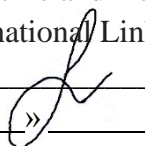


National Pirogov Memorial Medical University, Vinnytsya

“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»
Elective block 2 – Internal medicine – EB 2.1;

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 Monastyrskiy Yu.I., PhD, Ass-professor Berko G.K., PhD, Ass-professor Khomenko V.M., PhD, Ass-professor Burdeina L.V.
Contact information	<i>intmed1@vnmu.edu.ua,</i> <i>Pirogov str., 46 Vinnytsia, (0432) 509491</i>
Compiler of syllabus	Ass-professor, PhD Olena SAVYTSKA

1. Status and structure of the discipline

Discipline status	Compulsory
Discipline code in EPP/ discipline place in EPP	EB 2.1, component of the professional training cycle
Course / semester	6th year (IX-X semesters)
The amount of discipline (the total number of hours /number of credits ECTS)	435 hours /14,5 credits ECTS
The structure of the discipline	Practical classes – 200 hours Independent work – 235 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 cardiology, rheumatology, hematology , 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 of the cardiovascular, musculoskeletal system, blood and hematopoietic organs.

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, phtisiatry, 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 cardiovascular, musculoskeletal and hematopoietic systems.
2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results in a patient with pathology of the cardiovascular, musculoskeletal and hematopoietic systems.

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

4. Content and logistics of the discipline

Module 2.1 Medicine content modules - 4	Internal	11-12 semesters 435 hours /14,5 credits	Practical classes EB 2.1.1 № 1-14, EB 2.1.2 № 1-10, EB 2.1.3 № 1-10, EB 2.1.4 № 1-5 Topics for independent work № 1-8
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The discipline EB2.1.1 includes 14 topics, which are divided into 6 content modules.

Module 2.1.1. "Modern practice of internal medicine"
1. Management of a patient with hypertension
2. Management of a patient with back and <i>extremities</i> pain
3. Management of a patient with joint syndrome
4. Management of a patient with purpura, weight loss
5. Management of a patient with dysphagia, heartburn, functional dyspepsia, abdominal pain
6. Management of a patient with diarrhea, constipation
7. Management of a patient with hepatomegaly, hepatolienal syndrome, portal hypertension and ascites
8. Management of a patient with pulmonary infiltrate
9. Management of a patient with chronic cough, bronchoobstructive syndrome
10. Management of a patient with hemoptysis, pleural effusion
11. Management of a patient with urinary syndrome
12. Management of a patient with nephrotic syndrome
13. Management of a patient with chronic kidney disease
14. Management of a patient with anemia, hemorrhagic syndrome
Module 2.1.2. "Basic instrumental syndromes in cardiovascular pathology"
1. Methods of long-term ECG recording in cardiac arrhythmias
2. Methods of long-term ECG recording in cardiac conduction disorders

3. Methods of long-term ECG recording in repolarization disorders
4. Methods of long-term registration of blood pressure
5. Modern stress tests
6. Fundamentals of echocardiography
7. Ultrasound methods of heart examination
8. Angiographic research methods
9. X-ray methods in cardiology
10. Radioisotope research methods in cardiology.
Module 2.1.3. "Modern standards of management of patients after surgery for cardiovascular pathology"
1. Management of the patient after revascularization of acute coronary syndrome
2. Management of patients after surgical treatment of valvular diseases
3. Management of patients after aneurysmectomy (aorta, heart), endovascular operations
4. Management of patients after surgery for cardiac arrhythmias
5. Management of patients after surgery for cardiac conduction disorders
6. Management of patients after surgery for heart failure
7. Management of patients after surgery for hypertrophic cardiomyopathy
8. Management of patients after surgery for inflammatory diseases of the heart and pericardium
9. Management of patients after intracardiac thrombosis surgery
10. Management of patients after surgery for heart tumors. Final control (credit)
Module 2.1.4. "Emergencies in the clinic of internal medicine"
1. Management of a patient with a hypertensive crisis, acute heart failure
2. Management of a patient with acute coronary syndrome, pulmonary embolism
3. Management of a patient with syncope and paroxysmal heart rhythm disorders
4. Management of a patient with hematemesis, melena, shock
5. Management of a patient with a coma. Final control (credit)

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 / 6 course / Educational materials / or through the link <https://www.vnmu.edu.ua/en/department/department/34>. Access to the materials is carried out through the student's corporate account 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 control of the discipline EB 2.1.2, 2.1.3, 2.1.4 (credit)	According to the Regulation of the Academic process in Pirogov Memorial Medical University, Vinnytsya (link https://www.vnmu.edu.ua/General information)
Final control of the discipline EB 2.1.1 – differentiated credit	Individual oral or written survey; electronic survey, solving typical situational problems; interpretation and assessment of the results of laboratory and instrumental research, test tasks with the choice of the correct answer (According to the Regulation of the Academic process in Pirogov Memorial Medical University, Vinnytsya) (link https://www.vnmu.edu.ua/General 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).

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 120 points (see Score Scale) evaluation
Final control of the discipline - differentiated credit	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	satisfactory	
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).

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.vnmu.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.vnmu.edu.ua/General> information) at the time of work out schedule (published on the website of the department

<https://www.vnmue.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.vnmue.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.vnmue.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 STANISLAVCH