

**Academic programme  
component**

**31.05.01 General Medicine  
programme**

**B1.0.40  
discipline code**

## **SYLLABUS**

**Discipline**      **Introduction to Internal Medicine**

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## Clarification

Discipline volume: 8 credit points

**1. Discipline training results** correlated with the indicators of competencies achievement determined by the educational programme.

Competency	Indicators of competency achievement	Results of training in the discipline
<p><b>ОПК-4</b> Can apply medical devices according to the established medical procedures and conduct medical examination to determine a diagnosis</p>	<p><b>ИД-1ОПК-1</b> Knows the features of modern diagnostics, conducts a patient examination using medical devices in accordance with medical protocols and standards;</p> <p><b>ИД-2ОПК-1</b> Substantiates the application and evaluation algorithm for the results of applying medical technologies, specialized equipment and medical devices for solving professional problems.</p>	<p><b>To know:</b></p> <ul style="list-style-type: none"> <li>- modern methods of examination;</li> <li>- indications and contraindications to prescribing certain examination methods in accordance with a disease;</li> <li>- normal indicators and their possible deviations in pathological conditions;</li> <li>- a list of medical devices according to the established medical procedures, in the diagnostics and treatment of patients with various types of pathology;</li> </ul> <p><b>To be able to:</b></p> <ul style="list-style-type: none"> <li>- determine the indications and contraindications to prescribing certain examination methods in accordance with a disease;</li> <li>- analyse the results of the examination and the ongoing treatment;</li> <li>- select the necessary medical devices for the diagnostics and treatment of a particular patient;</li> </ul> <p><b>To have:</b></p> <ul style="list-style-type: none"> <li>- skills in using indicators of laboratory, functional, instrumental examination in the diagnosis of diseases;</li> <li>- skills in providing medical care using medical devices according to the established medical procedures</li> </ul>

## 2. Discipline contents

no.	Topic	Contents
<b>1</b>	Introduction to Internal Medicine: goals and objectives, the concept of semiotics, physical examination of the patient.	The subject and tasks of the discipline. The methodology of diagnosis. The structure of the medical history. Patient questioning and general examination. Basic and additional methods of patient examination. The concept of medical ethics and deontology.
<b>2</b>	Workup of patients with respiratory diseases. The main syndromes of respiratory diseases.	Complaints of patients with respiratory diseases, its physical diagnosis, diagnostic value of symptoms. Syndromes of respiratory diseases, their pathogenesis and diagnostic value. Respiratory distress syndrome, pathogenesis, its physical diagnosis, using laboratory, instrumental and functional methods.
<b>3</b>	Workup of patients with cardiovascular diseases. The main syndromes of cardiovascular diseases.	Complaints of patients with cardiovascular diseases, its physical diagnosis, diagnostic value of symptoms. Syndromes of cardiovascular diseases, their pathogenesis, and diagnostic value. Acquired valvular heart disease, heart failure, their physical diagnosis, use of additional

		methods in the diagnosis of cardiovascular diseases.
4	Workup of patients with urinary diseases. The main syndromes of digestion diseases.	Complaints of patients with digestion diseases, their physical diagnosis, diagnostic value of symptoms. Syndromes of digestion diseases. General clinical diagnostics, additional methods in the diagnosis of digestion diseases.
5	Workup of patients with urinary diseases. The main syndromes of hepatobiliary system diseases.	Complaints of patients with hepatobiliary system diseases, physical diagnosis for diseases of the liver and biliary tract, diagnostic value of symptoms. Syndromes of hepatobiliary system diseases, their pathogenesis and diagnostic value, general clinical diagnosis, additional methods in the diagnosis of liver diseases.
6	Workup of patients with urinary system diseases. Main syndromes of urinary system diseases.	Complaints of patients with diseases of the kidneys and urinary tract, physical diagnosis for diseases of urinary system, diagnostic value of symptoms. Syndromes of urinary system diseases, pathogenesis and diagnostic value. Physical diagnosis of kidney diseases, laboratory and instrumental methods in the diagnosis of the urinary system diseases.
7	The most common diseases of respiratory organs.	Syndromes of pneumonia, bronchial asthma, chronic obstructive pulmonary disease, principles of classification, the importance of physical, laboratory, instrumental and functional diagnostic methods.
8	The most common cardiovascular diseases.	Syndromes of rheumatic heart disease, acute rheumatic fever, infectious endocarditis. Syndromes of systemic atherosclerosis, arterial hypertension, acute and chronic myocardial ischemia, principles of classification. Physical and additional methods in the diagnosis of cardiovascular diseases.
9	The most common digestion diseases.	Syndromes of peptic ulcer disease of different localization, diseases of the liver, biliary tract, pancreas. Principles of classification, value of physical, laboratory, instrumental and functional methods in the diagnosis of digestion diseases.
10	The most common kidney and urine system diseases.	Syndromes of glomerulonephritis, urolithiasis diseases, chronic pyelonephritis. Principles of classification, diagnostic value of physical and additional methods in the kidney diseases diagnosis. The concept of chronic kidney disease, diagnostic value.
11	The most common diseases of the endocrine system and hemopoietic organs.	Syndromes of endocrine system diseases. Hyperglycemia, thyrotoxicosis, hypothyroidism. Syndromes of systemic blood diseases. Principles of classification, physical and additional methods in the diagnosis of endocrine system diseases.

### 3. Training support materials

- multimedia presentations on the discipline are available on MAU LMS Moodle;
- practical training manuals are available on MAU LMS Moodle;
- learning materials are available on MAU official website at [«Информация по образовательным программам, в том числе адаптированным»](#).

### 4. Discipline assessment materials

Discipline assessment materials is a separate document within the educational programme, it includes:

- a list of competencies indicating the stages of their achievement within the discipline;
- formative assessment tasks;
- interim assessment tasks;
- tasks for internal assessment of education quality.

**5. The list of main and supplementary literature** (printed sources, electronic textbooks and (or) resources of Digital Library Systems)

### **Main literature:**

1. Propedevtika vnutrennikh boleznei : uchebnoe posobie / E.A. Dotsenko, I.I. Burakov, M.N. Antonovich i dr. ; pod red. E.A. Dotsenko, I.I. Burakova. – Minsk : RIPO, 2020. – 289 s. : il. – Rezhim dostupa: po podpiske. – URL: <https://biblioclub.ru/index.php?page=book&id=599793> . – Bibliogr.: s. 252. – ISBN 978-985-7234-33-2. – Tekst : elektronnyi.
2. Drozdov, A.A. Propedevtika vnutrennikh boleznei: polnyi kurs k ekzamenu : [16+] / A.A. Drozdov, M.V. Ivanyuk ; Nauchnaya kniga. – 2-e izd. – Saratov : Nauchnaya kniga, 2020. – 318 s.: tabl. – Rezhim dostupa: po podpiske. – URL: <https://biblioclub.ru/index.php?page=book&id=578405> . – Bibliogr. v kn. – ISBN 978-5-9758-1922-2. – Tekst : elektronnyi.
3. Ignatenko G. A. Propedevtika vnutrennikh boleznei : uchebnyk dlya ispol'zovaniya v obrazovatel'nykh uchrezhdeniyakh, realizuyushchikh osnovnye professional'nye obrazovatel'nye programmy vysshego obrazovaniya urovnya spetsialiteta po napravleniyam podgotovki 31.05.01 "Lechebnoe delo", 31.05.02 "Pediatriya", 32.05.01 "Mediko-profilakticheskoe delo". – Moskva : GEOTAR-Media, 2020. – 811 s., [10] l. il. : il., tabl. – Bibliogr.: s. 772. – ISBN 978-5-9704-5827-3 [Grif]. – Tekst (vizual'nyi) : neposredstvennyi

### **Supplementary literature:**

1. Klipina, T.Yu. Propedevtika vnutrennikh boleznei : [12+] / T.Yu. Klipina, N.N. Polushkina ; Nauchnaya kniga. – 2-e izd. – Saratov : Nauchnaya kniga, 2020. – 412 s. : tabl. – Rezhim dostupa: po podpiske. – URL: <https://biblioclub.ru/index.php?page=book&id=578458> . – ISBN 978-5-9758-1939-0. – Tekst : elektronnyi.

## **6. Professional databases and information reference systems**

- 1) The state legal information system - the official website of legal information. Online access at <http://pravo.gov.ru>
- 2) Information system “Single window of access to educational resources”. Online access at <http://window.edu.ru>
- 3) Jaypeedigital, an online medical resource platform from Jaypee Brothers Medical Publishers. An introduction to working with the platform (video in English): [https://disk.yandex.ru/i/K3Q61Zerp\\_x5Kw](https://disk.yandex.ru/i/K3Q61Zerp_x5Kw). Online access at <https://www.jaypeedigital.com/home>
- 4) S Ebooks (Medical & Science) (<https://eduport-global.com/>). Electronic library of medical literature from CBS Publishers & Distributors Pvt. Ltd.
- 5) Legal reference system Consultant Plus - URL: <http://www.consultant.ru/>
- 6) University Library online <https://biblioclub.ru> Access is available until May 29, 2025
- 7) EBC "Yurayt", access is provided until December 30, 2024.
- 8) Electronic library system “Lan” at <https://e.lanbook.com/> (Open since October 1, 2025)
- 9) Electronic library system “Student Consultant” at <http://www.studentlibrary.ru/> (open until May 24, 2025). Access to collections [Медицина. Здравоохранение \(ВО\)](#)» издательства «ГЭОТАР-Медиа» and «[Медицина \(ВО\) ГЭОТАР-Медиа. Books in English](#)».

## **7. The list of licensed and openly distributed software, including domestic software**

1. Microsoft Windows Vista Business Russian Academic OPEN operating system, licence no. 44335756 dated 07/29/2008 (Agreement No. 32/379 dated 14.07.08)
2. Microsoft Office Service Pack 2007 Russian Academic OPEN, licence no. 45676388 dated 08.07.2009 (Agreement no. 32/224 dated 14.0.2009)

3. Microsoft Office 2010 Russian Academic OPEN office suite, license no. 47233444 dated 30.07.2010 (Agreement 32/285 dated July 27, 2010)
4. ABBYY FineReader Corporate Optical Text Recognition system 9.0 (network version), 2009 (Agreement LC-080000510 dated April 28, 2009)
5. Antivirus program (Contract no.7689 dated 23.07.2018 for the Dr.Web Desktop Security Suite Antivirus program)

### 8. Ensuring mastering the discipline for people with special needs

Students with special needs are provided with printed and (or) electronic educational resources adapted to their needs.

**9. The material and technical support of the discipline (module)** is presented in the appendix to the academic programme “Material and technical conditions for the implementation of the academic programme” and includes:

- technically equipped classrooms for conducting training sessions provided for the Specialist programme;
- spaces for self-study work equipped with computer, Internet connection and access to MAU LMS Moodle;

### 10. Study load distribution by the type of educational activity

Table 1. Study load distribution

Type of educational activity	The discipline (module) study load distribution by the forms of training			
	Full-time			
	Semester / Year	Total hours	Semester / Year	Total hours
	3/5		3/6	
Lectures	24	24	30	30
Seminars	64	64	52	52
Self-study	56	56	26	26
Preparation for interim assessment	-		36	36
<b>Total hours on the discipline / in the form of seminars</b>	<b>144</b>	<b>144</b>	<b>144</b>	<b>144</b>
	64	64	52	52
Interim and formative assessment				
Examination			+	

### The list of seminars by the forms of education

No.	Seminar topics
1	2
Full-time	
1	Patients questioning as a diagnostic method. Questioning goals and objectives, the main, additional and undeclared complaints, their diagnostic value. Anamnesis of the disease and life, diagnostic value. The plan and methodology of the patient examination. Ethics and deontology of patient physical examination.

2	Patient examination as a method of diagnostic, general and special examination. The plan of the procedure, the symptoms detected during the general examination, their diagnostic value.
3	Questioning of patients with respiratory system diseases, main and additional complaints, anamnesis, diagnostic value. The tasks of examination and palpation of the chest, the procedure and rules of conduct. Vocal fremitus, its diagnostic value. Symptoms and their diagnostic value.
4	Percussion as a diagnostic method, types of percussion sound and percussion, its rules. Chest percussion, tasks, procedure and rules for comparative and topographic lung percussion. Types of pathological percussion sound, diagnostic value.
5	Auscultation as a diagnostic method. Lung auscultation, its order and rules. Main and secondary respiratory sounds, their mechanisms diagnostic value of the main respiratory sounds changes. Adverse respiratory sounds, diagnostic value, differences in auscultation. Bronchophonia, procedure, diagnostic value
6	The main pulmonary diseases. Additional diagnostic methods. Spirometry as a diagnostic method, its diagnostic value
7	Questioning of patients with cardiovascular diseases, the main complaints, their diagnostic value. Examination, heart palpation. Apical beat, pulse examination, diagnostic value. A symptom of chest thrill (or, “cat’s purring” in Russian terminology), diagnostic value.
8	Percussion of the heart, its algorithm. Determination of the relative and absolute dullness of the heart, the contours of the cardiovascular system. Heart overall configuration. Workup of patients with cardiovascular diseases.
9	Auscultation of the heart, heart tones, mechanism of formation, diagnostic value. Changes in tones in norm and pathology, three types of arrhythmias
10	Auscultation of the heart. Heart murmurs, their formation, the diagnostic value of systolic and diastolic heart murmurs. Functional and innocent murmurs, their difference
11	Mitral valve disease. Hemodynamic disorders, stages of compensation and decompensation, the importance of physical and additional methods in the diagnosis of mitral valve disease. Tricuspid regurgitation, stenosis of the right atrioventricular orifice, diagnosis. The concept of the pulmonary heart.
12	Aortal valve disease. Hemodynamic disorders, stages of compensation and decompensation, the importance of physical and additional methods in the diagnosis of aortal valve disease. Acute and chronic heart failure.
13	ECG as a diagnostic method, electrophysiological basis of the method, recording technique, protocol for decoding a normal ECG. ECG – signs of myocardial hypertrophy of the ventricles of the heart and atria. ECG diagnosis of myocardial infarction. Phonocardiogram as a diagnostic method, its diagnostic value.
14	Questioning of patients with digestion diseases, main and additional complaints, their importance in diagnosis. Examination of the abdomen is static and dynamic, palpation of the abdomen, the diagnostic significance of the symptoms detected in the study of patients with digestion diseases. The main syndromes.
15	Questioning of patients with hepatobiliary system diseases, main and additional complaints, anamnesis, diagnostic value. Examination of the liver area. Percussion and palpation of the liver and spleen, diagnostic value of symptoms. Palpation of the gallbladder. Liver functional tests. The main syndromes.
16	Questioning of patients with diseases of the kidneys and urinary system, main and additional complaints, anamnesis, diagnostic value. General examination, examination of the lumbar region, diagnostic value of symptoms. Palpation and percussion of the kidneys. Urine examination, diagnostic value. The main syndromes. Testing and demonstration of practical skills.
17	Syndromes of pneumonia. Principles of classification. Pathogenesis, clinical symptoms, and their diagnostic value. Laboratory and radiation methods in the diagnosis of pneumonia. Standardized patients, diagnosis
18	Syndromes of bronchial asthma. Principles of classification. Pathogenesis, clinical symptoms, and their diagnostic value. Additional verification methods. Syndromes of pleurisy, its definition, clinical manifestations, diagnosis. Standardized patients, diagnosis
19	Syndromes of chronic obstructive pulmonary disease. Principles of classification. Pathogenesis, clinical symptoms, and their diagnostic value. The function of external respiration in the diagnosis of bronchial obstruction. Suppurative lung diseases, bronchiectasis, its diagnosis. Standardized

	patients, diagnosis
20	Syndromes of rheumatic heart disease, acute rheumatic fever. Principles of classification. Pathogenesis, clinical symptoms, and their diagnostic value. Laboratory methods in the diagnosis of the rheumatic diseases' severity. ECG and echocardiography in the diagnosis of rheumatic heart disease. Syndromes of infectious endocarditis, diagnosis.
21	Arterial hypertension. Principles of classification. Pathogenesis, clinical symptoms, and their diagnostic value. Diagnostics. Daily monitoring of blood pressure, diagnostic value. Standardized patients, diagnosis
22	Syndromes of chronic myocardial ischemia. Pathogenesis, clinical symptoms, and their diagnostic value. Diagnostics. Additional verification methods. Diagnostic significance of laboratory markers of risk factors and chronic myocardial ischemia. Diagnostic value of ECG, echocardiogram, exercise tolerance test, cardio angiography. Standardized patients, diagnosis
23	Arrhythmias and conduction disorders. Causes, mechanisms of development, pathomorphological substrates of arrhythmias. Clinical manifestations. ECG diagnostics
24	Syndromes of gastric ulcer and duodenal ulcer. Pathogenesis, clinical symptoms, and their diagnostic value. Functional gastrointestinal disorders. Peptic ulcer complications, diagnosis. Syndromes of pancreas diseases. Additional verification methods.
25	Syndromes of chronic hepatitis and cirrhosis. Pathogenesis, clinical symptoms, and their diagnostic value. Additional methods in the diagnosis of chronic hepatitis and cirrhosis. Functional disorders of the hepatobiliary system, diagnosis. Standardized patients, diagnosis
26	Syndromes of chronic glomerulonephritis and chronic pyelonephritis. Pathogenesis, clinical symptoms, and their diagnostic value. Diagnostic value of urine, radiation and ultrasound imaging in chronic urinary tract disease
27	Diagnosis of the endocrine system diseases using clinical methods. The main syndromes. Thyrotoxicosis and hypothyroidism. Pathogenesis, clinical symptoms, and their diagnostic value. The importance of additional methods in the diagnosis of the endocrine system diseases
28	Diagnosis of blood diseases by general clinical methods. The main syndromes. Pathogenesis, clinical symptoms, and their diagnostic value. Diagnostic criteria for major blood diseases in clinical blood analysis.