification. Features of clinical manifestations, diagnosis of different options. Hepatic failure and other complications. Principles of treatment. Immediate treatment of complications.

Changes in the oral cavity. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

Topic 20. Control lesson. Credit.

2.1 Discipline scope

	Field of knowledge,	Characteristics of
Parameters	direction, specialty,	discipline
1 at affecters	educational and	full-time education
	qualification level	Tun-time education
Number of credits 3.0	Area of knowledge	regulatory
Number of credits 5.0	«22» Health care	regulatory
Total number of hours – 90	Specialty	Course: 3 rd
Total number of nours – 30	221 "Dentistry"	Semester: 6 th
Hours for full day courses:	Educational and qualification	Lectures: 10 hours
practical – 50	level:	Practical classes: 40 hours
Self-study – 40	the second (Master's) level	Self-study: 40 hours
Sen-study 40		Control type: <i>Credit</i>

2.2.1 Lectures

№	Lecture topic	Hours		
1. Principles of Internal Medicine (Respiratory diseases. Diseases of the circulatory				
system. Rheumatic diseases. Diseases of the digestive system).				

Total for the discipline		
	in prevention.	
	Principles of treatment. Changes in the oral cavity. The role of the dentist	
	cirrhosis. Etiology. Pathogenesis. Classification. Clinic. Diagnosis.	
	cholecystitis. Gallstone disease. Intestinal diseases. Hepatitis and	
5	Chronic gastritis. Gastric or peptic ulcer: Chronic pancreatitis. Chronic	2
	prevention. Features of dental tactics.	
	Etiology. Pathogenesis. Clinic. Diagnosis. The role of the dentist in	
4	Rheumatic disease. Infectious endocarditis. Mitral and aortic defects.	2
	myocardial infarction.	
	shock (reflex collapse). Principles of treatment of uncomplicated	
	Complications of acute myocardial infarction early and late. Cardiogenic	
3	Acute myocardial infarction. Clinical, ECG and laboratory diagnostics.	2
	Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.	
	Cardiopulmonary resuscitation. Angina pectoris Etiology. Pathogenesis.	
	Atherosclerosis. CHD. WHO classification. Sudden coronary death.	
2	Hypertensive disease. Hypertensive crises. Symptomatic hypertension.	2
	insufficiency. The role of the dentist in prevention.	
	Pleurisy. Etiology. Pathogenesis. Clinic. Diagnosis. Pulmonary	
1	Chronic obstructive pulmonary disease. Bronchial asthma. Pneumonia.	2

2.2.2 Seminars

2.2.3 Practical classes

N₂	Topic	Hours			
1.]	1. Principles of Internal Medicine (Respiratory diseases. Diseases of the circ				
	system. Rheumatic diseases. Diseases of the digestive system).				
	1. Diseases of respiratory system				
1	Bronchial asthma. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.	2			
	Emergency aid. Dental aspects.				
2	COPD. Pulmonary emphysema. Pulmonary insufficiency Etiology.	2			
	Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid. Dental				
	aspects.				
3	Pneumonia. Pleural syndrome. Etiology. Pathogenesis. Clinic. Diagnosis.	2			
	Treatment. Emergency aid. Dental aspects.				
4	Control class	2			
	2. Diseases of circulatory system				
5	Hypertension. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.	2			
	Emergency aid. Dental aspects.				

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6	Symptomatic hypertension. Etiology. Pathogenesis. Clinic. Diagnosis.	2		
	Treatment. Emergency aid. Dental aspects.			
7	Atherosclerosis. CHD. WHO classification.	2		
8	Sudden cardiac arrest. Angina pectoris. Acute coronary syndrome. Acute			
	myocardial infarction. Etiology. Pathogenesis. Clinic. Diagnosis.			
	Treatment. Emergency aid. Dental aspects			
9	Acute heart failure (left and right ventricular) and acute vascular	2		
	insufficiency. Chronic heart failure. Etiology. Pathogenesis. Clinic.			
	Diagnosis. Treatment. Emergency aid. Dental aspects.			
10	Dental aspects. Control class.	2		
	3. Rheumatic diseases			
11	Rheumatic disease. Etiology. Pathogenesis. Clinic. Diagnosis. Treatment.	2		
	Dental aspects.			
12	Infectious endocarditis. Etiology. Pathogenesis. Clinic. Diagnosis.			
	Treatment. Dental aspects.			
13	Acquired heart defects. Mitral defects. Aortic defects. Etiology.	2		
	Pathogenesis. Clinic. Diagnosis. Treatment. Dental aspects.			
14	Diffuse connective tissue diseases. Systemic vasculitis. Etiology.	2		
	Pathogenesis. Clinic. Diagnosis. Treatment. Dental aspects.			
15	Changes in the oral cavity. The role of the dentist in preventing serious	2		
	complications and providing emergency care in the workplace. Control			
	class.			
	4. Diseases of the digestive system			
16	Gastritis. Gastric or peptic ulcer: Etiology. Pathogenesis. Clinic.	2		
	Diagnosis. Treatment. Emergency aid. Dental aspects.			
17	Intestinal diseases (chronic enteritis, colitis, nonspecific ulcerative colitis).	2		
	Etiology. Pathogenesis. Clinic. Diagnosis. Treatment. Emergency aid			
18	Pancreatitis. Cholecystitis. Gallstone disease Etiology. Pathogenesis.	2		
	Clinic. Diagnosis. Treatment. Emergency aid. Dental aspects.			
19	Chronic hepatitis. Cirrhosis of the liver. Etiology. Pathogenesis. Clinic.	2		
	Diagnosis. Treatment. Emergency aid			
20	Final control. Credit	2		
	Total for the discipline	40		
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2.2.4. Laboratory classes

2.2.5. Independent student work

No Topic Hou	S
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1.	1. Principles of Internal Medicine (Respiratory diseases. Diseases of the circulatory				
	system. Rheumatic diseases. Diseases of the digestive system).				
1	Preparation for practical classes.	25			
2	Mastering practical skills according to the list.	5			
3	Curation of the patient with a written justification of the diagnosis and	5			
	writing a fragment of the medical history				
4	Preparation for the final control	3			
5	Individual work:	2			
	– report of the abstract on a practical lesson;				
	– report at clinical conferences of departments;				
	- report on the patient's medical history in a practical lesson;				
	– writing abstracts, articles.				
	Total for the discipline	40			

Teaching methods. Teaching the discipline involves a combination of traditional forms of classroom learning with elements of E-learning, which uses special information, interactive technologies, online counseling, etc. The study of the discipline is conducted according to the Curriculum in the form of classroom training (lectures and workshops) as well as self-study. Practical classes lasting 4 hours are built in the form of discussions on the topic, in preparation for which the student works independently with literature, which allows him to answer questions, justify their point of view. Types of classes, according to the curriculum of elective courses, are practical classes and self-study.

Practical classes according to the method of their organization are clinical and include:

- 1. Curation of thematic patients, carried out according to a given algorithm of actions of students.
- 2. Mastering practical skills (examination of the patient, selection of syndromes, evaluation of the results of additional examination).
- 3. Consideration of theoretical issues regarding the acquisition of practical skills according to standard lists before each practical lesson and during the control.
 - 4. Analysis of archival case histories.
 - 5. Solving situational problems.
 - 6. Standardized test control, oral and written questioning.

Self-study includes work in the clinic in extracurricular time to master practical skills, development of schemes of differential diagnosis and algorithms for examination of patients, as well as traditional preparation for practical classes and control of mastering the list of topics for self-study.

It is recommended to use the following methods to determine the level of preparation of students:

- 1. answers to control questions;
- 2. computer tests;
- 3. solving clinical situational problems;
- 4. evaluation and interpretation of data of clinical-laboratory and instrumental examinations:

Individual tasks:

Individual tasks are one of the forms of organization of education in the university, which aims to deepen, generalize and consolidate the knowledge that students receive in the learning process, as well as the application of this knowledge in practice. Students independently under the guidance of a teacher perform individual tasks. Individual tasks include: report of the abstract in practical classes, reports of case histories in practical classes, conducting sanitary-educational work, preparation of sanitary bulletin, report at clinical conferences of the department, writing abstracts, articles.

Presentations, video materials, methodical recommendations with reference to KhNMU repositions, Moodle system can be used at teaching of discipline.

Control methods. It is recommended to use the following methods to determine the level of preparation of students:

- 1. answers to control questions;
- 2. computer tests;
- 3. solving clinical situational problems;
- 4. evaluation and interpretation of data of clinical-laboratory and instrumental examinations;

Classroom practical classes are held on the clinical base of the department directly in the wards, diagnostic, manipulation and treatment rooms. The acquisition of practical skills is also carried out with the help of phantoms. Associate professors/assistants ensure that each student receives the necessary competence in the following areas: questioning the patient, clinical examination, oral report, making diagnostic decisions and determining treatment tactics (critical thinking), filling out documentation.

Presentations, video materials, methodical recommendations with reference to repositions of KhNMU, Moodle system can be used at teaching of discipline.

3. EVALUATION CRITERIA

3.1. Evaluation of educational success of students is carried out on the basis of the current "Instructions for evaluating the educational activities of students of KhNMU"

3.2. Credit questions:

List of questions to prepare for credit

- Bronchial asthma. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- COPD. Pulmonary emphysema. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Pneumonia. Pulmonary insufficiency. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Pleural syndrome. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Hypertension. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Symptomatic hypertension. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

- Atherosclerosis. CHD. WHO classification. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Sudden cessation of blood circulation. Principles of cardiopulmonary resuscitation. Definition. Etiology and pathogenesis. Clinic. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Angina pectoris. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Acute coronary syndrome. Acute myocardial infarction (AMI). Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Cardiac arrhythmias. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Acute heart failure (left ventricular and right ventricular) and acute vascular insufficiency. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Chronic heart failure. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Rheumatic disease. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Infectious endocarditis. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Acquired heart defects. Mitral and aortic defects. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.

- Features of the tactics of the dentist in patients with rheumatic diseases, infectious endocarditis and heart defects. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Diffuse connective tissue diseases. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Systemic vasculitis. The role of the dentist in prevention and treatment. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Gastritis. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Gastric or duodenal ulcer. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Intestinal diseases (chronic enteritis, chronic colitis, nonspecific ulcerative colitis). Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist on the prevention of serious complications and the provision of emergency care at the workplace.
- Pancreatitis. Cholecystitis. Gallstone disease. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing serious complications and providing emergency care in the workplace.
- Chronic hepatitis. Cirrhosis of the liver. Definition. Etiology and pathogenesis. Clinic. Classification. Treatment. The role of the dentist in preventing severe complications and providing emergency care in the workplace

List of practical skills:

- 1. Respiratory diseases
- Mastering the skills of interpretation of radiological data of the thoracic cavity.
- Mastering the skills of interpreting the data of endoscopic examination of the bronchi

- Mastering the skills of interpreting the indicators of the function of external respiration.
- Mastering the skills to analyze laboratory data (general blood test, total protein and protein fractions, coagulogram, general and microbiological examination of sputum, general and microbiological examination of pleural fluid)
 - Mastering the skills of providing medical care in acute respiratory failure.

2. Diseases of circulatory system

- Making the skills of ECG recording and interpretation
- Mastering the skills of measuring blood pressure
- Mastering the skills of interpreting the data of X-ray examination of the chest
- Make the skills to analyze laboratory data (microbiological blood tests, acute blood counts, total protein and protein fractions, blood transaminases, coagulogram, laboratory markers of myocardial necrosis, blood lipid spectrum, blood creatinine, blood creatinine clearance, electrolyte data, and electrolytes in autoimmune processes)
- Mastering the skills of medical care in acute heart failure, collapse, shock, paroxysmal arrhythmias, Morgan-Adams-Stokes syndrome, hypertensive crisis, circulatory and respiratory arrest

3. Rheumatic diseases

- Mastering the skills of interpreting echocardiography data
- Mastering the skills to analyze laboratory data (total blood test, total protein and protein fractions, creatinine, urea, blood uric acid, blood electrolytes, immune status, acute phase blood counts, data from serological tests in autoimmune processes, laboratory indicators of liver function and kidneys)
 - Making the skills of ECG recording and interpretation

4. Diseases of the digestive system

- _Mastering the skills of interpreting data from endoscopic examination of the digestive tract
- Mastering the skills of interpreting data of radiological (radiological and sonographic) examination of the digestive tract and abdominal organs
- Mastering the skills of interpreting the data of the study of the secretory function of the stomach (pH-metry)

- Mastering the skills of interpreting data from microbiological and biochemical studies of bile
 - Mastering the skills of interpreting biochemical (functional liver tests) blood tests
- Mastering the skills of interpretation of enzyme-linked immunosorbent assays of blood and feces

3.4. Individual tasks Individual tasks are one of the forms of organization of education in the university, which aims to deepen, generalize and consolidate the knowledge that students receive in the learning process, as well as the application of this knowledge in practice. Students independently under the guidance of a teacher perform individual tasks. Individual tasks include: report of the abstract in practical classes, reports of case histories in practical classes, conducting sanitary-educational work, preparation of sanitary bulletin, report at clinical conferences of the department, writing abstracts, articles.

Individual tasks can be performed in the form of an abstract report on individual work, which is heard in a practical lesson according to the following topics:

Tasks for self-study work

Principles of Internal Medicine (Respiratory diseases. Diseases of the circulatory system. Rheumatic diseases. Diseases of the digestive system).

- 1. Prepare a review of the scientific literature on the topics studied.
- 2. Conduct research on the following topics:
- Bronchial asthma. The role of the dentist in prevention and emergency care.
- Manifestations of COPD in the mouth.
- Principles of first aid in hypertensive crises.
- The role of the dentist in the prevention of infectious endocarditis.
- Manifestations of diseases of the gastrointestinal tract in the oral cavity.
- 3. Write essays on topics:
- Providing emergency care in case of sudden cessation of blood circulation.
- General principles of cardiopulmonary resuscitation.
- The role of the dentist in the prevention of diseases of the gastrointestinal tract.
- 4. Carry out sanitary-educational work in the polyclinic and hospital, during the reception of patients, during the preventive examination.

- 5. Conduct preventive talks.
- 6. Make a sanitary bulletin.

Self-study work of students includes work in the clinic in extracurricular time to master practical skills, drawing up schemes of differential diagnosis and algorithms for examination of patients, as well as traditional preparation for practical classes and control of mastering the list of topics for self-study

Preparation for practical classes. Processing of material according to the reference abstract. Work with supporting literature. Search and analytical work.

Learning results, including practical skills (list of knowledge, skills and abilities acquired by the applicant in higher education in the process of its study).

Integrative final program learning outcomes, which promotes the formation of study course "Internal Medicine" lay the foundations for a further program of practical training results in accordance with the standards of higher education Ukraine undergraduate training specialists second (master's) level of 221 specialty "Dentistry":

- 1. Collect information about the general condition of the patient; assess the psychomotor and physical development of the patient, the condition of the maxillofacial organs, based on the results of laboratory and instrumental studies to assess information about the diagnosis.
- 2. Identify and identify leading clinical symptoms and syndromes; according to standard methods, using preliminary data of the patient's anamnesis, data of the patient's examination, knowledge about the person, his organs and systems, to establish a probable nosological preliminary clinical diagnosis of somatic disease.
- 3. To appoint and analyze laboratory, functional and / or instrumental examination of patients with somatic disease for differential diagnosis of diseases.
- 4. Determine the final clinical diagnosis, adhering to the relevant ethical and legal norms, by making an informed decision and logical analysis of subjective and objective data of clinical, additional examination, differential diagnosis under the supervision of a doctor in a medical institution.
 - 5. To diagnose emergencies in a medical institution.

- 6. To determine the nature, principles of work, rest and the necessary diet in the treatment of dental diseases based on preliminary or final clinical diagnosis.
- 7. Analyze and evaluate government, social and medical information using standard approaches and computer information technology.
- 8. Assess the impact of the environment on the health of the population in a medical institution by standard methods.
- 9. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.
- 10. Form goals and determine the structure of personal activities based on the results of the analysis of certain social and personal needs.
 - 11. Adhere to a healthy lifestyle; use the techniques of self-regulation and self-control.
- 12. To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general educational and cultural level.
- 13. Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.
- 14. Perform medical manipulations based on preliminary and / or final clinical diagnosis (according to lists 2, 2.1) for different segments of the population and in different conditions (according to list 6).
- 15. Manipulate the provision of emergency medical care, using standard schemes, under any circumstances based on a diagnosis of emergency (according to list 4) for a limited time (according to lists 6, 7).

As a result of studying the discipline, students must:

know:

- the most common internal diseases and their complications that threaten the lives of patients;
 - tactics of the dentist in relation to patients with somatic pathology;
 - basics of legislation and basic policy documents on health care;
 - features of development and spread of somatic diseases;
- main clinical symptoms and syndromes inherent in the most common somatic diseases;

- basic approaches to laboratory diagnosis, treatment and prevention of somatic diseases.

be able to:

- determine the preliminary clinical diagnosis of somatic diseases and to identify diseases that require special tactics of patient management;
- prescribe treatment for somatic diseases, provide the necessary emergency care and
 identify diseases that require special tactics of the patient;
- assess the impact of dental pathology and diseases of the dental system on the occurrence and course of diseases of internal organs;
- determine the role and place of the dentist in the prevention of internal diseases and their complications;
- demonstrate mastery of moral and deontological principles of professional subordination in the provision of medical care to patients;
- diagnose and provide emergency care in emergencies that complicate the course of somatic diseases at the prehospital stage.

3.6. Rules for appealing the assessment

Consideration of the appeal of the results of the final control of knowledge of students is part of the organizational support of the educational process is carried out in order to determine the objectivity of the assessment. The main task of the appeal procedure is to overcome the elements of subjectivism in assessing the knowledge of students, to avoid misunderstandings and controversial situations, to create favorable conditions for the development and real provision of legal rights and interests of students. Appeal procedures are conducted in accordance with the Order of KhNMU from 30.09.2020 № 252 "Regulations on the appeal of the results of the final control of students of Kharkiv National Medical University."

4. DISCIPLINE POLICY AND VALUES

To achieve the goals of training and successfully complete the course, it is necessary to join the work from the first day; attend lectures regularly; read the material before its consideration in a practical lesson; do not be late and do not miss classes.

Assessment is carried out according to the system: "excellent", "good", "satisfactory" and "unsatisfactory". The minimum number of points that a student must score for the current activity during the study of the section is 70 points, the maximum number of points - 120 points.

The grade for the discipline is defined as the sum of points, which are translated into the 120-point ECTS scale. Conversion of the average grade for current educational activities in a multi-point scale is carried out in accordance with table 1.

 ${\bf Table\ 1}$ **Recalculation of the average grade for the current control in a multi-point scale**

4–point scale	120–point scale	4–point scale	120–point scale
5,00	120	3,91–3,94	94
4,95–4,99	119	3,87–3,90	93
4,91–4,94	118	3,83–3,86	92
4,87–4,90	117	3,79–3,82	91
4,83–4,86	116	3,74–3,78	90
4,79–4,82	115	3,70–3,73	89
4,75–4,78	114	3,66–3,69	88
4,70–4,74	113	3,62–3,65	87
4,66–4,69	112	3,58–3,61	86
4,62–4,65	111	3,54–3,57	85
4,58–4,61	110	3,49–3,53	84
4,54–4,57	109	3,45–3,48	83
4,50–4,53	108	3,41–3,44	82
4,45–4,49	107	3,37–3,40	81
4,41–4,44	106	3,33–3,36	80
4,37–4,40	105	3,29-3,32	79
4,33–4,36	104	3,25–3,28	78
4,29–4,32	103	3,21–3,24	77
4,25–4,28	102	3,18-3,20	76
4,20-4,24	101	3,15–3,17	75
4,16–4,19	100	3,13–3,14	74
4,12-4,15	99	3,10–3,12	73
4,08–4,11	98	3,07-3,09	72
4,04-4,07	97	3,04–3,06	71
3,99–4,03	96	3,00-3,03	70
3,95–3,98	95	Less than 3	Not enough

5. ACADEMIC INTEGRITY

The university has introduced a system of academic integrity, which establishes norms, rules and principles for the observance of academic integrity and ethics of academic relations as an integral part of ensuring the quality of higher education and research at Kharkiv National Medical University. This is necessary to create a positive moral climate in the team and ensure the quality of higher education at the University. The system of academic integrity regulates the organization and measures to prevent, detect and be responsible for their violation, determines the organization of the Commission on Academic Integrity, Ethics and Conflict Management, as well as the Group to promote academic integrity as a component of educational quality.

On the official website of KhNMU, in the section "Academic Integrity" there is an information base - a set of normative documents and organized information used during the functioning of the system of academic integrity at the university. With the help of information materials of the base the principles of ensuring academic freedom and a favorable moral and psychological climate in the team and increasing the authority of KhNMU are popularized.

Applicants for higher education can be held liable for the following: reduction of the results of assessment of tests, exams, tests, etc.; re-assessment (tests, exams, tests, etc.); appointment of additional control measures; restriction of the violator's participation in scientific research, exclusion from certain scientific projects; deprivation of the right to participate in competitions for scholarships, grants, etc.; expulsion from the Student Council of the University; expulsion of students, graduate students, doctoral students and young scientists from the Scientific Society; removal from the post of headman, from the team of Olympiad participants, non-inclusion in such a team during the school year; re-passing the relevant educational component of the educational program; repeated performance of scientific and / or qualification work; notification of the entity that finances the training of the applicant, the applicant's parents about the violation; ban on representation of the University in any events for a certain period; announcement of reprimand with entry of the violator in the personal file; deductions from the University.

Scientific, scientific-pedagogical and pedagogical employees of the University may be held liable for the following: exclusion from the collegial bodies of the University; deprivation of the right to participate in competitions for funding for research and

implementation of educational projects, scholarships, grants; deprivation of honorary titles, awards, scholarships, etc., awarded by the University; conducting an additional check for signs of academic plagiarism of all works authored by the violator; ban on representation of the University in any events for a certain period; announcement of reprimand with entry of the violator in the personal file; release.

Sources of information on academic integrity

On the official website of KhNMU, in the section "Academic Integrity" there is an information base - a set of normative documents and organized information used during the functioning of the system of ensuring academic integrity.

On the Moodle platform, in the distance learning system of KhNMU there are 3 courses on academic integrity.

During the "Freshman Info Week" in September 2020, the Director of the Scientific Library of KhNMU and the deans acquainted higher education students with the system of academic integrity of KhNMU and during the autumn semester of 2021–2022 academic year. All students who entered KhNMU passed the distance course "Academic Integrity", after which they passed the control of mastering the material and received the appropriate certificate.

Passing distance courses on academic integrity in the spring semester of 2021–2022 academic year is planned for all applicants for higher education of senior courses of KhNMU.

The need to comply with the code of academic integrity is stated in the contract of each applicant for higher education of KhNMU and in the additional agreement to the employment contract of each scientific and pedagogical employee of KhNMU.

6. RECOMMENDED LITERATURE:

Basic:

- 1. Davidson's Essentials of Medicine: 2nd Edition / edited by J. Alastair Innes, with a contribution by Simon Maxwell / 2016 Elsevier Ltd.
- 2. Harrison's Principles of Internal Medicine: 19th Edition: 2015 by McGraw-Hill Education.
 - 3. Kumar and Clark's Clinical Madicine: seventh edition: 2009, Elsevier Ltd.

Extra:

- 1. European Resuscitation Council Guidelines for Resuscitation, www.erc.edu, www.resus.org.uk
 - 2. T. Hughes, J. Cruickshank. Adult emergency medicine at glance, 2011.

7. INFORMATION RESOURCES:

- 1. Official site of World Health Organization, access mode: https://www.who.int/home
- 2. Centers of diseases control and prevention: https, access mode: https://www.cdc.gov/
- 3. European Resuscitation Council Guidelines for Resuscitation, access mode www.erc.edu, www.resus.org.uk
- 4. Official site of the medical service of the Armed Forces of Ukraine, access mode http://gvmu.mil.gov.ua
- 5. KhNMU Repository (http://repo.knmu.edu.ua/) and KhNMU Library (http://libr.knmu.edu.ua/)

Link to the discipline page in MOODLE: http://distance.knmu.edu.ua/course/view.php?id=121.