

National Pirogov Memorial Medical University, Vinnytsya
Department of propaedeutic to internal medicine

“APPROVED ”

Vice-Rector of higher education
institution for Research, Education, and
Teaching

 professor of HEI
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“ 31 ” August 2022

“AGREED ”

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Propaedeutic to internal medicine

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“ 31 ” August 2022

SYLLABUS
of academic discipline
Nursing

Specialty	222 Medicine
Educational level	the second (master`s) level
Educational program	EPP Medicine, 2022
Academic year	2022-2023
Department	Propaedeutic to internal medicine
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1. Status and structure of the discipline

Discipline status	Compulsory
Discipline code in EPP/ discipline place in EPP	CC 57 //discipline of professional training
Course / semester	<i>2nd year (III-IV semester)</i>
The amount of discipline (the total number of hours / number of credits ECTS)	<i>Eg. 150 hours / 5 credits ECTS</i>
Number of content modules	Eg, 1 module
The structure of the discipline	Lectures - 0 hours Practical classes - 20 hours Independent work - 30 hours
Language of study	English
For mof study	Full-time

2. Description of the discipline

Short annotation of the course, relevance.

Nursing – is one of the first disciplines of the clinical stage of undergraduate training of a doctor, during the study of which students learn methods for determining vital signs, assessing the general condition of the patient, recognizing emergency conditions, providing emergency care, preparing patients for additional examination methods, implementation diagnostic and therapeutic procedures. Thus, nursing practice is an educational clinical discipline that studies the methods and techniques of clinical examination of the patient, the features of professional communication between the doctor and the patient, monitoring the patient's condition, performing diagnostic and therapeutic procedures.

According to the curriculum, 1 credit (30 hours) is allocated for nursing practice, of which 20 hours are classroom training (in the form of practical classes) and 10 hours of independent work of students. Nursing practice is conducted directly during the semester in a row in the therapeutic department of the hospital and is represented by one module, which in turn is divided into two content modules.

Nursing practice is carried out by conducting practical classes and independent work of students. For nursing practice once a week is allocated 4 hours of student work, which consists of two parts: 1) mastering theoretical material on the features of the department, the basic manipulations of the nurse and their practice under the supervision of a teacher (in the form of 4-hour practical classes - classroom practices); 2) independent work of the student in the departments of the hospital and consolidation of the acquired knowledge and skills (independent work of students).

Practical classes according to the method of their organization are clinical, because they provide:

- improvement of methods of history taking, examination, palpation, percussion, auscultation;

- supervision of patients with various pathologies of internal organs (and in their absence in the clinic - analysis of clinical situational tasks or archival case histories): collection of anamnesis;
- ability to instruct the patient to prepare for instrumental, radiological, endoscopic, ultrasound diagnostic methods;
- ability to teach the patient to collect sputum, urine, feces for general clinical, microbiological research;
- ability to determine vital indicators: state of consciousness, body temperature, respiratory rate, oxygen saturation level, pulse properties, blood pressure level;
- ability to diagnose an emergency;
- ability to provide pre-medical care.

Assimilation of the topic is controlled in practical classes in accordance with specific objectives, assimilation of content modules - in practical final classes. The following means are used to determine the level of preparation of students: the implementation of practical skills, solving situational problems and tests, interpretation of laboratory results, analysis and evaluation of instrumental results and parameters that characterize the functions of the human body, its systems and organs. The final control of mastering the module is carried out after its completion in the form of differential credit. Assessment of student performance in the discipline is a rating and is set on a multi-point scale and is determined by the ECTS system and the scale adopted in Ukraine.

Prerequisites

According to the curriculum, the study of the discipline "Nursing" is carried out in the III- IV semesters, when the student has acquired relevant knowledge in the basic disciplines:

- medical biology (basics of medical genetics, manifestations of the basic laws of inheritance, medical and biological bases of parasitology);
- medical and biological physics (genesis of ECG; physical basis of electrical stimulation of tissues and organs, pulse currents and their characteristics, pacemakers; physical basis of the use of X-rays in medicine; modern methods and means of X-ray diagnostics; X-ray computed tomography; use of radionuclides; radioisotope images of organs and tissues; emission computed tomography);
- human anatomy (organ-specific features of the structure of the mucous membrane of tubular organs; general patterns of structure of the muscular membrane of the wall of tubular organs, topography, structure, functions of the gastrointestinal tract, structure of cartilage, joints, ligaments, laryngeal muscles; glottis: boundaries, formation, parts, trachea: and bronchi: topography, wall structure, lungs: topography, external structure, lungs: particles, broncho-pulmonary segments, lobes, their structure, lung X-ray, bronchial tree: branching, wall structure, functions, alveolar tree: branching, wall structure, acinus: definition, structure, functions, pleura: general characteristics, functions, pleural cavity, its nooks, kidneys: structure on frontal autopsy, structural and functional unit of the kidney, its components, ways of excretion of urine (components of excretory pathways of the

kidney, renal sinus (sinus), its bridge, X-ray anatomy of the kidney, heart: topography, position options, shape options, external structure, chambers, projection of the heart on the anterior wall of the chest; areas of auscultation of heart valves; large circle of blood circulation; small circle of blood circulation; vessels of the torso);

– physiology (structural and functional organization of the autonomic nervous system and its role in the regulation of visceral functions; volumes that are part of the VL and their determination using a spirometer; dynamic indicators of pulmonary ventilation, methods for their determination, the volumes that are included to the composition of VL and their definition by spirogram, the sequence and duration of periods and phases of the cardiac cycle, characteristics of the first and second tones (their origin, components, duration), mechanical manifestations of heart activity: heartbeat (its properties and features in children), pulse its properties), electrocardiogram recording technique, types of ECG leads (standard, amplified, chest), genesis and parameters of ECG components, ECG analysis, heart law (Starling, Frank), Zion-Ludwig, Goering-Ivanov, Bainbridge, Dani-Ashner reflexes, Goltz, factors that determine the magnitude of blood pressure, arterial and venous pulse, components, their origin, microcirculation and its role in the mechanism exchange of fluid and various substances between blood and tissues; types of digestion depending on the location of hydrolysis, hormonal regulation of the gastrointestinal tract, enzymes of gastric juice, the role of hydrochloric acid in the digestion of nutrients, gastric and intestinal phases of gastric juice secretion, the role of gastric mucus, types of gastric contractions, exocrine activity of the pancreas and pancreas properties of pancreatic juice, phases of pancreatic juice secretion, regulation of bile formation and secretion in duodenum, functional characteristics of secretor processes in the small intestine, cavity and membrane hydrolysis of nutrients in different parts of the small intestine, colon function, absorption in the gastrointestinal tract proteins, water, salts, carbohydrates, fats; motor activity of the small and large intestine; the role of the kidneys in the processes of excretion, maintenance of homeostasis, mechanisms of urination);

– biological and bioorganic chemistry (properties of enzymes, regulation of enzymatic activity, cofactors and qualitative reactions to vitamins, general patterns of metabolism, metabolism of carbohydrates and lipids, common pathways of amino acid catabolism, nucleotide metabolism, molecular biology and genetics, molecular peripheral endocrine glands, the effect of insulin and adrenaline on blood glucose, water- and fat-soluble vitamins, blood chemistry in normal and pathology, proteins of the acute phase of inflammation, pigment metabolism, liver detoxification function, hormonal regulation of water-mineral-metabolic properties, urine);

– histology (dependence of vascular wall structure on hemodynamic, arteriolo-venular anastomosis, organ features of veins, structure of heart wall, its membranes, conducting system of heart, structure and functions of bone marrow, lymph nodes, features of structure of mucous membrane of different gastrointestinal tract, histophysiology of secretory, morphofunctional characteristics of the liver,

gallbladder, pancreas, the structure of the alveoli, the cellular composition of its lining, the renal filtration barrier, cortex and juxtamedullary blood supply systems);

- microbiology, virology and immunology (main periods of infectious disease; carrier of the pathogen, its detection; forms of infection: acute, chronic, latent, persistent, recurrence, reinfection, superinfection; pneumonia streptococci: morphology, pathogenicity, pathogenesis, immunology pneumococcal infections, the microflora of the human body, its role in normal physiological processes and pathology, the characteristics of diseases caused by opportunistic pathogens;

The purpose of the course and its significance for professional activities.

The aim of the course and its significance for professional activity of teaching content module 1 "STRUCTURE AND THE MAIN TASKS OF NURSING IN THE GENERAL SYSTEM OF THERAPEUTIC PATIENTS TREATMENT" of the discipline "Nursing" is to achieve the main final goals, designated in the educational and professional training programs specialties 222 "Medicine" is the basis for the formation of the content of industrial practice. On the basis of the final goals to each content-specific goals are formulated in the form of certain skills (actions), goal tasks that ensure the achievement of the final goal of the production practice. Final objectives are located at the beginning of the program and overlap its content, the specific objectives overlap the content of the corresponding content module.

Integral competencies: specialized conceptual knowledge that includes modern scientific achievements in the field of professional activity or field of knowledge and is the basis for original thinking and research, critical understanding of problems in the field and on the border of fields of knowledge.

General competencies (GC)

GC 1. Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.

GC 2. Ability to apply knowledge in practical situations.

GC 3. Knowledge and understanding of the subject area and understanding of professional activity.

GC 4. Ability to adapt and act in a new situation.

GC 5. Ability to make informed decisions; work in a team; interpersonal skills.

GC 6. Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language.

GC 7. Skills in the use of information and communication technologies; ability to search, process and analyze information from various sources.

GC 8. Definiteness and persistence in terms of tasks and responsibilities.

GC 9. Ability to act socially responsibly and consciously.

GC 10. The desire to preserve the environment.

Professional competencies (PC)

PC 1. Skills of interviewing and clinical examination of patients.

PC 2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.

PC 3. Ability to establish a preliminary and clinical diagnosis of the disease.

PC 7. Ability to diagnose emergencies.

PC 11. Skills of medical manipulations.

Detailing of competencies according to NQF descriptors in the form of "Competence Matrix".

Competence Matrix

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
<i>Integral competencies</i>					
IC 1	Specialized conceptual knowledge, which includes modern scientific achievements in the field of professional activity or branch of knowledge and is the basis for original thinking and conducting research, critical reflection on problems in the field and between branches of knowledge	To know how to use positions, theories and methods of fundamental, chemical, technological, biomedical and socio-economic sciences.	Be able to solve complex problems and solve practical problems in professional activity, integrate knowledge and solve complex problems, formulate judgments for lack of or limited information	To convey your knowledge, conclusions and their validity to your audience in a clear and unambiguous manner.	To be responsible for the timely acquisition of up-to-date knowledge.
<i>General competencies (GC)</i>					
GC 1	Ability to abstract thinking, analysis and synthesis, the ability to learn and be	Know how to apply the provisions, theories and methods of basic,	Be able to solve complex problems and solve practical problems in professional activities,	Clear and unambiguous to convey own knowledge, conclusions and their	To be responsible for the timely acquisition of modern knowledge, regulation of

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
	modernly trained	chemical, technological, biomedical and socio-economic sciences.	integrate knowledge and solve complex problems, formulate judgments with insufficient or limited information.	validity to professional and non-professional audience.	their professional development taking into account their own personal qualities, self-improvement and self-education
GC 2	Ability to apply knowledge in practical situations.	Have deep conceptual knowledge of propedeutics of internal medicine.	Be able to apply knowledge in their professional activities.	Ability to effectively form a communication strategy in practice	To be responsible for professional practical activity, its improvement
GC 3	Knowledge and understanding of the subject area and understanding of professional activity.	Have deep knowledge of the structure of professional activity.	Be able to carry out professional activities that require updating and integration of knowledge.	Ability to effectively form a communication strategy in professional activities	To be responsible for professional development, ability to further professional training with a high level of autonomy.
GC 4	Ability to adapt and act in a new situation.	Know the types and methods of adaptation, principles of action in a new situation.	To be able to apply means of self-regulation, to be able to adapt to new situations (circumstances) of life and activity.	Establish appropriate connections to achieve results.	Be responsible for the timely use of self-regulatory methods.
GC 5	Ability to make an informed decision.	Know the tactics and strategies of communication, laws	Be able to make informed decisions, choose ways and strategies to communicate to	Use communication strategies and interpersonal skills	Be responsible for the choice and tactics of communication

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
		and ways of communicative behavior.	ensure effective teamwork		
GC 6	Ability to communicate in the state language both orally and in writing, the ability to communicate in a foreign language (mostly English) at a level that ensures effective professional activity.	Have a perfect knowledge of the state language. Have basic knowledge of a foreign language.	Be able to apply knowledge of the state language, both orally and in writing. Be able to communicate in a foreign language.	Use the state language in professional and business communication and in the preparation of documents. Use a foreign language in professional activities.	Be responsible for the choice and tactics of communication
GC 7	Skills in the use of information and communication technologies; ability to search, process and analyze information from various sources	Have in-depth knowledge in the field of information and communications applied technologies are engaged in professional activities.	Be able to use information and communication technologies in the professional field, which requires updating and integration of knowledge.	Use information and communication technologies in professional activities	To be responsible for fluency in the state language, for the development of professional knowledge with the use of a foreign language.
GC 8	Definiteness and perseverance in terms of tasks and	Know the responsibilities and ways to	Be able to set goals and objectives to be persistent and conscientious in	Establish interpersonal relationships to effectively	Be responsible for the development of

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
	responsibilities	accomplish the tasks.	the performance of duties	perform tasks and responsibilities	professional knowledge and skills. Responsible for the quality of the tasks
GC 9	The ability to act socially responsibly and consciously	Know your social and community rights and responsibilities.	To form one's personal consciousness, to be able to act in accordance with it	Ability to convey one's public and social position	Be responsible for your civic position and activities
GC 10	The desire to preserve the environment	Know the problems of environmental protection and ways to preserve it.	Be able to form requirements for themselves and others to preserve the environment	Make proposals to the relevant bodies and institutions on measures to preserve and protect the environment	Be responsible for the implementation of environmental protection measures within its competence.

Professional competencies (PC)

PC 1	Skills of interviewing and clinical examination of the patient	Have specialized knowledge about body, internal organs and systems, know the standard schemes of questioning and physical examination of the patient.	Be able to conduct a conversation with the patient, his examination, palpation, percussion, auscultation on the basis of algorithms and standards.	Effectively form a communication strategy when communicating with the patient. Enter information about the state of human health in the relevant medical records	Be responsible for the quality collection of information received on the basis of interviews, surveys, surveys and for timely assessment of the general health of the patient
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№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
PC 2	Ability to determine the required list of laboratory and instrumental studies and evaluate their results	Have specialized knowledge about body, internal organs and systems; standard methods of laboratory and instrumental research defined by the program.	Be able to analyze the results of laboratory and instrumental studies and on their basis to assess information about the patient's condition	To form and inform the patient and specialists about the necessary list of laboratory and instrumental research.	Be responsible for taking decisions on the process of laboratory and instrumental research results evaluation
PC 3	Ability to establish a preliminary and clinical diagnosis of the disease	Have specialized knowledge about body, internal organs and systems;; disease diagnosis algorithms; algorithms for isolating leading symptoms and syndromes; methods of laboratory and instrumental examination; knowledge of human	Be able to conduct a physical examination of the patient; be able to make an informed decision about the selection of a leading clinical symptom or syndrome; be able; to appoint laboratory and instrumental examination of the patient by applying standard methods	On the basis of normative documents to keep medical documentation of the patient (inpatient card, etc.).	Adhering to ethical and legal norms, be responsible for making informed decisions and actions regarding the correctness of the established syndromic diagnosis of the disease

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
		condition assessment.			
PC 7	Ability to diagnose emergencies	Have specialized knowledge about body, internal organs and systems; knowledge standard methods of human examination	Be able, in the absence of information, using standard methods, by making an informed decision to assess the human condition and the need for emergency care	Under any circumstances, in compliance with the relevant ethical and legal norms to make an informed decision to assess the human condition and the organization of essential medical measures depending on the human condition.	To be responsible for the timeliness and effectiveness of medical measures to diagnose emergencies
PC 11	Skills to perform medical manipulations	Have specialized knowledge about body, internal organs and systems; knowledge of algorithms for performing medical manipulations provided	Be able to perform medical manipulations provided by the program	It is reasonable to form and bring to the patient, specialists conclusions about the need for medical manipulations	To be responsible for the quality of medical manipulations

№	Competence	Knowledge	Skills	Communication	Autonomy and responsibility
		by the program			

Postrequisites. "Nursing" is that type of discipline which requires knowledge, skills and abilities acquired after the study of this discipline. The study of this clinical discipline - propedeutics of internal medicine, propedeutics of pediatrics and general surgery, with which the program of nursing is integrated, has begun. In turn, "Nursing" forms the basis for students to study the following clinical disciplines - internal medicine, general practice (family medicine), medical psychology, infectious diseases, oncology, anesthesiology and intensive care, which involves "vertical" integration with these disciplines and skills to apply knowledge from the main methods of examination of the patient in the process of further training and in professional activity.

3.Learning outcomes.

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Integrative final program learning outcomes (PLO), the formation of which is facilitated by the study of the discipline:

PLO 1. To be able to analyze information, make informed decisions, be able to acquire modern knowledge. Establish appropriate connections to achieve goals. Be responsible for the timely acquisition of modern knowledge.

PLO 2. To have specialized conceptual knowledge acquired in the learning process. Be able to solve complex problems and problems that arise in professional activities. Ability to effectively form a communication strategy in professional activities; clear and unambiguous communication of own conclusions, knowledge and explanations that substantiate them to specialists and non-specialists. Responsible for making decisions in difficult conditions.

PLO 3. To have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, ability to further professional training with a high level of autonomy.

PLO 4. To know the types and methods of adaptation, principles of action in a new situation. To be able to apply means of self-regulation, to be able to adapt to new situations (circumstances) of life and activity. Establish appropriate connections to achieve results. Be responsible for the timely use of self-regulatory methods.

PLO 5. To know the tactics and strategies of communication, laws and methods of communicative behavior. Be able to make informed decisions, choose ways and strategies to communicate to ensure effective teamwork. Be able to make informed decisions, choose ways and strategies to communicate to ensure effective

teamwork. Organize the work of medical staff in a team, unit, institution. Be responsible for the choice and tactics of communication.

PLO 6. To have sufficient knowledge of the state language and basic knowledge of a foreign language. Be able to apply knowledge of the state language, both orally and in writing, be able to communicate in a foreign language. Use the state language in professional and business communication and in the preparation of documents. Use a foreign language in professional activities. To be responsible for fluency in the state language, for the development of professional knowledge.

PLO 7. To know the basics of information and communication technologies and be able to apply them in professional activities.

PLO 8. To know the professional duties, to be able to define the purpose and tasks at their performance, to bear responsibility for qualitative performance of the set tasks.

PLO 9. Know your social and community rights and responsibilities. Develop a sufficient level of legal culture necessary to maintain a balance of relations between the subjects of medical relations and respect for human rights in the field of health care. Be responsible for your civic position and activities.

PLO 10. To know the problems of environmental protection and ways to preserve it. Be able to form requirements for themselves and others to preserve the environment. Make proposals to the relevant authorities and institutions on measures to preserve and protect the environment. Be responsible for the implementation of environmental protection measures within its competence.

PLO 11. To collect data on patient complaints, medical history, life history, conduct a physical examination of the patient, using standard research algorithms based on knowledge about the person, his organs and systems, in a health care facility or outside it.

PLO 12. To evaluate information on the diagnosis, using a standard procedure based on the results of laboratory and instrumental studies (according to list 4).

PLO 13. To highlight the leading clinical symptom or syndrome (according to list 1: 2-7, 9-10, 12, 15-17, 19-28, 3-31, 34, 36-37, 39-43, 45-52, 55-56) by making an informed decision. To establish the most probable or syndromic diagnosis of the disease (according to the list 2: 1-4, 9, 41, 44, 45, 49, 51, 53, 58, 59, 63, 65, 69, 71, 72, 7678, 80-87, 90-96, 98, 100-102, 106, 108, 110, 112, 115, 116, 129, 132, 134, 137, 140, 145, 149, 152, 156, 162, 165). Assign a laboratory and / or instrumental examination of the patient (according to the list 4: 1-19, 25-35, 44-49, 52) by making an informed decision, by comparison with standards. Carry out differential diagnosis of diseases (according to list 2) by making an informed decision, according to a certain algorithm, using the most probable or syndromic diagnosis, laboratory and instrumental examination of the patient. Establish a preliminary clinical diagnosis (according to list 2: 1-4, 9, 41, 44, 45, 49, 51, 53, 58, 59, 63, 65, 69, 71, 72, 7678, 80-87, 90-96, 98, 100-102, 106, 108, 110, 112, 115, 116, 129, 132, 134, 137, 140, 145, 149, 152, 156, 162, 165) by making an informed decision and logical analysis.

PLO 17. To establish a diagnosis of emergency (according to list 3: 2-4, 7-8, 11, 16-24, 31) by making an informed decision and assessment of the person's

condition, under any circumstances (under health care facilities and beyond), including in emergency situations, in field conditions, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

PLO 21. To perform medical manipulations (according to list 5: 1-4, 8, 10-14) on the basis of a previous clinical diagnosis and / or indicators of the patient's condition by making an informed decision and using standard techniques.

Integrative final program learning outcomes, the formation of which is facilitated by the study of the discipline:

- to carry out professional activity in social interaction based on humanistic and ethical principles;
- identify future professional activities as socially significant for human health;
- apply knowledge of general and professional disciplines in professional activities;
- comply with the norms of sanitary and hygienic regime and safety requirements in carrying out professional activities;
- use the results of independent search, analysis and synthesis of information from various sources to solve typical problems of professional activity;
- argue information for decision-making, be responsible for them in standard and non-standard professional situations;
- adhere to the principles of deontology and ethics in professional activities;
- to carry out professional communication in modern literary language, to use skills of oral communication in a foreign language, analyzing texts of professional orientation and to translate foreign language information sources;
- adhere to the norms of communication in professional interaction with colleagues, management, work effectively in a team;
- to analyze the information received as a result of scientific researches, to generalize, systematize and use it in professional activity.

Integrative final program learning outcomes, the formation of which is facilitated by the study of the discipline:

- to carry out professional activity in social interaction based on humanistic and ethical principles;
- identify future professional activities as socially significant for human health;
- apply knowledge of general and professional disciplines in professional activities;
- comply with the norms of sanitary and hygienic regime and safety requirements in carrying out professional activities;
- use the results of independent search, analysis and synthesis of information from various sources to solve typical problems of professional activity;
- argue information for decision-making, be responsible for them in standard and non-standard professional situations;
- adhere to the principles of deontology and ethics in professional activities;

- to carry out professional communication in modern literary language, to use skills of oral communication in a foreign language, analyzing texts of professional orientation and to translate foreign language information sources;

- adhere to the norms of communication in professional interaction with colleagues, management, work effectively in a team;

- to analyze the information received as a result of scientific researches, to generalize, systematize and use it in professional activity.

Learning outcomes for the discipline:

1. Collect data on patient complaints, medical history, life history (including professional history), in a health care facility, its unit or at the patient's home, using the results of the interview with the patient, according to the standard scheme of the patient. Under any circumstances (in the health care facility, its unit, at the patient's home, etc.), using knowledge about the person, his organs and systems, according to certain algorithms.

2. Evaluate information about the patient's condition in the health care institution, its unit, using a standard procedure, using knowledge about the person, his organs and systems, based on the results of laboratory and instrumental studies: general blood test, sputum analysis, pleural fluid analysis, general urine analysis, Zymnitsky urine analysis, Nechiporenko urine analysis, blood proteins and their fractions, C-reactive protein, blood glucose, glycosylated hemoglobin, blood lipids and lipoproteins and their fractions, serum ferritin and iron, creatinine, glomerular filtration rate, blood electrolytes, blood aminotransferases, total blood bilirubin and its fractions, coagulogram, blood uric acid, blood alkaline phosphatase, study of external respiratory function, standard ECG (in 12 leads), endoscopic examination of the bronchi, endoscopic examination of the bronchi echocardiography, methods of instrumental visualization of organs of the abdominal cavity, methods of instrumental visualization of the thoracic cavity, methods of instrumental visualization of the urinary system, methods of instrumental visualization of the spine, bones and joints.

3. Assign laboratory and / or instrumental examination of the patient by making an informed decision, based on the most probable syndrome diagnosis, according to standard schemes, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms.

4. Identify signs of emergency situation (hypertensive crisis, acute respiratory failure, acute heart failure, acute coronary syndrome, acute bleeding, cardiac arrest, collapse, loss of consciousness, renal colic, biliary colic, acute cardiac arrhythmias) by making an informed decision and assessment human condition, under any circumstances (at home, on the street, health care facility, its units), using standard methods of physical examination and possible history, knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms.

5. Provide emergency pre-medical care, under any circumstances, using knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on the detection of an emergency (cardiac arrest) for a limited time according to with certain tactics, using standard schemes (indirect heart massage and artificial lung ventilation).

6. Perform medical manipulations (perform intravenous injections, indirect heart massage, artificial respiration, restore airway patency, record a standard ECG in 12 leads, measure blood pressure) in a medical institution, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision and using standard methods.

7. Under the conditions of the health care institution, its subdivision to keep medical documentation on the patient (outpatient card, medical history), using standard technology, on the basis of and regulations.

8. Carry out preventive measures, in the conditions of the health care institution, its subdivision on the basis of data on the state of health of patients and on the presence of environmental impact on it, using existing methods, within the primary health care, regarding: activities and recreation; primary disease prevention; prevention of bad habits; promoting a healthy lifestyle.

9. Determine the necessary mode of stay of the patient in a health care facility on the basis of selected clinical symptoms and syndromes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms, by making informed decisions according to existing algorithms and standard schemes.

3. Content and logistic of the discipline

Module 1 ("Structure and Main Tasks of Patient Care in the General Therapeutic Patient Care System" of the "Nursing" discipline (total number of years / number of ECTS credits))	30 hours / 1 credits	Practical classes №1-10 Topics for self-study № 1-10
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The course includes 10 topics, which are divided into 3 thematic modules.

According to the curriculum, 3 credits (90 hours) are allocated for nursing practice, 60 hours of which are classroom training (in the form of practical classes) and 30 hours of independent work of students. Nursing practice is conducted directly during the semester in three departments of the hospital - therapeutic, surgical, pediatric - and is represented by three modules, which in turn are divided into seven content modules. Nursing practice is carried out by conducting practical classes and independent work of students. For nursing practice once a week is allocated 4 hours of student work, which consists of two parts: 1) mastering theoretical material on the features of the department, the basic manipulations of the nurse and their practice under the supervision of a teacher (in the form of 4-hour practical classes - classroom) practices); 2) independent work of the student in the departments of the hospital and consolidation of the acquired knowledge and skills (independent work of students).

Modul 1. Nursing of the patients at the therapeutic department

Content module 1. Principles of activity and organization of work of a nurse of a therapeutic hospital.

Specific goals:

- determine the content and basic principles of professional activity of a nurse,
- to demonstrate mastery of skills of the organization of work of the nurse of reception and general therapeutic department,
- to acquire professional skills of the nurse of the manipulation room, - to improve the skills of caring for patients with a therapeutic profile,
- demonstrate mastery of the basic principles of medical ethics and deontology.

Topic 1. General and special nursing the therapeutic patients. Structure and functions of the therapeutic department and its subdivisions. Moral, ethical and deontological grounds of medical specialist formation. Features of use of deontological principles at the untreatable disease.

Topic 2. Inquiring patient.

Topic 3. General visual inspection of the patient. Hygiene of patient.

Topic 4. Observation and care of patients in the presence of respiratory dysfunction. The main complaints. Features of medical history and life, general examination.

Topic 5. Observation and care of patients in the presence of respiratory dysfunction. Assessment of the patient's condition and vital signs. First aid.

Topic 6. Observation and care of patients in the presence of cardiovascular dysfunction. The main complaints. Features of medical history and life, general examination.

Topic 7. Observation and care of patients in the presence of cardiovascular dysfunction. Assessment of the patient's condition and the main vital signs. First aid.

Topic 8. Observation and care of patients with disorders of gastrointestinal tract. The main complaints. Features of medical history and life, general examination. First aid. Organization of medical nutrition of patients.

Topic 9. Administration of the main kinds of medications. The use of basic types of drugs, including analgesics for incurable patients. Parenteral administration of drugs.

Topic 10. General and special nursing seriously sick, untreatable and agonizing patients with different age in therapeutic practice. Reanimation. Features of emergency care and the simplest methods of cardiopulmonary resuscitation for untreatable patients.

Types of education according to the curriculum are: a) practical classes, b) independent work of students, c) consultations.

Practical classes provide a theoretical and practical of the main issues of the topic and the acquisition of the following practical skills of studying the discipline "Nursing":

I. Master modern knowledge about:

- the most important etiological and pathogenic factors in the formation of pathological processes in the human body;

- methodical bases of clinical examination of the patient, schemes of research of the patient and writing of the history of illness;
- methodical bases of physical examination of the patient;
- interrogation, inspection;
- the most important symptoms and syndromes in the clinic of internal diseases and their semiological interpretation;
- preparation of patients to the most important laboratory-instrumental researches.

II. Be able to apply the acquired knowledge in practical situations.

1. Demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of internal medicine.

2. Conduct surveys and physical examinations of patients and analyze their results in the clinic of internal medicine.

3. To make the plan of inspection of the patient at a typical course of the most widespread therapeutic diseases.

4. To prepare patient to basic laboratory and instrumental research methods.

5. Identify the leading symptoms and syndromes in the clinic of internal medicine.

6. Demonstrate the ability to methodically accurately present the results of the patient's examination in the form of a medical history with a justification for the syndrome diagnosis.

7. Use Greek-Latin medical terms in the practice of a specialist.

8. Demonstrate mastery of skills in organizing the mode of stay of patients in the departments of therapeutic, pediatric, surgical profile.

9. Demonstrate first aid skills for patients with disorders of the cardiovascular, respiratory, digestive, urinary and endocrine systems.

Independent work

1. Basic principles and organizational principles of care for therapeutic patients.

2. Structure and functions of the therapeutic hospital and its main departments.

3. Organization of work of the therapeutic departments of the hospital.

4. The basic rules of communication with the sick person, the rules of the description of the patient and the general examination.

5. Body temperature, rules of its measurement and registration.

6. Determination of the main indices of hemodynamics and respiration.

7. The use of basic types of medications.

8. Carrying out the simplest physical therapy procedures.

9. General and special care for the critically ill and agonizing.

10. Organization of treatment and nutrition of patients.

Individual tasks

1. Supervision of the patient with fever.

2. Recording a temperature list. 3.

3. Establishing the type of fever and reporting the clinical incident to the class.

4. Preparing and conducting interviews with the patients.

5. Completion of the main accounting documentation - the annual of production practice and the summary report.

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 at intermediate control classes and final control of the discipline.

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

The route for obtaining materials: Department of propaedeutic to internal medicine / for students / Full-time education / medicine / 2 course / Educational materials / or through the link <https://www.vnmdu.edu.ua/> Department of propaedeutic to internal medicine #. Access to the materials is carried out through the student's corporate account s000XXX@vnmdu.edu.ua

5. Forms and methods of monitoring academic performance

Current control in practical studies	Methods: oral, written survey, testing, electronic survey, solving situational problems, interpreting of the results of laboratory and instrumental studies, and evaluating their results.
Control of mastering the thematic section of the discipline at intermediate control lessons	Methods: oral or written survey, electronic testing, situational problem solving, control of practical skills
Final semester control (credit) at the end of the III-IV semester	According to the Regulation of the Academic process in National Pirogov Memorial Medical University (link https://www.vnmdu.edu.ua/en/general-information)
Final control of the discipline - grading test	Methods: oral questioning (according to the Regulation of the Academic process in National Pirogov Memorial Medical University (link https://www.vnmdu.edu.ua/en/general-information))
Learning success diagnostic tools	Theoretical questions, clinically-oriented situational tasks, practical tasks, practical skills demonstration

LIST OF QUESTIONS FOR DIFFERENTIAL TEST

- 1 To prepare the proper disinfective solution and carrying out sanitary clearing bedside-table and window-sills in a ward.
- 2 To prepare the proper disinfective solution and carrying out sanitary clearing up of manipulation.
- 3 To prepare the proper disinfective solution and to carry out clearing medical reusing tools (cupping-glasses, thermometers, rectal tube and bedpan).
- 4 To inquire a patient and fill the title page of hospital chart.
- 5 To recognize exhaustive symptoms (vomiting, dyspnea) accompany untreatable condition.
- 6 To give psychological help to untreatable patients and their relatives during disease and after death of patient.
- 7 To take an axillary temperature at a patient and recording data on the temperature chart.
- 8 To review a patient at the presence of scab and pediculosis.
- 9 To measure a patient waist, height in standing and sitting positions, to measure patient weight and calculate the body mass index.
- 10 To prepare bath for sanitary treatment of patient, to carry out this treatment and disinfecting the bath after the use.
- 11 To show the method of transporting patient on stretcher and shifting him on a bed.
- 12 To show skills of the use by a functional bed and assisting the patient at the asthma attack, collapse, chest pain, stomach pain.
- 13 To inquire the patient and select basic complaints.
- 14 To take a radial pulse, to do a conclusion about basic its properties.
- 15 To take lower extremities pulse, to do a conclusion about its accordance to the norm.
- 16 To measure arterial blood pressure, to do a conclusion about its accordance to the norm.
- 17 To obtain a respiratory rate, to do a conclusion about basic its properties.
- 18 On the form of temperature chart to mark pulse, blood pressure, temperatures of body values offered by a teacher, to do a conclusion about their accordance to the norm and about the type of temperature curve.
- 19 To change the bed linen and the patient underwear at the bedridden patient.
- 20 To decompose on demonstration table the offered medications by groups according to the method of administration, to name the basic methods of administration.
- 21 To show irrigating the ears, nose, eyes on a plaster cast.
- 22 To prepare necessary solutions and show the rules of handling a one-use syringe after its application.
- 23 To prepare necessary equipments and show applying a warm compress.
- 24 To show applying a hot water bottle and an ice bag.

- 25 To show applying mustard plasters.
- 26 To show the feeding procedure of the bedridden patient.
- 27 To prepare the necessary equipment for a cleansing enema, to show the technique of its administering on a plaster cast.
- 28 To show assisting a patient in bedpan or male urinal use on a plaster cast.
- 29 To prepare specimen container for urine collection for Zimnitskiy test, to give the proper instruction to the patient.
- 30 To prepare necessary equipments and provide oral, nose, ears hygiene for seriously ill patient.
- 31 To prepare necessary equipments and prevent bedsores.
- 32 To show performing cardiopulmonary resuscitation (artificial ventilation of lights, indirect massage of heart) on a phantom.
- 33 To consult untreatable patients and their relatives about medical and non-medical support of the untreatable disease including medical care, nutrition, social, legal and mental support.
- 34 To inform patient and his relatives about bad news.
- 35 To be able to deal with a deceased person in accordance with applicable law.

6. Assessment criteria

Knowledge assessment is carried out in accordance with the Regulations of the Academic processing National Pirogov Memorial Medical University (link <https://www.vnmu.edu.ua/en/general-information>)

Continuous assessment	On a four point system of traditional assessments: 5 «excellent», 4 «good», 3 «satisfactory», 2 «unsatisfactory»
Midpoint separation assessment	On a four-point system of traditional assessments
Control of practical skills	According to the four-point system of traditional assessments
Pass-fail exam	On a 200-point scale (the arithmetic turn grade for the semester is converted into points) Credited: 120 to 200 points Not credited: less than 120 points (See Grading Scale)
Final control of the discipline	Exam grade: 71-80 points - "excellent" 61-70 points - "good" 50-60 points - "satisfactory" Less than 50 points - "unsatisfactory" / did not pass
Discipline assessments:	Current academic assessment - from 72 to 120 points (conversion of the average traditional

	assessment of practical class on a 120-point scale): 60% of the grade for the discipline Final control - from 50 to 80 points: 40% of the grade for the discipline Individual work - from 1 to 12 points From 122 to 200 points in total.
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For the individual task the student receives from 2 to 6 points:

1. Weekly observation of a patient with fever - 6 points.
2. Filling the temperature sheet - 2 points.
3. Establishing the type of fever and clinical case report in class - 4 points.
4. Preparation and conduct of interviews with patients - 2 points.
5. Filling in the main reporting documentation - the diary of industrial practice and the final report - 2 points.

Discipline Score Scale: National and ECTS

The sum of grades for all types of educational activities	Score ECTS	Score on a national scale	
		For exam, course project (work), practice	for credit test
180-200	A	excellent	credited
170-179,9	B	good	
160-169,9	C		
141-159,9	D	satisfactory	
122-140,99	E	satisfactory	-
120-140,99	E	-	credited
119-61	FX	unsatisfactory with the possibility of reassembly	is not credited with the possibility of reassembling
1-60	F	unsatisfactory with a mandatory reexamination of discipline	is not credited with mandatory reexamination of discipline

Criteria for student knowledge assessment

Assessment of oral / written response during the current assessment

The grade "*excellent*" is given to a student who has deeply and comprehensively mastered the theoretical material, competently and logically teaches it. He is fluent in Latin terminology, clearly answers non-standard questions on the topic of the lesson, is able to link the material of the topic with previously studied sections, which indicates knowledge of the recommended literature and the ability to analyze the material studied, and clearly demonstrates the importance of theoretical knowledge for practice.

The grade "*good*" is given to a student who knows and has a good theoretical material, teaches it correctly, does not allow inaccuracies in the answer, is able to reveal the topic from the standpoint of its medical significance and practical application, but the answers do not go beyond the textbook, guidelines.

A grade of "*satisfactory*" is given to a student who knows the basic concepts and definitions of the studied topic, but admits significant inaccuracies or has difficulty in formulating the answer, does not understand the medical aspects of the topic, can not relate theoretical material to practice.

The grade "*unsatisfactory*" is given to a student who does not know the theoretical foundations of the topic, makes gross mistakes in answering, does not understand the basic concepts and definitions, can not explain the importance of theoretical material for practical medicine.

Assessment of practical skills during the current assessment

The grade "*excellent*" is given to a student who knows the course and sequence of independent practical work to perform a practical tasks such as subjective and objective examination of the patient, show the ability for interpretation of the results of additional methods of examination, demonstrates the correct implementation of the necessary practical skills, and correctly formulates the syndrome and name possible of diseases, which can be accompanied by it.

A grade of "*good*" is given to a student who admits inaccuracies in the performance of practical skills, but is able to identify errors and can demonstrate the implementation of practical skills in general.

Assessment of "*satisfactory*" is given to a student who knows the basics of the practical task, but has difficulty during subjective and objective examination of the patient, show low ability for interpretation of the results of additional methods of examination, can not demonstrate the correct sequence of practical skills, can not fully interpret the results of additional methods of investigation.

The grade "*unsatisfactory*" is given to a student who cannot demonstrate the performance of practical skills, experiences significant difficulties in interpretation of the results of additional methods of examination, violates the procedure for performing of any practical work.

Assessment of intermediate control (credit)

Intermediate control is credited if the student has mastered a certain section of the discipline in full, as evidenced by the current assessment of each practical lesson, and attended a lecture course. To assess the intermediate control, the calculation of the arithmetic average mark of the traditional assessment for the semester is performed.

Assessment of the oral answer during the final control (exam)

The grade "*excellent*" is given in the case when the student knows the content of the lesson and lecture material in full, illustrating the answers with various examples; gives comprehensively accurate and clear answers without any leading questions; spreads the material without errors and inaccuracies; freely solves problems and performs practical tasks of varying complexity.

The grade of "*good*" is given when the student knows the content of the lesson and understands it well, answers the questions correctly, consistently and

systematically, but they are not exhaustive, although the student answers additional questions without errors; solves all problems and performs practical tasks, experiencing difficulties only in the most severe cases.

The grade "*satisfactory*" is given to the student on the basis of his knowledge of the whole content of the lesson and with a satisfactory level of his understanding. The student is able to solve modified (simplified) problems with the help of leading questions; solves problems and performs practical skills, experiencing difficulties in simple cases; is not able to systematically state the answer on his own, but answers directly asked questions correctly.

The grade "*unsatisfactory*" is given in cases when the knowledge and skills of the student do not meet the requirements of "satisfactory" grade.

The calculation of individual points is carried out on the basis of the Regulation of the Academic processing National Pirogov Memorial Medical University (link <https://www.vnmu.edu.ua/en/general-information>)

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 National Pirogov Memorial Medical University and the principles of academic integrity (link <https://www.vnmu.edu.ua/en/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.

Requirements for preparation for practical classes.

The student should be prepared for a practical lesson. 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 National Pirogov Memorial Medical University (link <https://www.vnmu.edu.ua/en/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 processing National Pirogov Memorial Medical University ((link <https://www.vnmdu.edu.ua/en/general-information>) at the time of workout schedule (published on the website of the department <https://www.vnmdu.edu.ua/ Department of propedeutic to internal medicine #>) to the teacher on duty. To work out missed lesson student must answer questions in writing or orally to the topic of the lesson. The reworking of missed lectures is carried out after providing a thesis of lecture material, or writing an abstract, or preparing own presentation on the topic of missed lecture.

The procedure for admission to the discipline final control is given in the Regulation of the Academic processing National Pirogov Memorial Medical University (link <https://www.vnmdu.edu.ua/en/general-information>). Students, who do not have missed practical classes, lectures and received an average traditional grade of at least "3", are allowed to pass 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 processing National Pirogov Memorial Medical University (link <https://www.vnmdu.edu.ua/en/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.vnmdu.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.vnmdu.edu.ua/ General information>). The main training platforms for studying are Microsoft Team and Google Meets. Practical classes and lectures, exercises and consultations during distance learning is published on the website of the department ([https://www.vnmdu.edu.ua / Department of propedeutic to internal medicine / news](https://www.vnmdu.edu.ua/ Department of Microbiology / Student or https://www.vnmdu.edu.ua / Department of propedeutic to internal medicine / 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 (<https://www.vnmdu.edu.ua/ Department of propedeutic to internal medicine / for students>). Consultations are hold on twice a week according to the schedule.

Basic literature

1. Patients Care (Practical course) : textbook / O.V. Kovalyova, V. N. Lesovoy, R. S. Shevchenko et al. - Kyiv : AUS Medicine Publishing, 2015 – p. 4-27.
2. Керівництво з клінічного обстеження хворого та написання історії хвороби : навчальний посібник для студентів медичних вузів, які навчаються українською, англійською або російською мовою – 4-те видання / Укл. : Ю.М. Мостовой, А.В. Демчук, Т.В.Константинович, Т.Д. Данілевич, В.Л. Побережець –Київ : Центр ДЗК, 2018. – 120 с.

Additional literature

1. Dossey B.M., Keegan L., Guzzetta C.E. Holistic Nursing. A Handbook for Practice BOSTON: Jones and Bartlett Publishers. - 2005. — 942 p.
2. De Laune S., Ladner P. Fundamentals of Nursing 4th edition. — Delmar, 2010. — 1438p.
3. Bickley, Lynn S. Bates' pocket guide to physical examination and history taking / Lynn S. Bickley, Peter G. Szilagy. — 7th ed. 2013, p 430.
4. Potter Patricia A., Perry Anne Griffin, Stockert Patricia A., Hall Amy M. (Eds.) Fundamentals of Nursing 8th edition. — Elsevier, 2013. — 1397 p.
5. Hood Lucy J. (ed.) Leddy & Pepper's Conceptual Bases of Professional Nursing 8th edition. — Wolters Kluwer, 2014. — 1591 p.
6. Harlan C.A. Global Health Nursing: Narratives From the Field Springer Publishing Company, LLC, 2015. — 344 p.
7. Solheim Jeff. Emergency Nursing: The Profession, the Pathway, the Practice IGMA Theta Tau International Honorary Society of Nursing, 2016. — 463 p.
8. Berman A.T., Snyder S., Frandsen G. Kozier & Erb's Fundamentals of Nursing Pearson, 2016. — 1542 p.
9. Ackley B.J., Ladwig G.B., Makic M.B.F. Nursing Diagnosis Handbook: An Evidence-Based Guide to Planning Care St. Louis: Mosby, 2016. — 1061 p.
10. Perrin K., MacLeod C. Understanding the Essentials of Critical Care Nursing New York: Pearson. 2017. — 640 p.
11. Williams P.A. Study Guide for deWit's Fundamental Concepts and Skills for Nursing Boston: Elsevier, 2018. — 325 p.
12. McEwen M., Wills E.M. Theoretical basis for nursing Philadelphia: Wolters Kluwer, 2019. — 699 p.

Electronic resources:

1. <https://www.youtube.com/user/MEDCRAMvideos>
2. <https://pubmed.ncbi.nlm.nih.gov/>
3. <http://www.meddean.luc.edu/lumen/meded/medicine/puimonar/pd/contents.htm>
4. <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>
5. <http://www.blaufuss.org/>
6. <http://meded.ucsd.edu/clinicalmed/>
7. <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>

8. <http://gastroresource.com/gitextbook/en/default.htm>
9. <http://meded.ucsd.edu/clinicalmed/>
10. <http://library.med.utah.edu/kw/ecg/>
11. <http://www.ecglibrary.com/>
12. <http://www.blaufuss.org/>
13. http://archive.nbuu.gov.ua/portal/soc_gum/vzhdu/2011_57/vip_57_1_3.pdf
14. http://archive.nbuu.gov.ua/portal/chem_biol/mosv/2012_4/DATA/ARTICLE22.PDF
15. http://archive.nbuu.gov.ua/portal/soc_gum/NPD/2012_1/2NERA NOV.PDF.

9. The time table and distribution of groups with assigned teachers are published on the webpage of the department (<https://www.vnmu.edu.ua>/ Department of propedeutic to internal medicine / for students).

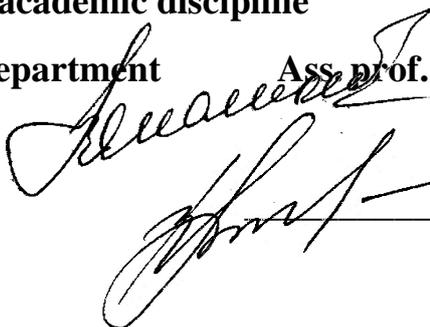
10. Questions to the intermediate and final semester control (credit) of the discipline are published on the webpage of the department <https://www.vnmu.edu.ua>/ Department of propedeutic to internal medicine / for students).

The syllabus of the discipline "Propedeutic to internal medicine" was discussed and approved at the meeting of the department of propedeutic to internal medicine (record № 1, dated "26" August 2022).

Responsible for the academic discipline

Acting head of the department

Ass. prof. of HEI Halyna Tomaschkevych



Ass. prof. Oksana Viltaniuk