


**National Pirogov Memorial Medical University, Vinnytsya**

**“APPROVED”**

Higher Educational Institution Vice-Rector  
for Scientific and Academic Work and  
International Links

 Inna ANDRUSHKO  
« 30 » 08 2024

**“AGREED”**

Head of the Department  
of Internal Medicine №1

 prof. HEI Mykola STANISLAVCHUK  
« 30 » 08 2024

**SYLLABUS  
of academic discipline  
«INTERNAL MEDICINE»**

Specialty	222 Medicine
Educational level	the second (master`s) level
Educational program	EPP Medicine, 2022
Academic year	2024-2025
Department of	Internal Medicine №1
Lecturers	PhD, DM, professor Stanislavchuk M.A., PhD, DM, professor Andrushko I.I., PhD, DM, professor Kuzminova N.V., PhD, Ass-professor Savytska O.O., PhD, Ass-professor Berko G.K., PhD, Ass-professor Nechyporuk O.V., PhD, Ass-professor Burdeina L.V., PhD, Ass-professor Khomenko V.M.
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Compiler of syllabus	Ass-professor, PhD Olena Savytska

## 1. Status and structure of the discipline

Discipline status	mandatory
Discipline code in EPP/ discipline place in EPP	EC 27, component of the professional training cycle
Course / semester	4th year (VII-VIII semesters)
The amount of discipline (the total number of hours /number of credits ECTS)	180 hours /6,0 credits ECTS
The structure of the discipline	Lectures – 22 hours Practical classes – 92 hours Independent work – 66 hours
Number of content modules	4
Language of study	Ukrainian, English
Form of study	Full-time (with the introduction of quarantine measures – distance full-time )

## 2. Description of the discipline

**Brief annotation of the course, relevance.** The subject area of the program is a study of basics of internal medicine in its main sections, with emphasis on the study of etiology, pathogenesis, clinical presentation, diagnosis, treatment and prevention of major and most common diseases of internal organs, obtaining knowledge from sections like pulmonology, gastroenterology, nephrology, formation of practical skills and abilities: collecting anamnesis, conducting an objective examination of patients, drawing up a survey plan, interpretation of the results obtained during the examination, prescribing treatment according to modern standards and developing measures to prevent diseases.

**Prerequisites.** The study of the discipline "internal medicine" is based on knowledge of the main natural sciences: human anatomy, medical biology, histology, cytology and embryology, pathological anatomy, physiology, pathophysiology, medical and biological physics, bioorganic and biological chemistry, microbiology, virology and immunology, pharmacology, clinical pharmacology and clinical pharmacy, radiology and radiation medicine, propaedeutics of internal medicine and integrates with these disciplines.

**The purpose of the course and its significance for professional activities.** The purpose of the discipline is to acquire and deepen knowledge, skills, abilities and other competencies in internal medicine, necessary in professional activities, which are established based on educational and professional program of the specialist.

**Postrequisites.** In the process of studying the discipline the foundations for the study of internal medicine by students are laid which provide the integration of teaching with endocrinology, phthisiatry, clinical immunology, infectious diseases, surgery, obstetrics and gynecology, oncology and the application of knowledge from the above disciplines in the process of further study and professional activities.

## 3. Learning outcomes.

After successful study of the discipline, the applicant will be able to:

1. Skills of interviewing a patient with pathology of the digestive, respiratory and urinary systems.
2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results in a patient with pathology of the digestive, respiratory and urinary systems.
3. Ability to establish a preliminary and clinical diagnosis of a patient with pathology of the digestive, respiratory and urinary systems.

4. Ability to determine the required mode of work and rest in the treatment of diseases of the digestive, respiratory and urinary systems.
5. Ability to determine the nature of nutrition in the treatment of diseases of the digestive, respiratory and urinary systems.
6. Ability to determine the principles and treatment nature of diseases of the digestive, respiratory and urinary c systems.
7. Ability to diagnose emergencies in patients with pathology of the digestive, respiratory and urinary systems.
8. Ability to determine the tactics of emergency medical care to a patient with pathology of the digestive, respiratory and urinary systems.
9. Emergency care skills for a patient with pathology of the digestive, respiratory and urinary systems.
10. Skills in performing medical manipulations of a patient with pathology of the digestive, respiratory and urinary systems.
11. Ability to determine the tactics of management of a patient with pathology of the digestive, respiratory and urinary systems, subject to dispensary supervision.
12. Ability to conduct an examination of the patient's ability to work with pathology of the digestive, respiratory and urinary systems.
13. Ability to keep medical records of a patient with pathology of the digestive, respiratory and urinary systems.

#### 4. Content and logistics of the discipline

Module 1. <b>Internal Medicine</b> content modules - 4	7-8 semesters 180 hours/6,0 credits	Lectures № 1-11 Practical classes № 1-23 Topics for independent work № 1-6
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The discipline includes 23 topics, which are divided into 4 content modules.

#### **Content module 1. Fundamentals of diagnosis, treatment and prevention of respiratory diseases**

Topic 1. Basic symptoms of pulmonary pathology and methods of examination in pulmonology.

Pulmonary failure

Topic 2. Chronic obstructive pulmonary disease.

Topic 3. Bronchial asthma.

Topic 4. Community-acquired pneumonia.

Topic 5. Hospital-acquired pneumonia.

Topic 6. Pleurisy and pleural effusion.

Topic 7. Infectious destructive diseases of lung.

#### **Content module №2. Basics of diagnosis, treatment and prevention of diseases of the digestive system**

Topic 8. The main symptoms of gastroenterological pathology. Research methods in gastroenterology. Gastroesophageal reflux disease

Topic 9. Gastric dyspepsia. Chronic gastritis

Topic 10. Peptic ulcer and other ulcers of stomach and duodenum

Topic 11. Cholelithiasis, chronic cholecystitis and functional biliary disorders (dyskinesias).

Topic 12. Chronic disease of the small intestine: celiac disease and other enteropathy, Crohn's disease

Topic 13. Chronic disease of the colon: ulcerative colitis and other non-specific colitis. Irritable bowel syndrome.

Topic 14. Chronic hepatitis

Topic 15. Cirrhosis of the liver

Topic 16. Chronic pancreatitis

### **Content module 3. Foundation of diagnostic, treatment and prevention of basic disorders of the kidneys and urinary system**

Topic 17. Acute and chronic glomerulonephritis and nephrotic syndrome

Topic 18. Pyelonephritis, tubulointerstitial nephritis

Topic 19. Chronic kidney disease

Topic 20. Acute kidney damage.

### **Content module 4. General questions of internal medicine**

Topic 21. Obesity and its consequences.

Topic 22. Diagnosis and treatment of diseases of the internal organs in the elderly. Final control

Topic 23. Supervision and defence of medical history

The topics of the lecture course reveal problematic issues of the relevant sections of internal medicine. Practical classes provide a theoretical justification of the main issues of the topic and the acquisition of the following practical skills:

1) interviewing a patient with diseases of the internal organs, conducting a clinical examination, appointing a plan of examination and interpretation of results of laboratory and instrumental methods of investigation, determining the leading syndrome of the disease, the ability to establish a clinical diagnosis according to modern classifications of diseases of internal organs, differentiate them with other diseases, prescribe treatment and to carry out preventive measures;

2) solving situational tasks in internal medicine, which have a clinical and diagnostic direction. In the practical classes, students analyze the practical lesson's topic, conduct a clinical analysis of the thematic patient and solve clinically-oriented situational tasks and tests.

The student's independent work involves preparation for practical classes and development of practical skills, study of topics for independent extracurricular work, preparation of presentations, tables, processing of scientific literature and writing reviews of the provided topics for individual work. Control of mastering the topics of independent extracurricular work is carried out on final control of the discipline.

Thematic plans of lectures, calendar plans of practical classes, thematic plan of independent extracurricular work, volume and directions of individual work are published on the department website.

The route for obtaining materials: Department of Internal Medicine №1 / Student / Full-time study / Medicine / (4) course / Educational materials / or through the link <https://www.vnmu.edu.ua/en/departments/departments/34>. Access to the materials is carried out through the student's corporate account [s000XXX@vnmu.edu.ua](mailto:s000XXX@vnmu.edu.ua).

### **5. Forms and methods of monitoring the success of training**

Current control in practical classes	Methods: oral or written survey, testing, electronic survey, solving situational tasks, conducting a clinical examination of thematic patient with an appointment of examination plan and treatment.
Final semester control (credit) at the end of the 7th semester	According to the Regulation of the Academic process in Pirogov Memorial Medical University, Vinnytsya (link <a href="https://www.vnmu.edu.ua/General">https://www.vnmu.edu.ua/General</a> information)
Final control of the discipline – exam	Methods: pre-examination testing, practical skills, oral examination (According to the Regulation of the Academic process in Pirogov Memorial Medical University, Vinnytsya) (link <a href="https://www.vnmu.edu.ua/General">https://www.vnmu.edu.ua/General</a> information)
Learning success diagnostic tools	Theoretical questions, tests, conducting of physical examination of the patient, situational tasks KROK-2, clinical tasks, demonstration of practical skills

## 6. Assessment criteria

Knowledge assessment is carried out in accordance with the Regulations of the Academic process in Pirogov Memorial Medical University, Vinnytsya (link [https://www.vnmu.edu.ua/General information](https://www.vnmu.edu.ua/General%20information)).

Continuous assessment	On a four point system of traditional assessments: 5 «excellent», 4 «good», 3 «satisfactory», 2 «unsatisfactory»
Control of practical skills	On a four-point system of traditional assessments
Credit	On a 200-point scale (conversion of the average traditional assessment of practical class on points) Credited: 122 to 200 points Not credited: less than 122 points (see Score Scale) evaluation
Final control of the discipline - exam	Final control – from 50 to 80 points: 40% of the the discipline grade Exam grade: 71-80 points – "excellent" 61-70 points – "good" 50-60 points – "satisfactory" Less than 50 points – "unsatisfactory" / did not pass
Discipline assessment:	Current performance – from 72 to 120 points (conversion of the average traditional assessment of practical classes on a 120-point scale): 60% of the discipline grade Final control – from 50 to 80 points: 40% of the the discipline grade Individual work – from 6 to 12 points A total – from 122 to 200 points

### Discipline assessment scale: national and ECTS

Discipline assessment scale: national and ECTS			
The sum of points for all types of educational activities	ECTS assessment	Score on a national scale	
		for exam, course project (work), practice	for credit
180-200	A	excellent	credited
170-179,9	B	good	
160-169,9	C		
141-159,9	D		
122-140,99	E	satisfactory	
0-121,99	FX	unsatisfactory with the possibility of reassembly	not credited with the possibility of re-assembly
	F	unsatisfactory with mandatory re-study of the discipline	not enrolled with mandatory re-study of the discipline

## 7. Policy of discipline / course

The student has the right to receive high-quality educational services, access to contemporary scientific and educational information, qualified tutoring during the study of discipline and mastering practical skills. The policy of the department during the providing of educational services is a student-centered, based on normative documents of the Ministry of Education and the Ministry of Health of Ukraine, the Statute of the University and the Procedure for the Providing of Educational Services regulated by the main principles of the organization of the educational process in VNMU named after M.I.Pirogov and the principles of academic integrity ( link [https://www.vnmu.edu.ua/General information](https://www.vnmu.edu.ua/General%20information)).

### **Adherence to the rules of VNMU, safety techniques in practical classes.**

Observance of the rules of the VNMU regulations, safety precautions at practical classes. Instruction on biosafety, safety of handling chemical reagents and burners is conducted at the first practical lesson by the teacher. The instructed students are registered in the Safety Instruction Journal. A student who has not been instructed is not allowed to perform practical work.

### **Requirements for preparation for practical classes.**

The student should be prepared for a practical lesson, testing tasks for the current topic should be solved in a workbook, diagrams and tables are filled.

A student should come to class on time, without delay. A student who is more than 10 minutes late is not allowed to the practical class and must work it in the prescribed manner.

In practical classes, the student must be dressed in a work uniform (medical gown, hat). Students who do not have a work uniform are not allowed to practice.

The student must follow the rules of safety in practical rooms and at the department.

When discussing theoretical issues, students should demonstrate tolerance, courtesy and respect for their colleagues and the teacher; when performing practical tasks, the workplace should be kept in order and be cleaned after performing practical work.

### **Usage of mobile phones and other electronic devices.**

The use of mobile phones and other electronic devices in the classroom is allowed only during electronic testing or surveys.

**Academic integrity.** When studying the discipline, the student must be guided by the Code of Academic Integrity and Corporate Ethics of VNMU named after M.I. Pirogov (link : <https://www.vnmdu.edu.ua/General> information)/ Code of Academic Integrity).. In case of violation of the norms of academic integrity during the current and final controls student receives a grade of "2" and must work it out to his teacher in the prescribed manner within two weeks after receiving an unsatisfactory assessment).

**Missed classes.** Missed classes are working out in the manner prescribed by Regulations of the Academic process in VNMU named after M.I. Pirogov (link <https://www.vnmdu.edu.ua/General> information) at the time of work out schedule (published on the website of the department <https://www.vnmdu.edu.ua/> Department of Internal Medicine №1#) to the teacher on duty. To work out missed lesson student must provide a protocol workbook with recipes for the topic, take a test and answer questions in writing or orally to the topic of the lesson.

**The procedure for admission to the discipline final control** is given in the Regulation of the Academic process in VNMU named after M.I. Pirogov (link <https://www.vnmdu.edu.ua/General> information). Students who do not have missed practical classes and lectures and received an average traditional grade of at least "3" are allowed to final control.

**Additional points.** Individual points in the discipline that student can receive for individual work, is determined by the results of his individual work according to Regulation of the Academic process in VNMU named after M.I. Pirogov (link <https://www.vnmdu.edu.ua/General> information) and policy of the course.

**Conflict resolution.** In case of misunderstandings and complaints to the teacher because of the quality of educational services, knowledge assessment and other conflict situations, student should

submit his / her claims to the teacher. If the issue is not resolved, the student has a right to apply to the head of the department according to Complaints Consideration Procedure (<https://www.vnmue.edu.ua/> General information / Basic documents).

**Politics in terms of remote learning.** Distance learning regulated by the Regulations of the elements of remote learning in VNMU named after Pirogov M.I. (<https://www.vnmue.edu.ua/> General information). The main training platforms for studying are Microsoft Team and Google Meets. The procedure for conducting practical classes and lectures, exercises and consultations during distance learning is published on the website of the department (<https://www.vnmue.edu.ua/> Department of Internal Medicine №1 / Student or <https://www.vnmue.edu.ua/> Department of Internal Medicine №1 / News).

Feedback from teachers is via messengers (Viber, Telegram, WhatsApp) or e-mail (at the teacher's choice) during working hours.

**8. Educational resources** Educational and methodological support of the discipline is published on the website of the department. Route for obtaining materials <https://www.vnmue.edu.ua/> Department of Internal Medicine №1 / Student. Consultations are held twice a week according to the schedule.

**The timetable and distribution of groups** with assigned teachers are published on the web page of the department ((<https://www.vnmue.edu.ua/> department of Internal Medicine №1 / student).

**Questions to the intermediate and final semester** control (credit) of the discipline are published on the web page of the department (<https://www.vnmue.edu.ua/> Department of Internal Medicine №1 / student).

The syllabus on discipline «INTERNAL MEDICINE" discussed and approved at the meeting of the Department of Internal Medicine #1 (record № 1, from "30" August 2024)

Responsible for the academic  
Discipline \_\_\_\_\_

(signature)

Ass-prof., Ph.D. Olena SAVYTSKA

Head of the department \_\_\_\_\_

Prof. Mykola STANISLAVCHUK