## MINISTRY OF HEALTH OF UKRAINE

## **Odesa National Medical University**

# Department of Internal Medicine No. 1

# Syllabus of the academic discipline "Internal Medicine"

Scope of the	Total number of hours per discipline: 210 hours (7 credits)
academic discipline	Semesters: XI - XII
_	6 year of study.
Days, time, place of	According to the schedule of classes.
educational	Department of Internal Medicine No. 1, Odesa, str. Zabolotnogo 26.
discipline	Municipal non-commercial enterprise "Odesa Regional Clinical Hospital"
	of the Odesa Regional Council, 9th floor building, 7th floor.
Teacher(s)	Head of the department: Karpenko Yurii Ivanovich, Doctor of Medicine,
	Professor, Honored Doctor of Ukraine, Head of the Regional Center of
	Cardiac Surgery of "Odesa Regional Clinical Hospital"
	Professor : Zolotaryova N.A, Izha H.M
	Associate professors: PhD Savelyeva O.V., Kryzhanovskyi Yu.M.,
	Pavlovska K.M., Potapchuk O.V., Chernyavskii V.G., Shukhtina I.M
	Assistants: Alavatska T.V., Kravtsova K.V., Maistrenko M.S., Ryabinina
	A.G., Romanchenko M.I., Uhan V.V., Bondarenko O.V., Zolotaryova K.O.,
	Panin V.N., Yurdanova I.I.
Contact	Help by phone:
Information	Savelyeva Olga Valeriivna, head teacher of the department +380 95 279 28
	52
	Belozertseva-Baranova Yuliya Evgeniivna, senior laboratory technician of
	the department +380668510435
	E-mail: vnutrimed1@ onmedu.edu.ua
	Eyes consultations: from 14.40 to 16.00 everyday.
	Online consultations: from 14.40 p.m. to 16:00 p.m. everyday,
	The link to the online consultation is provided to each group during classes separately.

## **COMMUNICATION**

Communication with applicants will take place in the classroom (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, messengers Viber (via groups created in Viber for each group, separately through the head of the group).

#### THE COURSE ANNOTATION

The subject of the study of the discipline is the study of the clinic, diagnostics, treatment of diseases and the ability to carry out differential diagnosis in the clinic of internal medicine (IM) Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):

*Prerequisites*: Ukrainian language (by professional direction), foreign language (by professional direction), Latin language and medical terminology, medical biology, medical and biological physics, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology,

physiology, microbiology, virology and immunology, life safety; basics of bioethics and biosafety, pathomorphology, pathophysiology, pharmacology, propaedeutics of therapy, medical psychology. *Post-requisites*: internal medicine, surgery, obstetrics and gynecology, infectious diseases, epidemiology and principles of evidence-based medicine, oncology and radiation medicine, traumatology and orthopedics, phthisiology, anesthesiology and intensive care, emergency and urgent medical care, hygiene and ecology, palliative and hospice medicine, general practice (family medicine).

The goal of the discipline: to prepare a student who is able to master the professional competencies and skills of observation and management of the patient according to the specified list of symptoms, syndromes and emergency conditions in the clinic of internal diseases, which require special tactics of patient management, laboratory and instrumental research, medical manipulations for solving problems and problems in the field of medicine, health care and further education.

Tasks of the discipline:

- 1. Formation of skills and abilities: on differential diagnosis, the most common diseases in adults.
- 2. Improving the skills of substantiating a clinical diagnosis, drawing up a plan for laboratory and instrumental research,
- 3. Mastering the ability to determine emergency aid tactics, treatment and prevention of the most common diseases in adults.

Expected results:

As a result of studying the academic discipline, the applicant must:

*Know:* basic principles of diagnosis and treatment of diseases of the cardiovascular system, blood and hematopoietic organs, based on the principles of evidence-based medicine.

Be able to:

- Communicate with the patient and his relatives, perform a clinical examination of the patient with diseases of the cardiovascular system, blood and hematopoietic organs. namely, to collect data on the patient's complaints, medical history, life history.
- To evaluate information about the diagnosis based on the results of laboratory and instrumental studies, namely, to determine the list of necessary clinical and laboratory and instrumental studies and to evaluate their results.
- Identify the leading clinical symptom or syndrome. Establish the most likely or syndromic diagnosis of the disease. Assign laboratory and instrumental examination of the patient.
- Carry out differential diagnosis of diseases. Establish a preliminary and clinical diagnosis.
- To determine the nature and principles of treatment of patients on the basis of a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- Diagnose emergency conditions.
- Determine tactics and provide emergency medical assistance.
- Perform medical manipulations. (according to list 5).
- Keep medical documentation.

#### DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Forms and methods of education

The discipline will be taught in the form of practical classes (140 classroom hours); organization of the applicant's independent work (70 hours).

*Teaching methods:* conversation, role-playing, solving clinical situational problems, patient examination, manipulations according to list 5, instruction and practice of skills on dummies, training exercises on differential diagnosis of the most common diseases in the internal medicine clinic, standardized hybrid therapeutic patient.

Content of the academic discipline

Topic 1: Management of a patient with arterial hypertension.

Topic 2: Management of a patient with a heart rhythm disorder.

- Topic 3: Management of a patient with impaired cardiac conduction.
- Topic 4: Management of a patient with cardiac pain.
- Topic 5: Management of a patient with chronic coronary syndrome
- Topic 6: Management of a patient with cardiomegaly.
- Topic 7: Management of a patient with heart murmurs.
- Topic 8: Management of a patient with heart failure.
- Topic 9: Management of a patient with shortness of breath.
- Topic 10: Management of a patient with edematous syndrome.
- Topic 11: Management of a patient with pain in the limbs and back
- Topic 12: Management of a patient with joint syndrome
- Topic 13: Management of a patient with broncho-obstructive syndrome
- Topic 14: Management of a patient with infiltrative darkening in the lungs
- Topic 15: Management of a patient with community-acquired pneumonia. Management of a patient with hospital-acquired pneumonia.
- Topic 16: Management of a patient with hemoptysis. Management of a patient with respiratory failure.
- Topic 17: Management of a patient with fever of unknown origin . Damage to organs and systems during HIV infection
  - Topic 18: Management of a patient with gastric dyspepsia
  - Topic 19: Management of a patient with chronic diarrheal syndrome
  - Topic 20: Management of a patient with jaundice
  - Topic 21: Management of a patient with ascites, with portal hypertension
  - Topic 22: Management of a patient with hepatomegaly and hepato-lienal syndrome
  - Topic 23: Management of a patient with urinary syndrome
  - Topic 24: Management of a patient with nephrotic syndrome
  - Topic 25: Management of a patient with chronic kidney disease
  - Topic 26: Management of a patient with anemia
  - Topic 27: Management of a patient with a leukemic reaction and leukemia
  - Topic 28: Management of a patient with lymphadenopathy
- Topic 29: Management of a patient with hemorrhagic syndrome Management of a patient with purpura
- Topic 30: Management of a patient with a complicated hypertensive crisis. Management of a patient with cardiac asthma and pulmonary edema.
- Topic 31: Management of a patient with acute coronary syndrome. Management of a patient with myocardial infarction. Management of a patient with cardiogenic shock
- Topic 32: Management of a patient with pulmonary embolism . Treatment tactics for sudden cardiac death.
  - Topic 33: Management of a patient with paroxysmal rhythm and conduction disorders.
- Topic 34: Management of a patient with severe community-acquired and hospital-acquired pneumonia. Management of a patient with total pleural effusion and pneumothorax
  - Topic 35: Management of a patient with asthmatic status.
  - Topic 36: Management of a patient with anaphylactic shock and Quincke's edema.
  - Topic 37: Management of a patient with acute liver failure.
  - Topic 38: Management of a patient with acute renal failure
- Topic 39: Management of a patient with acute abdominal pain. Management of a patient with gastrointestinal bleeding
  - Topic 40: Emergencies in the clinic of military therapy
- Topic 41: Peculiarities of management of seriously ill, incurable patients. Methodology for assessing the patient's condition. Treatment and care planning. Psychological, spiritual and social issues of palliative care for incurable patients and their relatives.

## List of recommended literature:

#### Main:

- 1. Modern classifications and standards of treatment of diseases of internal organs. Emergency conditions in therapy. Analyses. Normative indicators. Interpretation of changes. /Edited by Prof. Yu.M. Mostovoy. 29th ed., additions and revisions. Vinnytsia: publisher Kostyushin V.V. 2023. 799 p.
- 2. Internal diseases: in 2 h. Part 1: Chapters 1–8: Nats. textbook for intern doctors, stud . honey. ZVO, medical practitioners, therapist. profile. Recommended by the academic council of IFNMU / L.V. Hlushko, S.V. Fedorov, I.M. Skrypnyk and others; under the editorship L.V. Hlushka. K., 2022. 680 p., tv. pal., (art. 5 pr.).
- 3. Internal diseases: in 2 h. Part 2: Chapters 9–24: Nats. at hand for intern doctors, students . honey. ZVO, medical practitioners, therapist. profile. Recommended by the academic council of IFNMU / L.V. Hlushko, S.V. Fedorov, I.M. Skrypnyk and others; under the editorship L.V. Hlushka. K., 2022. 584 p. + 6s. color \_ incl., TV pal., (art. 5 pr.).
- 4. Emergency and urgent medical care: Study guide for students of higher educational institutions of the Ministry of Health of Ukraine. Recommended by the State Institution "Central Methodical Cabinet for Higher Medical Education of the Ministry of Health of Ukraine" / D. A. Shkurupii (ed.). 2nd ed.— 2020. 240 p., black and white, color TV.
- 5. Diagnostic methods in the clinic of internal medicine: Training . help \_ for medical practitioners, families. doctors, graduate students, students . honey. ZVO Recommended by the academic council of NMU named after O.O. Bogomoletsa / A.S. Svintsitskyi . K., 2022. 1008 p. + 80 s. color \_ incl., TV pal., (art. 3pr.).
- 6. Cardiovascular diseases. Classification, standards of diagnosis and treatment // Edited by V.M. Kovalenko, M.I. Lutaya, Yu.M. Sirenka, O.S. Sychova, 4th ed., revised . and additional  $\_$  K.: Morion, 2023. 224 p.
- 7. ECG in practice. The ECG in Practice: a study guide / John R. Hampton; translation of the 7th Eng. edition. Kyiv: Medicine, 2023. 560 p.

#### Additional:

- 1. Electrocardiological diagnostics and treatment in emergency cardiology. Textbook. Approved by the Academic Council of the D. Halytskyi Lviv National Medical University. Publisher Marchenko T.V. Format A5. Skybchik V.A., Skybchik Ya.V. 2021. 164 p.
- 2. Skybczyk V. A. Clinical electrocardiography: manual / V. A. Skybczyk, Ya. V. Skybczyk. Lviv: Marchenko T. V., 2021. 568 p.
- 3. Side effects of drugs: a manual for students of higher medical education institutions / I. F. Belenichev. -2021.
- 4. Algorithms for diagnosis and treatment of emergency conditions at the therapist. Practitioners: manual / Starodub E.M. Vol. 2019. 196 p., pal. soft \_
- 5. Emergencies in the practice of a therapist and family doctor, manual / Yepishyn A.V...-Vol. 2019. 380 pp., pal. TV
- 6. Workshop on curation of a therapeutic patient and writing an educational medical history: manual / S.M. Andreychyn \_ Vol. 2019. 112 pp., pal. soft \_
- 7. Treatment and prevention of COVID-19. Protection of mental health in the conditions of a pandemic. Study guide for students, interns (Ukrainian language). Recommended by the Academic Council of the Academy of Medical Sciences. Corresponds to a typical curriculum. /under the editorship Prof., Doctor of Medicine Abaturova O.E. and Prof., Doctor of Medicine L.M. Yuryeva L. 2020. 296 pp., pal. TV

## Electronic information resources

- 1. http://moz.gov.ua Ministry of Health of Ukraine
- 2. www.ama-assn.org American Medical Association / American Medical Association
- 3. www.who.int World Health Organization
- 4. www.dec.gov.ua/mtd/home/ State Expert Center of the Ministry of Health of Ukraine
- 5. http://bma.org.uk British Medical Association

#### **EVALUATION**

Forms and methods of current control: oral (survey), practical (working with a patient, a standardized hybrid patient), assessment of communication skills and activity in class and during role play, assessment of interpretation of results of clinical, laboratory and instrumental studies.

Criteria of ongoing assessment at the practical class

Score	Evaluation criteria
Excellent	The student is fluent in the material, takes an active part in discussing and solving
"5"	a situational clinical problem, confidently demonstrates practical skills during the
	examination of a patient and the interpretation of clinical, laboratory and
	instrumental research data, expresses his opinion on the topic of the class,
	demonstrates clinical thinking.
Good	The applicant has a good command of the material, participates in the discussion
"4"	and solution of a situational clinical problem, demonstrates practical skills during
	the examination of a patient and the interpretation of clinical, laboratory and
	instrumental research data with some errors, expresses his opinion on the topic of
	the class, demonstrates clinical thinking.
Satisfactory	The acquirer does not have sufficient knowledge of the material, is unsure of
"3"	participating in the discussion and solution of the situational clinical problem,
	demonstrates practical skills during the examination of the patient and the
	interpretation of clinical, laboratory and instrumental research data with significant
	errors.
Unsatisfactory	The acquirer does not possess the material, does not participate in the discussion
"2"	and solution of the situational clinical problem, does not demonstrate practical
	skills during the examination of the patient and the interpretation of clinical,
	laboratory and instrumental research data.

Forms and methods of final control: the final control in the form of an exam is carried out after the study of all topics of the discipline is completed

The applicant is admitted to the exam on the condition that the requirements of the educational program are met and if he received at least 3.00 points for the current educational activity.

# Assessment of students' learning outcomes during the final examination - an oral standardized exam.

The methodology for conducting an oral standardized exam is unified, transparent and involves the use of standardized forms. The number of questions asked on the oral standardized exam corresponds to the amount of credits allocated for studying the academic discipline.

The form of the examination ticket is standardized and consists of structural elements (components). The examination ticket consists of theoretical questions, decoding of the electrocardiogram and solving a situational problem. Each ticket has 4 questions. The questions are short, simple, understandable, clear and transparent, composed in such a way that the full answer to it takes no more than 5 minutes. The timing of the oral structured exam is standard - no more than 30 minutes.

A checklist (answer template) is prepared for each question, which includes key points that are required to provide a complete answer to the question. Each answer template is accompanied by a literary source with pages.

During an oral structured exam, the candidate sees the question, the teacher sees a checklist with reference answers and determines which components were or were not named by the candidate.

The overall score for the oral structured exam is calculated as the arithmetic average of all scores received for the answers to the questions asked (including situational tasks).

The compiled package of documents for the oral structured exam: list of questions, answer standards (checklists) received a review by the subject-specific cyclical methodological commission

(minutes No. 1 dated 08/30/2024)

The possibility and conditions of obtaining additional (bonus) points: not provided.

## Independent work of students of higher education

Independent work involves preparation for each practical session

# Policy of educational discipline

Deadlines and Rescheduling Policy:

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

## Academic Integrity Policy:

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.

Unacceptable in educational activities for participants of the educational process are:

- the use of family or official ties to obtain a positive or higher grade during any form of control of academic performance or academic merit;
- micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

For violation of academic integrity, students may be held to the following academic responsibility:

- a decrease in the results of assessment of the control work, assessment in class, credit, etc.;
- retaking the assessment (test, credit, etc.);
- assignment of additional control measures (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

## Attendance and Tardiness Policy:

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

State of health: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

## *Use of mobile devices*:

Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

#### Behavior in the audience:

The behavior of applicants and teachers in the classrooms must be working and calm, strictly comply with the rules established by the Regulations on academic integrity and ethics of academic

relations at Odessa National Medical University , in accordance with the Code of Academic Ethics and University Community Relations of Odessa National Medical University , Regulations on Prevention and detection of academic plagiarism in the research and educational work of higher education applicants, scientists and teachers of Odesa National Medical University .