MINISTRY OF HEALTHCARE OF UKRAINE
Poltava State Medical University
Department of Internal Medicine №1

"AGREED"
Guarantor of the academic
and professional program "Medicine"
_____ I.M. Skrypnyk
"_____" _____

"APPROVED "
Chairman of the Academic Council
of the Medical Faculty №1
_____M.M. Riabushko
Minutes as of 30.08.2023 №1

SYLLABUS
INTERNAL MEDICINE,
including ENDOCRINOLOGY, MEDICAL GENETICS
compulsory discipline

level of higher education	the second (master's) level of higher education
field of knowledge	22 "Healthcare"
specialty	222 "Medicine"
academic qualification	Master of Medicine
professional qualification	Medical Doctor
academic and professional program	"Medicine"
mode of study	full-time education
course(s) and semester(s) of study of the discipline	the 4th course, the 7th-8th semesters

MODULE 1. FUNDAMENTALS OF INTERNAL MEDICINE (GASTROENTEROLOGY, PULMONOLOGY, HEMATOLOGY)

«RESOLVED»
at the meeting of the Department of Internal
Medicine №1
Head of the Department
_____ H.S. Maslova

Minutes as of 29.08.2023 №1

Poltava – 2023

INFORMATION ABOUT TEACHERS

Surname, name, teacher (s), academic degree, academic title	Maslova Hanna Serhiivna – PhD, associate professor, head of the department Skrypnyk Igor Mykolayovych - Doctor of Medicine, Professor Kulishov Serhiy Kostiantynovych - Doctor of Medicine, Professor Sorokina Svitlana Ivanivna - PhD, associate professor Tretyak Natalia Hryhorivna - PhD, associate professor Shevchenko Tetyana Ivanivna - PhD, associate professor Shaposhnyk Olga Anatoliivna - PhD, associate professor Prykhodko Nataliia Petrivna - PhD, associate professor Kudrya Iryna Pavlivna - PhD, assistant Lymanets Tetyana Volodymyrivna - PhD, assistant Yakymyshyna Larysa Illivna – PhD, assistant Drabovska Inna Anatoliivna - assistant Pilat Inna Olegovna– assistant - assistant Skrypnyk Roman Igorovych – assistant Ostrovskyi Vladyslav Leonidovych – assistant
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MAIN CHARACTERISTICS OF THE EDUCATIONAL DISCIPLINE

The scope of the academic discipline

Number of credits / hours: ***5,0/150, of which:***
Lectures (hours) – ***34.***
Practical classes (hours) **– *96.***
Self-directed work (hours) – ***20.***
Types of control– final semester attestation

THE POLICY OF THE ACADEMIC DISCIPLINE

The discipline policy is determined by the system of requirements that the teacher makes to the student in the study of discipline and is based on:
https://www.pdmu.edu.ua/n-process/department-npr/normativni-dokumenti

- Regulations on the organization of the educational process
- The Code of Poltava State Medical University Integrity
- Rules of internal procedure of Poltava State Medical University
- Regulations on the organization and methods of assessment of educational activities of applicants for higher education at the Poltava State Medical University
- Regulations on the organization of self-directed work of students at the Poltava State Medical University
- Regulations on working off missed classes and unsatisfactory marks by applicants for higher education of the Poltava State Medical University
- Regulations on the procedure for forming individual educational trajectories by Poltava State Medical University students
- Regulations on the appeal of the results of the final control of knowledge of applicants for higher education

– Regulations on the rating of applicants for higher education of the Poltava State Medical University

COURSE DESCRIPTION (ABSTRACT). Internal medicine is a section of medicine that deals with the problems of etiology, pathogenesis and clinical manifestations of diseases of internal organs, their diagnosis, non-surgical treatment, prevention and rehabilitation. The discipline "Module 1. Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" covers the study of the main etiological and pathogenetic factors of diseases of the digestive, respiratory and hematopoietic systems. The basics of clinical examination of the patient, the main symptoms and syndromes of diseases of internal organs and their evaluation, methodological foundations of physical examination of the patient and semiological evaluation of the results of examination of the patient, clinical and diagnostic interpretation of the most important laboratory and instrumental studies in these diseases; basic principles of treatment, prognosis and prevention.

Prerequisites and postrequisites of the discipline (interdisciplinary links)

Prerequisites: in accordance with the curriculum of Module 1. "Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" is carried out in VII-VIII semesters, when the student has acquired relevant knowledge in the basic disciplines: medical biology, medical and biological physics, human anatomy, physiology, biological and bioorganic chemistry, medical chemistry, histology, cytology and embryology, microbiology, virology and immunology, with which the program is integrated Module 1. "Fundamentals of internal medicine (gastroenterology , hematology, pulmonology).

Postrequisites: Module 1. "Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" forms the basis for students to study the following clinical disciplines - internal medicine, general practice (family medicine), infectious diseases, anesthesiology and intensive care, emergency medicine which provides "vertical" integration with these disciplines and the formation of skills to apply knowledge in the process of further study and in professional activities.

The aim and objectives of the discipline

1.1. The aim of studying Module 1. "Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" is to acquire and deepen knowledge, skills, abilities and other competencies in internal medicine required in professional activities, which are established on the basis of educational and professional program of the specialist.

1.2. The main tasks of studying Module 1. "Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" are:

- Assimilation by students of etiological and pathogenetic factors of the most common diseases in the clinic of gastroenterology, hematology, pulmonology.
- Students master the skills of conducting investigations and physical examinations of patients and analyze their results in the clinic of gastroenterology, hematology, pulmonology.

- Mastering the skills to identify the leading syndromes and symptoms, analyze the typical clinical picture, different clinical variants and complications of the most common diseases in the clinic of gastroenterology, hematology, pulmonology.
- Mastering the skills to justify and formulate preliminary and clinical diagnoses of the most common diseases in the clinic of gastroenterology, hematology, pulmonology
- Determining the plan of examination of the patient, interpretation of the results of laboratory and instrumental studies in the most common diseases in the clinic of gastroenterology, hematology, pulmonology and their complications.
- Acquaintance with modern principles of tactics of management (recommendations concerning a regime, a diet, treatment, rehabilitation actions), non-medical and medical treatment of patients with the most widespread diseases in clinic of gastroenterology, hematology, pulmonology.
- Acquaintance with the principles of diagnosis and medical care in emergencies in the clinic of gastroenterology, hematology, pulmonology.
- Formation of students' moral, ethical and deontological qualities in professional communication with the patient.

Competences and learning outcomes, the formation of which is facilitated by disciplines.

The discipline provides students with the acquisition of competencies:

– ***integral:***

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

– ***general:***

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

– 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 in 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 treatment of diseases.

7. Ability to diagnose emergencies.

8. Ability to determine the tactics of emergency medical care.

9. Skills in providing emergency medical care.

10. Skills of medical manipulations.

11. Ability to carry out sanitary and hygienic and preventive measures.

12. Ability to ensure the required mode of stay of the patient in the hospital in the treatment of diseases.

13. Ability to keep medical records.

14. Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.

15. Ability to take measures to organize and integrate medical care and marketing of medical services.

Learning outcomes for the discipline

Upon completion of the study of Module 1. "Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" students must:

know:

- Etiological and pathogenetic factors of the most common diseases of the digestive, respiratory, blood and hematopoietic organs.
- Various clinical variants and complications of the most common diseases of the digestive, respiratory, blood and hematopoietic organs.
- Tactics of management (recommendations regarding the regime, diet, treatment, rehabilitation measures) of the patient, non-drug and drug treatment, including prognostic-modifying, the most common diseases of the digestive, respiratory, blood and hematopoietic organs and their complications.
- Prognosis and efficiency of patients with the most common diseases of the digestive, respiratory, blood and hematopoietic organs.

be able to:

- Conduct surveys and physical examinations of patients with major diseases of the digestive, respiratory, blood and hematopoietic organs and analyze their results.
- Analyze the typical clinical picture of the most common diseases of the digestive, respiratory, blood and hematopoietic organs.
- Formulate a preliminary diagnosis of the most common diseases of the digestive, respiratory, blood and hematopoietic organs.
- Make a plan for examination of the patient, analyze the data of laboratory and instrumental examinations for the most common diseases of the digestive, respiratory, blood and hematopoietic organs and their complications.
- Make a differential diagnosis, substantiate and formulate a clinical diagnosis of the most common diseases of the digestive, respiratory, blood and hematopoietic organs.
- Diagnose and provide emergency medical care in emergencies.
- Perform medical manipulations.
- Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination.

Thematic plan of lectures, indicating the main issues discussed at the lectures

№	Topic	Number of hours
Content module 1. Basics of diagnosis, treatment and prevention of major diseases of the digestive system		
1.	**Modern methods of examination in gastroenterology.** Definition of the main clinical syndromes in gastroenterology. Basic laboratory (general clinical, biochemical, enzyme-linked immunosorbent assays) research methods and clinical-biochemical syndromes. Indications, contraindications and complications of instrumental (endoscopic, ultrasonographic, radiological) methods of examination in gastroenterology.	2
2.	**Gastroesophageal reflux disease.** Definition. Etiology, pathogenesis. Classification. Erosive and non-erosive GERD. Clinical manifestations depending on the variant and stage. Data of laboratory and instrumental research methods. Diagnosis criteria, differential diagnosis. Complication. Differentiated therapy. Primary and secondary prevention.	2
3.	**Gastric dyspepsia. Chronic gastritis. Peptic ulcer and other ulcers of the stomach and duodenum.** Determination of dyspepsia. Etiology and pathogenesis. The role of H. pylori in the occurrence of gastroduodenal pathology. Classification. Unexplored and functional dyspepsia. Criteria for diagnosis. Differential diagnosis. Modern approaches to the treatment of functional dyspepsia. Primary and secondary prevention. Definition, etiology and pathogenesis of chronic gastritis. The role of H. pylori in the occurrence of chronic gastritis. Classification. Clinical manifestations, data of laboratory and instrumental research methods. The value of endoscopic (with morphology) research. Modern approaches to the treatment of various types of chronic gastritis. Primary and secondary prevention. Prognosis and efficiency. The main causes and pathogenesis of peptic ulcers. Classification. Clinical manifestations. Complications (perforation, penetration, bleeding, stenosis, malignancy). Eradication therapy, control of eradication efficiency. Drug therapy of Hp-negative ulcers. Indications for surgical treatment. Primary and secondary prevention. Prognosis and efficiency.	2
4.	**Irritable bowel syndrome.**	2

	Definition. Etiology and pathogenesis. Classification. Clinical manifestations of different options. Roman diagnostic criteria. Differential diagnosis. Treatment of various forms. Primary and secondary prevention. Prognosis and efficiency.	
5.	**Chronic diseases of the colon: nonspecific ulcerative colitis, Crohn's disease.** Nonspecific ulcerative colitis and Crohn's disease: definition, etiology and pathogenesis. Classification. Features of the clinical course depending on the degree of activity, severity and phase of the course. Laboratory and instrumental diagnostics. Diagnosis criteria, differential diagnosis. Intestinal and extraintestinal complications and diseases associated with inflammatory bowel disease (toxic dilatation, perforation, sclerosing cholangitis, spondylitis, arthritis, dermatoses, uveitis, etc.). Treatment. Primary and secondary prevention. Prognosis and efficiency.	2
6.	**Chronic cholecystitis and functional biliary disorders. Gallstone disease.** Definition. Etiology, pathogenesis. The importance of infection, motility disorders and dyscholia in the development of chronic cholecystitis, cholangitis and gallstone disease. Classification. Features of the clinical course. Laboratory and instrumental diagnostic methods. Differential diagnosis. Complications of gallstone disease. Treatment. Indications for surgical treatment. Primary and secondary prevention. Prognosis and efficiency.	2
7.	**Chronic hepatitis.** Definition. Classification. The role of toxic and medicinal agents, immune disorders and alcohol. Methods of diagnosis of viral infection. Autoimmune hepatitis, toxic (drug) hepatitis. Alcoholic liver disease. Basic clinical and biochemical syndromes. Features of the clinical course and diagnosis of individual forms. Differential diagnosis. Complication. Features of treatment of various forms. Primary and secondary prevention. Prognosis and efficiency.	2
8.	**Liver cirrhosis.** Definition. Significance of viral infection, nutritional factors, alcohol, toxic substances and immune disorders. Classification. Features of clinical manifestations and diagnosis of different options. Differential diagnosis. Hepatic failure and other complications. Differentiated therapy. Urgent therapy for complications. Primary and secondary prevention. Prognosis and efficiency.	2
9.	**Chronic pancreatitis.** Definition. Significance of various etiological factors. Classification. Features of the clinical course, diagnosis and differential diagnosis depending on the form and location of the pathological process. Complication. Research methods in the diagnosis of pancreatitis. Differentiated treatment. Primary and secondary prevention. Prognosis and efficiency.	2
Content module 2. Basics of diagnosis, treatment and prevention of major diseases of the blood and hematopoietic organs		
10.	**Modern methods of examination in hematology.** Hematopoiesis. Composition and functions of blood. Definition of the main clinical syndromes in hematology. Basic laboratory (general-clinical, biochemical, enzyme-linked immunosorbent, cytological) research methods and clinical-hematological syndromes. Indications, contraindications and complications of instrumental (ultrasonographic, radiological) methods of examination in hematology. Structures and function of the bone marrow. Bone marrow examination. Myelogram count, bone marrow indices and their evaluation.	2
11.	**Anemia.** Definition. Etiological factors and pathogenesis. Mechanisms of intravascular and intracellular hemolysis. Features of clinic and laboratory diagnostics of various forms. Differential diagnosis. Complication. Treatment of various forms of anemia. Transfusion of blood components and blood substitutes. Primary and secondary prevention. Prognosis and efficiency.	2
12.	**Acute and chronic leukemias.** Definition. Modern views on the etiology and pathogenesis. Classification. The main clinical and hematological syndromes. Clinical manifestations. Criteria for diagnosis. Differential diagnosis. Complication. Principles of treatment. Supportive therapy. Bone marrow transplantation. Primary and secondary prevention. Prognosis and efficiency.	2

13.	**Lymphomas. Myeloma.** Definition. Etiology and pathogenesis, main clinical syndromes. Criteria for diagnosis. Differential diagnosis. Treatment. Primary and secondary prevention. Prognosis and efficiency.	2
Content module 3. Basics of diagnosis, treatment and prevention of major respiratory diseases		
14.	**Modern methods of examination in pulmonology.** Definition of the main clinical syndromes in pulmonology. Basic laboratory (general-clinical, biochemical, enzyme-linked immunosorbent assay, cytological) research methods. Indications, contraindications and complications of instrumental (ultrasonographic, radiological) methods of examination in pulmonology. Functional methods of examination in pulmonology.	2
15.	**Chronic obstructive pulmonary disease.** Definition. The importance of smoking, environmental, professional factors and infection in the development of chronic obstructive pulmonary disease. Classification. Clinical manifestations, data of laboratory and instrumental research methods depending on the stage (severity). Differential diagnosis. Complication. Treatment. Primary and secondary prevention. Immunoprophylaxis. Prognosis and efficiency.	2
16.	**Asthma.** Definition. Etiology, features of pathogenesis. Classification. Clinical manifestations, data of laboratory and instrumental research methods. Differential diagnosis. Complication. Treatment. Emergency care for an asthma attack. Primary and secondary prevention. Prognosis and efficiency.	2
17.	**Pneumonia.** Definition. Etiology. Classification. Clinical manifestations and features of the course depending on the pathogen. Data of laboratory and instrumental research methods. Differential diagnosis. Complications (acute respiratory distress syndrome, destruction of lung tissue, acute respiratory failure and others). Differentiated treatment. Primary and secondary prevention. Prognosis and efficiency.	2
	All	**34**

Thematic plan of practical classes by modules and content modules, indicating the main issues addressed in the practical training

№	Topic	Number of hours
Content module 1. Basics of diagnosis, treatment and prevention of major diseases of the digestive system		
1.	**Modern methods of examination in gastroenterology.** Definition of the main clinical syndromes in gastroenterology. Basic laboratory (general-clinical, biochemical, enzyme-linked immunosorbent assays) research methods and clinical-biochemical syndromes. Indications, contraindications and complications of instrumental (endoscopic, ultrasonographic, radiological) methods of examination in gastroenterology.	4
2.	**Gastroesophageal reflux disease. Gastric dyspepsia.** Definition. Etiology, pathogenesis. Classification. Erosive and non-erosive GERD. Clinical manifestations depending on the variant and stage. Data of laboratory and instrumental research methods. Diagnosis criteria, differential diagnosis. Complication. Differentiated therapy. Primary and secondary prevention. Determination of dyspepsia. Etiology and pathogenesis. The role of H. pylori in the gastroduodenal pathology. Classification. Unexplored and functional dyspepsia. Criteria for diagnosis. Differential diagnosis. Modern approaches to the treatment of functional dyspepsia. Primary and secondary prevention. Prognosis and efficiency.	4
3.	**Chronic gastritis. Peptic ulcer and other ulcers of the stomach and duodenum.** Definition, etiology and pathogenesis of chronic gastritis. The role of H. pylori in the occurrence of chronic gastritis. Classification. Clinical manifestations, data of laboratory and instrumental research methods. The value of endoscopic (with morphology) research. Modern approaches to the treatment of various types of chronic gastritis. Primary and secondary prevention. Prognosis and efficiency. The main causes and pathogenesis of peptic ulcers. Classification. Clinical manifestations. Complications (perforation, penetration, bleeding, stenosis, malignancy). Eradication	4

	therapy, control of eradication efficiency. Drug therapy of Hp-negative ulcers. Indications for surgical treatment. Primary and secondary prevention. Prognosis and efficiency.	
4.	**Chronic diseases of the small intestine: celiac disease and other enteropathies.** Definition. Etiology, pathogenesis. The role of intolerance of food components, immune factors and enzymopathies (lactose intolerance, fructose, galactose, etc.). Malabsorption and maldigestion syndromes. Diagnosis criteria, differential diagnosis. Complication. Differentiated therapy. Primary and secondary prevention. Prognosis and efficiency.	4
5.	**Irritable bowel syndrome.** Irritable bowel syndrome, definition. Etiology and pathogenesis. Classification. Clinical manifestations of different options. Roman diagnostic criteria. Differential diagnosis. Treatment of various forms. Primary and secondary prevention. Prognosis and efficiency.	4
6.	**Chronic diseases of the colon: nonspecific ulcerative colitis, Crohn's disease.** Nonspecific ulcerative colitis and Crohn's disease: definition, etiology and pathogenesis. Classification. Features of the clinical course depending on the degree of activity, severity and phase of the course. Laboratory and instrumental diagnostics. Diagnosis criteria, differential diagnosis. Intestinal and extraintestinal complications and diseases associated with inflammatory bowel disease (toxic dilatation, perforation, sclerosing cholangitis, spondylitis, arthritis, dermatoses, uveitis, etc.). Treatment. Primary and secondary prevention. Prognosis and efficiency.	4
7.	**Chronic cholecystitis and functional biliary disorders. Gallstone disease.** Definition. Etiology, pathogenesis. The importance of infection, motility disorders and dyscholia in the development of chronic cholecystitis, cholangitis and gallstone disease. Classification. Features of the clinical course. Laboratory and instrumental diagnostic methods. Differential diagnosis. Complications of gallstone disease. Treatment. Indications for surgical treatment. Primary and secondary prevention. Prognosis and efficiency.	4
8.	**Chronic hepatitis.** Definition. Classification. The role of toxic and medicinal agents, immune disorders and alcohol. Methods of diagnosis of viral infection. Autoimmune hepatitis, toxic (drug) hepatitis. Alcoholic liver disease. Basic clinical and biochemical syndromes. Features of the clinical course and diagnosis of individual forms. Differential diagnosis. Complication. Features of treatment of various forms. Primary and secondary prevention. Prognosis and efficiency.	4
9.	**Liver cirrhosis.** Definition. Significance of viral infection, nutritional factors, alcohol, toxic substances and immune disorders. Classification. Features of clinical manifestations and diagnosis of different options. Differential diagnosis. Hepatic failure and other complications. Differentiated therapy. Urgent therapy for complications. Primary and secondary prevention. Prognosis and efficiency.	4
10.	**Chronic pancreatitis.** Definition. Significance of various etiological factors. Classification. Features of the clinical course, diagnosis and differential diagnosis depending on the form and location of the pathological process. Complication. Research methods in the diagnosis of pancreatitis. Differentiated treatment. Primary and secondary prevention. Prognosis and efficiency.	4
Content module 2. Basics of diagnosis, treatment and prevention of major diseases of the blood and hematopoietic organs		
11.	**Modern methods of examination in hematology.** Hematopoiesis. Composition and functions of blood. Definition of the main clinical syndromes in hematology. Basic laboratory (general-clinical, biochemical, enzyme-linked immunosorbent, cytological) research methods and clinical-hematological syndromes. Indications, contraindications and complications of instrumental (ultrasonographic, radiological) methods of examination in hematology. Structures and function of the bone marrow. Bone marrow examination. Myelogram count, bone marrow indices and their evaluation.	4
12.	**Anemia.** Definition. Etiological factors and pathogenesis. Mechanisms of intravascular and intracellular hemolysis. Features of clinic and laboratory diagnostics of various forms. Differential diagnosis. Complication. Treatment of various forms of anemia. Transfusion of blood components and blood substitutes. Primary and secondary prevention. Prognosis and efficiency.	4

13.	**Acute leukemia.** Definition. Modern views on the etiology and pathogenesis. Classification. The main clinical and hematological syndromes. Clinical manifestations. Criteria for diagnosis. Differential diagnosis. Complication. Principles of treatment. Supportive therapy. Bone marrow transplantation. Primary and secondary prevention.Prognosis and efficiency.	4
14.	**Chronic leukemia.** Definition. Modern views on the etiology and pathogenesis. Classification. The main clinical and hematological syndromes. Clinical manifestations. Criteria for diagnosis. Differential diagnosis. Complication. Principles of treatment. Supportive therapy. Bone marrow transplantation. Primary and secondary prevention. Prognosis and efficiency.	4
15.	**Lymphomas. Myeloma.** Definition. Etiology and pathogenesis, main clinical syndromes. Criteria for diagnosis. Differential diagnosis. Treatment. Primary and secondary prevention. Prognosis and efficiency.	4
16.	**Hemophilia and thrombocytopenic purpura.** Definition. Etiology and pathogenesis, main clinical syndromes. Criteria for diagnosis. Differential diagnosis. Treatment. Prevention of bleeding. Primary and secondary prevention.Prognosis and efficiency.	4
Content module 3. Basics of diagnosis, treatment and prevention of major respiratory diseases		
17.	**Modern methods of examination in pulmonology.** Definition of the main clinical syndromes in pulmonology. Basic laboratory (general-clinical, biochemical, enzyme-linked immunosorbent assay, cytological) research methods. Indications, contraindications and complications of instrumental (ultrasonographic, radiological) methods of examination in pulmonology. Functional methods of examination in pulmonology.	4
18.	**Chronic obstructive pulmonary disease.** Definition. The importance of smoking, environmental, professional factors and infection in the development of chronic obstructive pulmonary disease. Classification. Clinical manifestations, data of laboratory and instrumental research methods depending on the stage (severity). Differential diagnosis. Complication. Treatment. Primary and secondary prevention. Immunoprophylaxis. Prognosis and efficiency.	4
19.	**Asthma.** Definition. Etiology, features of pathogenesis. Classification. Clinical manifestations, data of laboratory and instrumental research methods. Differential diagnosis. Complication. Treatment. Emergency care for an asthma attack. Primary and secondary prevention. Prognosis and efficiency.	4
20.	**Pneumonia.** Definition. Etiology. Classification. Clinical manifestations and features of the course depending on the pathogen. Data of laboratory and instrumental research methods. Differential diagnosis. Complications (acute respiratory distress syndrome, destruction of lung tissue, acute respiratory failure and others). Differentiated treatment. Primary and secondary prevention. Prognosis and efficiency.	4
21.	**Pleurisy and pleural effusion.** Definition. Etiological factors. Classification. Clinical manifestations, data of laboratory and instrumental research methods. Differential diagnosis. Complication. Indications for pleural puncture and drainage of the pleural cavity. Treatment. Primary and secondary prevention. Prognosis and efficiency.	4
22.	**Infectious and destructive lung diseases. Pulmonary insufficiency.** Definition. Factors that contribute to the development of bronchiectasis, abscess and lung gangrene. Clinical manifestations, data of laboratory and instrumental research methods. Differential diagnosis. Complication. Treatment. Indications for surgical treatment. Primary and secondary prevention.Prognosis and efficiency. Diagnosis of respiratory and pulmonary insufficiency, study of the function of external respiration, arterial and venous blood gases, indicators of acid-base status of blood. Differential diagnosis of pulmonary insufficiency. Therapeutic tactics. Primary and secondary prevention.Prognosis and efficiency.	4
23.	Writing and defending medical history	4
24.	Computer control. Assessment of practical skills	4
	Total	**96**

Individual work on content modules (elaboration of topics that are not included in the classroom plan) is not provided by the curriculum and program.

Tasks for individual work of students

1. Analysis of medical histories.
2. Preparation of presentations on the subject of classes.
3. Report at the conference.
4. Participation in conferences.

Note. The student can independently choose the topic of the individual task

Theoretical questions for the final semester attestation

Determination of the main gastroenterological symptoms (hepatomegaly, ascites, jaundice, diarrhea, constipation). Methods of examination of patients with gastrointestinal pathology (gastric pH-metry, upper endoscopy).

- General and "disturbing" symptoms in gastroenterology. Computer and magnetic resonance imaging in gastroenterology: indications, contraindications.
- Diagnostic possibilities of esophagogastroduodenoscopy: indications, contraindications, restrictions to its carrying out, possible complications. Barrett's esophagus: diagnosis, treatment tactics.
- Diagnostic possibilities of colonoscopy: indications, contraindications and restrictions to their carrying out, possible complications.
- Diagnostic possibilities of biopsy in gastroenterology: indications, contraindications, restrictions to its carrying out, possible complications.
- Invasive and non-invasive methods for diagnosing H. pylori infection and other infectious factors: advantages and disadvantages.
- Definition, etiology, pathogenesis, classification of gastroesophageal reflux disease. The role of gastroesophageal reflux in the development of esophagitis and Barrett's esophagus.
- Classification, differential diagnosis and complications of gastroesophageal reflux disease. Principles of treatment, prevention.
- Erosive and non-erosive gastroesophageal reflux disease. Clinical picture, diagnosis and treatment depending on the variant and stage of gastroesophageal reflux disease.
- Definition, etiology, pathogenesis, classification and modern approaches to the treatment of gastric dyspepsia.
- Diagnostic criteria, classification, features of the clinical course and modern approaches to the treatment of functional dyspepsia.
- Unexplored and functional dyspepsia, differential diagnosis and treatment.

- Definition, etiology and pathogenesis of chronic gastritis. The role of H. pylori in the occurrence of gastroduodenal diseases. Eradication therapy according to Maastricht V (2016).
- Classification and treatment of chronic gastritis. Indications and contraindications to sanatorium treatment.
- Significance of endoscopic (with morphology) and radiological examination for the diagnosis of chronic gastritis, gastric and duodenal ulcers and their complications.
- Diagnostic criteria and treatment of chronic gastritis. Neatrophic and atrophic gastritis.
- Classification, differential diagnosis and treatment of chronic gastritis.
- Modern approaches to the treatment of chronic gastritis, primary and secondary prevention. Sanatorium treatment.
- Definition, etiology, pathogenesis of peptic ulcer of the stomach and duodenum. The role of H. pylori, acid-peptic factor and drugs in the occurrence of peptic ulcers and their recurrence. Eradication therapy according to Maastricht V (2016).
- Classification, features of the clinical course of peptic ulcer of the stomach and duodenum. Modern approaches to treatment.
- Differential diagnosis, features of the clinical course and treatment of gastric and duodenal ulcers.
- The value of laboratory and instrumental methods for the diagnosis of peptic ulcer of the stomach and duodenum. Methods of diagnosis and treatment of Helicobacter pylori infection.
- Modern tactics of managing a patient with peptic ulcer. Indications for surgical treatment.
- Complications of peptic ulcer of the stomach and duodenum (bleeding, evacuation-motor function, malignancy). Diagnostic criteria, tactics of management of patients.
- Features of the clinical course and criteria for the diagnosis of celiac disease.
- Definition, etiology and pathogenesis of celiac disease. The role of food intolerance, enzymopathies and immune factors. Malabsorption and maldigestion syndromes.
- Criteria for diagnosis and differentiated therapy of celiac disease. Complication.
- Definition, etiology, pathogenesis, classification, criteria for the diagnosis of nonspecific ulcerative colitis.
- Features of the clinical course and treatment of nonspecific ulcerative colitis depending on the degree of activity and severity of the course.
- Differential diagnosis, treatment and complications of nonspecific ulcerative colitis.
- Criteria for diagnosis and treatment of nonspecific ulcerative colitis. Indications for surgical treatment.
- Features of the clinical picture and extraintestinal manifestations of nonspecific ulcerative colitis. Principles of diagnosis and treatment.

- Definition, etiology, pathogenesis and classification of irritable bowel syndrome. Treatment of irritable bowel syndrome with diarrhea.
- Roman criteria V (2016) of functional bowel diseases: diagnosis and clinical manifestations of different variants of irritable bowel syndrome. Principles of treatment of irritable bowel syndrome with constipation.
- Definition, etiology, pathogenesis, classification, diagnostic criteria for Crohn's disease.
- Criteria for the diagnosis of Crohn's disease, features of the clinical course depending on the degree of activity, severity and phase of Crohn's disease.
- Classification, diagnosis and differential diagnosis and principles of treatment of Crohn's disease. Indications for surgical treatment.
- Definition, etiology, pathogenesis, features of the clinical picture and treatment of gallstone disease.
- Features of the clinical course, diagnosis and treatment of gallstones. Indications for surgical treatment.
- The role of laboratory and instrumental methods in the diagnosis of gallstones. Differential diagnosis and complications of gallstone disease.
- Treatment of gallstone disease depending on the clinical course and the presence of complications. Indications for surgical treatment. Primary and secondary prevention.
- Definition, etiology, pathogenesis, classification and treatment of chronic non-calculous cholecystitis.
- Features of the clinical course and treatment of chronic non-calculous cholecystitis. Laboratory and instrumental methods in the diagnosis of chronic noncalculous cholecystitis.
- Definition, etiology, pathogenesis, classification and treatment of functional disorders of the biliary tract (Roman criteria IV) (2016).
- Features of the clinical course and the role of instrumental methods in the diagnosis of functional disorders of the biliary tract. Principles of treatment.
- Cholangitis: etiology, pathogenesis, clinical manifestations, diagnosis and treatment.
- Alcoholic steatohepatitis: pathogenesis, criteria for diagnosis and treatment.
- Classification, features of the clinical course, criteria for diagnosis and treatment of autoimmune hepatitis.
- Definition, pathogenesis, diagnosis and treatment of nonalcoholic fatty liver disease.
- Clinical manifestations, diagnostic criteria, classification, treatment and prevention of non-alcoholic steatohepatitis.
- Chronic alcoholic hepatitis: pathogenesis, diagnostic criteria and treatment.
- Alcoholic liver cirrhosis: pathogenesis, classification, diagnostic criteria and treatment.

- Definition, etiology, pathogenesis, classification and diagnostic criteria of alcoholic liver cirrhosis.
- Classification, diagnostic criteria and principles of treatment of alcoholic steatohepatitis.
- Definition, etiology, pathogenesis, classification, criteria for diagnosis and treatment of non-alcoholic steatohepatitis.
- Complications of liver cirrhosis. Hepatic insufficiency: diagnosis, classification, treatment.
- Differential diagnosis of jaundice.
- Drug-induced liver damage: classification, diagnostic criteria and principles of treatment.
- Differential diagnosis, principles of treatment alcoholic liver disease and its complications.
- The value of morphological, biochemical and other instrumental methods in the diagnosis of liver and biliary tract diseases.
- Definition, etiology, pathogenesis, classification and principles of treatment of liver cirrhosis. Significance of viral infection, nutritional factors, alcohol, toxic substances and immunological disorders.
- Classification of liver cirrhosis. Principles of treatment of alcoholic liver cirrhosis and bleeding from varicose veins of the esophagus.
- Complications of liver cirrhosis. Features and tactics of patients with hepatic encephalopathy.
- Definition, etiology, pathogenesis, classification, main clinical symptoms and syndromes, principles of treatment of chronic pancreatitis.
- Features of the clinical course, criteria for diagnosis and treatment of chronic pancreatitis.
- Differential diagnosis and complications of chronic pancreatitis. Principles of treatment.
- Classification, treatment, primary and secondary prevention of chronic pancreatitis. Prognosis and efficiency.
- Benign hyperbilirubinemia. Gilbert's syndrome: pathogenesis, clinical picture, diagnostic criteria and treatment.
- Iron deficiency anemia: pathogenesis, biochemical parameters of serum iron metabolism, diagnostic criteria and treatment. Diagnostic criteria, differential diagnosis and treatment of iron deficiency anemia.
- Features of the clinical picture, laboratory and instrumental methods for the diagnosis of iron deficiency anemia. Principles and criteria of effective treatment.
- B12-deficiency anemia: definition, etiological factors, pathogenesis, features of the clinical picture, criteria for diagnosis and treatment.
- Aplastic anemia: definition, etiological factors, pathogenesis of the clinical picture, diagnosis, differential diagnosis, treatment and complications.

- Definition, etiological factors, pathogenesis, features of the clinical picture and laboratory diagnosis of hereditary hemolytic anemias.
- Definition, etiological factors, pathogenesis, clinical picture, diagnosis and treatment of posthemorrhagic anemia.
- Definition, etiological factors, pathogenesis, features of the clinical picture, diagnosis and treatment of autoimmune hemolytic anemia.
- Criteria for diagnosis, differential diagnosis, treatment and complications of folate deficiency anemia. Primary and secondary prevention.
- Hemophilias. Etiology and pathogenesis, main clinical syndromes, diagnosis criteria.
- Differential diagnosis and complications of hemophilia. Treatment of various hemophilias. Prevention of bleeding.
- Chronic myelocytic leukemia. The main clinical manifestations, clinical and hematological syndromes, treatment.
- Bone marrow transplantation.
- Acute lymphoblastic leukemia. Classification, diagnostic criteria and principles of treatment.
- Multiple myeloma: pathogenesis, classification, diagnostic criteria and principles of treatment.
- Diagnostic criteria and complications of multiple myeloma. Principles of treatment.
- Rationale for transfusion of blood components and blood substitutes.
- Definition, modern views on the etiology and pathogenesis, classification and criteria for the diagnosis of non-Hodgkin's lymphoma.
- Criteria for diagnosis, differential diagnosis, complications, principles of treatment of Hodgkin's lymphoma.
- Etiology, pathogenesis, classification and main clinical and hematological syndromes of acute myeloblastic leukemia. Principles of treatment.
- Diagnostic criteria, differential diagnosis and complications of hemophilia A. Principles of treatment. Prevention of bleeding.
- Diagnostic criteria for true polycythemia. Features of the clinical picture and principles of treatment.
- Therapeutic tactics, classification, primary and secondary prevention of pulmonary insufficiency. Prognosis and efficiency.
- Diagnosis, differential diagnosis and complications of pulmonary insufficiency.
- Definition, causes, pathogenesis, classification and features of the clinical course of pulmonary insufficiency.
- Differential diagnosis, treatment and complications of chronic obstructive pulmonary disease. Primary and secondary prevention.

- Definition, etiology, features of pathogenesis and classification of asthma.
- Differential diagnosis, treatment and complications of asthma. Primary and secondary prevention.
- Definition, etiology, pathogenesis and classification of chronic obstructive pulmonary disease. Significance of smoking, environmental, professional factors and infection.
- Determination of the main symptoms of respiratory diseases (shortness of breath, dyspnea, cough, chest pain). Study of the function of external respiration.
- Modern methods of diagnosis and treatment of community-acquired pneumonia. Primary and secondary prevention.
- General and specific symptoms of pulmonary pathology. Endoscopic examination of the bronchi, indications, contraindications, complications.
- Emergency care for severe exacerbation of bronchial asthma.
- Methods of physical examination and research of the function of external respiration of patients with pulmonary pathology.
- Diagnostic possibilities of X-ray examination and computed tomography of the lungs. Diagnostic value of microbiological examination of sputum.
- Diagnostic possibilities of bronchoscopy and bronchography: indications, contraindications, possible complications.
- Definition, etiology, features of pathogenesis and classification of asthma.
- Clinical manifestations of asthma. Changes in the data of instrumental research methods depending on the severity of asthma.
- Differential diagnosis, treatment and complications of bronchial asthma. Primary and secondary prevention.
- Definition, the most common etiological factors, pathogenesis and classification of pneumonia.
- Features of the clinical picture and principles of treatment of community-acquired and nosocomial pneumonia.
- Modern methods of diagnosis and treatment of community-acquired pneumonia. Primary and secondary prevention.
- Features of the clinical picture of aspiration pneumonia and pneumonia in persons with severe immune defects. Principles of diagnosis and treatment.
- Diagnosis, differential diagnosis of lung abscess.
- Definition, etiology, pathogenesis, clinical picture, diagnosis and treatment of bronchiectasis.
- Nosocomial pneumonia. Criteria for diagnosis, classification. Principles of treatment.
- Definition, etiological factors, pathogenesis, classification of pleurisy and pleural effusions. Indications for pleural puncture.

- Treatment of pleurisy and pleural effusions. Pleural puncture and drainage of the pleural cavity: indications and techniques.
- Clinical picture, diagnosis and treatment of pulmonary gangrene.
- Chronic obstructive pulmonary disease: diagnostic criteria, classification, principles of treatment.
- Differential diagnosis, treatment and complications of chronic obstructive pulmonary disease. Primary and secondary prevention.
- Classification of resorts by natural factors of action on the human body. Indications and contraindications to sanatorium treatment.

Practical skills for the final semester attestation

Work with patients and clinical tasks:

- evaluate complaints, medical history, life history;
- evaluate information about the general condition of the patient (consciousness, constitution) and assess the appearance (examination of the skin, subcutaneous fat, palpation of lymph nodes, thyroid and mammary glands), examine the condition of the musculoskeletal system, joints;
- assess the condition of the respiratory system (chest examination, chest palpation, percussion and lung auscultation);
- assess the state of the circulatory system (examination and palpation of the heart and blood vessels, percussion of the heart and auscultation of the heart and blood vessels);
- assess the condition of the digestive organs (examination, percussion, superficial and deep palpation);
- Make a clinical diagnosis of the disease.
- Interpret the results of laboratory and instrumental research.
- Make differential diagnosis of diseases.
- Determine the necessary regime and diet of a patient with diseases.
- Determine the principles and nature of treatment (conservative, operative) of diseases.
- Diagnose and provide assistance in emergencies.
- Determine the tactics of secondary prevention of patients subject to dispensary supervision.

Laboratory and instrumental research methods:

- Analysis of pleural fluid
- Analysis of ascitic fluid
- Analysis of urine for diastase
- Biochemical parameters of serum iron metabolism.
- Acute phase blood parameters, total blood protein and its fractions.
- Examination of bile

- pH-metry of the stomach and esophagus
- Respiratory tests with 13C-urea, 13C-triglycerides, 13C-starch, 13C-lactose and respiratory hydrogen tests with glucose and lactulose
- General blood test
- General analysis of urine
- General analysis of sternal punctate
- General analysis of sputum
- Blood electrolytes
- Coagulogram
- Coprocytogram
- Markers of viral hepatitis
- Microbiological study of biological fluids and secretions
- Indicators of acid-base status of blood.
- Blood transaminases, total bilirubin and its fractions, alkaline phosphatase
- Alpha-amylase of blood
- Fecal elastase-1
- Study of the function of external respiration
- Radiation examination of the abdominal cavity
- Radiation examination of the thoracic cavity
- Radiation examination of the skull and bones
- Endoscopic examination of the bronchi
- Endoscopic examination of the digestive tract
- Cytological examination of lymph node biopsy.

The system of continuous control

When assessing the mastery of each topic of the module, a student is graded according to a 4-point (traditional) scale using the evaluation criteria adopted by the academy for the discipline. This takes into account all types of work provided by the guidelines for the study of topics.

On a 4-point scale	Assessment in ECTS	Evaluation criteria
5 (excellent)	A	The student demonstrates special creative abilities, is able to acquire knowledge independently, without the help of the teacher finds and processes the necessary information, is able to use the acquired knowledge and skills for decision-making in unusual situations, convincingly argues his/her answers, independently reveals own talents and inclinations, possesses not less than 90 % of knowledge on the topic both during the spoken replies and all types of control.

4 (good)	B	The student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standardized situations, independently corrects errors, the number of which is insignificant, has at least 85% knowledge of the topic as during the spoken replies, and all types of control.
	C	The student is able to compare, summarize, systematize information under the teacher's guidance, in general, independently apply it in practice, control his/her activities; corrects mistakes, some of which are significant, chooses arguments to confirm opinions, has at least 75% knowledge of the topic both during the spoken replies and all types of control.
3 (satisfactory)	D	The student reproduces a significant part of theoretical material, shows knowledge and understanding of the basic provisions with the help of a teacher can analyze educational material, correct errors, among which there are a significant number of serious mistakes, has at least 65% knowledge of the topic, and during the spoken replies, and all types of control.
	E	The student has the educational material at a level higher than the initial, reproduces a significant part of it at the reproductive level, has at least 60% knowledge of the topic both during the spoken replies and all types of control.
2 (unsatisfactory)	FX	The student has the material at the level of individual fragments that make up a small part of the material, has less than 60% knowledge of the topic both during the spoken replies and all types of control.
	F	The student has the material at the level of elementary recognition and reproduction of individual facts, elements, has less than 60% knowledge of the topic as during the spoken replies, and all types of control.

Relevance of the average score of the current performance on the traditional 4-point scale of the total assessment of the current performance per module

Average score for continuous achievement (A)	Points for continuous achievement in the module (A*24)	Points for FMC from the module (A*16)	Points for the module and / or exam (A*24 + A*16)	ECTS category	On a 4-point scale
1	2	3	4	5	6
2	48	32	80	F FX	2 unsatisfactory
2,1	50	34	84		
2,15	52	34	86		
2,2	53	35	88		
2,25	54	36	90		
2,3	55	37	92		
2,35	56	38	94		
2,4	58	38	96		
2,45	59	39	98		
2,5	60	40	100		
2,55	61	41	102		

2,6	62	42	104		
2,65	64	42	106		
2,7	65	43	108		
2,75	66	44	110		
2,8	67	45	112		
2,85	68	46	114		
2,9	70	46	116		
2,95	71	47	118		
3	72	50	122	E	3 satisfactory
3,05	73	50	123		
3,1	74	50	124		
3,15	76	50	126		
3,2	77	51	128		
3,25	78	52	130	D	
3,3	79	53	132		
3,35	80	54	134		
3,4	82	54	136		
3,45	83	55	138		
3,5	84	56	140	C	4 good
3,55	85	57	142		
3,6	86	58	144		
3,65	88	58	146		
3,7	89	59	148		
3,75	90	60	150	C	4 good
3,8	91	61	152		
3,85	92	62	154		
3,9	94	62	156		
3,95	95	63	158		
4	96	64	160	B	
4,05	97	65	162		
4,1	98	66	164		
4,15	100	66	166		
4,2	101	67	168		
4,25	102	68	170		
4,3	103	69	172		
4,35	104	70	174		
4,4	106	70	176		
4,45	107	71	178		
4,5	108	72	180	A	5 excellent
4,55	109	73	182		
4,6	110	74	184		
4,65	112	74	186		
4,7	113	75	188		
4,75	114	76	190		
4,8	115	77	192		
4,85	116	78	194		
4,9	118	78	196		
4,95	119	79	198		
5	120	80	200		

Final semester attestation

The form of the final control of the success of the study of Module 1. "Fundamentals of internal medicine (gastroenterology, hematology, pulmonology)" is a final semester attestation and is made by students during the credit-examination session.

Students who are allowed to the final semester attestation:

- attended all classes (reworked missed classes in the prescribed manner);
- received the required number of points on computer testing (75%), according to existing requirements;
- performed the required list of practical skills;
- wrote and defended the medical history;
- scored a convertible amount of points, not less than the minimum;
- have in the individual curriculum (record book) a mark on admission to examinations.

Before each exam, the department organizes consultations. The schedule of pre-examination consultations, time and place of the examination the department informs the applicants for higher education not later than 2 weeks before the examination session.

FSA is conducted on a commission basis in accordance with the "Regulations on the examination commission". Examinations are open and public. Marks obtained during the exam by certified persons are displayed in the "Statement of final semester control" and in the individual plans of students.

The exam is conducted during one day in two stages: computer testing and theoretical component. At the first stage, on the day of the exam at the departmens' computer class (or electronic hall for missed classes at the academy), applicants for higher education are tested on 20 questions (time - 20 minutes) from the academic base CTI-1, CTI -2 in the discipline. Each correct answer for the test task when compiling the computer control is counted as 1 point (maximum in the amount for the first stage, respectively 20 points). The result of the computer control by the applicant with higher education is not a reason for not admitting him to the theoretical part of the exam. The examination card for each discipline should contain three specific basic theoretical (practice-oriented) questions, formulated in such a way that the reference response of the higher education applicant to each approximately lasts up to 3-5 minutes. Examination cards are approved by the board of the medical faculty №1 signed by the dean or the deputy dean. During the exam, it is not allowed to perform any additional tasks to the card (test tasks, writing a prescription, etc.). Each question of the examination card is evaluated within 0-20 points.

Based on the computer control and the theoretical part of the exam, the student is given a total score from 0 to 80 points, the conversion of points into the traditional score is not carried out. If the higher education student violates the rules of academic integrity (p.2.2.5. Rules of Procedure) during the exam, the results are canceled, the student is given a grade of "unsatisfactory" (0 points).

Applicants for higher education who during the study of the discipline had an average score of 4.50 to 5.0 are exempt from the exam and automatically (with consent) receive a final grade in accordance with table 2, with the presence of the applicant in the exam is mandatory. linguistic. In case of disagreement with the assessment, the specified category of applicants for higher education takes the exam according to the general rules. The applicant of higher education has the right to retake the exam no more than 2 times and only during the examination session. Permission to retake the exam is issued by the dean in the form of "Personal statement of retaking the final control", which the student receives in the dean's office under a personal signature upon presentation of an individual curriculum. When organizing the re-examination of a group of applicants for higher education, a general statement is used. The result of re-taking the exam is certified by the signatures of all members of the commission in the test-examination statement.

Teaching methods

Teaching methods are tested and systematically functioning ways of interconnected activity of those who teach and those who learn, aimed at solving certain educational, upbringing and developmental tasks in the educational process.

The following teaching methods are used at the Department of Internal Medicine №1:

- verbal (lecture, explanation, cases, conversation, instruction);
- visual (observation, illustration, demonstration);
- practical (different types of practical activities of the student under the guidance of the teacher or independently);
- analysis of specific situations;
- role-playing games;
- "brainstorming";
- video training.

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

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

To implement this it is necessary in the first lesson of the relevant module the student is provided with a detailed plan of his work in the clinic, which includes:

- research methods that the student must learn (or get acquainted with);

- algorithms (protocols) of examinations, diagnosis, treatment, prevention in accordance with the standards of evidence-based medicine;
- the number of patients for curation that the student must perform during the cycle;
- reports of the patient's medical history in the study group, at clinical rounds, practical conferences.

Curation of the patient involves:

- clarifying the patient's complaints, medical history and life, conducting surveys of organs and systems;
- conducting a physical examination of the patient and determining the main symptoms of the disease;
- analysis of laboratory and instrumental examination of the patient;
- formulation of the patient's diagnosis;
- prescribe the treatment;
- definition of primary and secondary prevention measures;
- report of the results of examination of the patient by a team of students in the study group, analysis under the guidance of the teacher of the correctness of the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of prognosis and performance.

In practical classes, students keep diaries in which they make brief information about the patients examined during the practical lesson, record the wording of the diagnosis, the patient's examination plan and the prescribed treatment.

Control methods

Various methods and forms of control are used to effectively check the level of students' acquisition of knowledge, skills and abilities in the discipline.

The most common methods of control are: oral control, written, test, graphic, programmed control, practical examination, as well as methods of self-control and self-assessment.

Oral questioning involves the following sequence: formulation of questions (tasks) taking into account the specifics of the discipline and the requirements of the program; preparing students for the answer and presentation of knowledge; adjustment of the knowledge stated in the process of answering; analysis and evaluation of the response.

Written inspection is carried out in the form of inspection (control) work. The main advantage of a written test is that in a short time the teacher has the opportunity to form a clear idea of the knowledge of many students. The results of the inspection are clearly recorded. Written works are saved. Students have the opportunity to find out with the teacher details and inaccuracies in their own answers, to conduct self-analysis.

To determine the level of formation of knowledge and skills in the discipline use the method of tests. Open-form tests (with freely constructed answers) and closed-form tests (with suggested answers) are used. It is advisable to conduct a test of each topic of the discipline on all its major issues.

Assessment of practical skills involves the assessment of the acquisition of practical professional skills and abilities, and is carried out during practical classes and during the final lesson.

Control forms. During training sessions use individual and frontal tests of knowledge, skills and abilities of students, as well as final forms of control.

Means of diagnosing learning outcomes (tests; situational tasks; materials of clinical examinations of the patient, medical history; materials of laboratory, functional, instrumental and other methods of examination of patients).

Methodical support

1. Working curriculum
2. Methodical development of lectures
3. Methodical recommendations for teachers
4. Methodical instructions for self-directed work of students during preparation for a practical lesson and in class
5. Methodical recommendations on the organization of industrial practice
6. List of recommended reading
7. Materials for control of knowledge, skills and abilities of students:
   - tests of different levels difficulty
   - tests from the bank of licensing exams "Step - 2"
   - situational tasks
   - computer control programs
8. Videos.
9. Multimedia presentations.
10. Clinical tests.

Recommended literature

1. Davidson's Principles and Practice of Medicine / I.D. Perman, S.H. Ralston, M.W.J.Strachan et al. 24th Edition. – Elsevier, 2020. – 1378 p.
2. Internal Medicine. In 2 books: textbook [for students and interns of higher medical education esteblishments]. Books 1. Diseases of the Cardiovascular and Respiratory Systems / N. M. Seredyuk, I. P. Vakaliuk, R. I. Yatsyshyn [et. al.]. - Kyiv: Medicine Publishing, 2019. - 663 p.
3. Internal Medicine. In 2 books: textbook [for students and interns of higher medical education esteblishments]. Books 2. Diseases of the Digestive System, Kidney, Rheumatic and Hematological

Diseases / N. M. Seredyuk, I. P. Vakaliuk, R. I. Yatsyshyn [et. al.]. – Kyiv: Medicine Publishing, 2020. - 463 p.

Additional:

1. Harrison's Principles of Internal Medicine / D.Kasper, A.Fauci, S.Hauser, D. Longo.-21 ed. –N.Y.: McGraw-Hill Professional, 2022. - Vol. 1, Vol.2.-3000 p.
2. Internal medicine: Part 1: textbook for English-speaking students of higher medical school / edited by Professor M.A. Stanislavchuk and V.K. Sierkova. – Vinnytsya: Nova Knyha, 2019.- 408p.
3. Internal medicine: Part 2: textbook for English-speaking students of higher medical school / edited by Professor M.A. Stanislavchuk and V.K. Sierkova. – Vinnytsya: Nova Knyha, 2019.- 360p.
4. Case history in internal medicine: tutorial for IV-VI year students of the foreign training faculty / Skrypnyk I.M., Sorokina S.I., Shevchenko T.I. – Poltava, 2015. – 251 p.

Information resources

http://moz.gov.ua/

http://pdmu.edu.ua/

https://www.facebook.com/groups/1886783128212266/?ref=bookmarks

http://www.medliter.ru/?page=list&id=49

http://www.medscape.com/gastroenterology

http://ukrgastro.com.ua/

http://www.gastroscan.ru/

http://www.worldgastroenterology.org/

http://www.moz.gov.ua/ua/portal/dn_20070319_128.html

http://www.ginasthma.org

http://www.goldcopd.com

http://www.medscape.com/pulmonarymedicine

http://www.who.int/mediacentre/news/releases/2017/bacteria-antibiotics-needed/ru/

http://health-ua.com/

https://medprosvita.com.ua/

https://www.umj.com.ua/

European LeukemiaNet recommendations for the management of chronic myeloid leukemia: 2013/ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4915804/

Chronic myeloid leukemia: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up / http://annonc.oxfordjournals.org/content/23/suppl_7/vii72.full

Chronic Lymphocytic Leukaemia: ESMO Clinical Practice Guidelines / http://www.esmo.org/Guidelines/Haematological-Malignancies/Chronic-Lymphocytic-Leukaemia

Guidelines for the diagnosis and treatment of chronic lymphocytic leukemia: a report from the International Workshop on Chronic Lymphocytic Leukemia updating the National Cancer Institute-Working Group 1996 guidelines / http://www.ncbi.nlm.nih.gov/pubmed/18216293

http://www.dec.gov.ua/mtd/reestr.html

http://www.ifp.kiev.ua/doc/metoddoc/metodrec_ukr.htm

https://www.ersnet.org/

https://www.ueg.eu/home/

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