BOGOMOLETS NATIONAL MEDICAL UNIVERSITY

Educational and Scientific Institute of Medicine

Department **of Propaedeutics of Internal Medicine**

«APPROVED»

Vice-Rector of higher education institution
Bogomolets National Medical University of
scientific-pedagogical and educational work

Professor Vlasenko O.M. _____

«31» _____ 2026 p.

WORK PROGRAM OF THE EDUCATIONAL DISCIPLINE

ОК 20 «PROPAEDEUTICS OF INTERNAL MEDICINE, including nursing practice, basic medical skills in the therapeutic department»

Second (Master's) Level of Higher Education

Field of Knowledge 22 «Healthcare»

Specialty 222 «Medicine»

Educational Program: Educational-Professional Program «Medicine»

2026 – 2027 Academic Year

Work program of the educational discipline «Propaedeutics of Internal Medicine, including nursing practice, basic medical skills in the therapeutic department»

for the second (Master's) level of higher education

Field of Knowledge 22 «Healthcare», Specialty 222 «Medicine»

Qualification «Master of Medicine. Doctor»

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The work program was approved at the meeting of the Department of Propaedeutics of Internal Medicine of Bogomolets NMU

Protocol № 1 / 26 from «26» August 2026.

Head of the Department,
Doctor of Medical Sciences, Professor V.Z. Netiazhenko

Approved at the meeting of the Cyclical Methodological Commission on Therapeutic Disciplines of Bogomolets NMU

Protocol № 1 from «27» August 2026

Head of the CMC on Therapeutic Disciplines
Doctor of Medical Sciences, Professor O.B. Iaremenko

1. Description of the educational discipline

<table>
<tr><td rowspan="2">Name of indicators</td><td rowspan="2">Field of knowledge, direction of training, educational and qualification level</td><td>Characteristics of the educational discipline</td></tr>
<tr><td>Daily-time study</td></tr>
<tr><td>Number of credits – 5.5</td><td>Field of knowledge:
22 «Healthcare»</td><td>Normative
OK 20</td></tr>
<tr><td>Modules – 3</td><td rowspan="4">Specialty:
222 «Medicine»</td><td rowspan="2">Year of preparation – 3-rd</td></tr>
<tr><td>Content modules – 11</td></tr>
<tr><td>Individual research task - writing a case history</td><td>Semester – V-VI</td></tr>
<tr><td>The total number of hours – 165</td><td>Lectures – 20 hours</td></tr>
<tr><td rowspan="3">Week hours for daily-time study:
Auditorium – 3.2
Independent work of the student – 1.6</td><td rowspan="3">Educational qualification level:
«Master of Medicine. Doctor»</td><td>Practical classes – 90 hours</td></tr>
<tr><td>Independent work - 55 hours, including independent work – 4,5 work</td></tr>
<tr><td>Type of control - final control</td></tr>
</table>

Annotation. The discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills in the therapeutic department" is one of the first disciplines of the clinical stage of undergraduate medical training, during which students master methods of diagnosing internal diseases and basic medical skills, as well as familiarization with the main duties and professional actions of a nurse in the therapeutic departments of a hospital.

The discipline consists of two structural parts - OK 20.1 "Propaedeutics of internal medicine" and OK 20.2 "Nursing practice, basic medical skills in the therapeutic department".

Propaedeutics of internal medicine is an educational clinical discipline that studies the methods and techniques of clinical examination of a patient, the features of professional communication between a doctor and a patient, subjective and objective manifestations of diseases (symptoms and syndromes), the causes and mechanisms of their occurrence and development (semiology) in order to establish a diagnosis.

Nursing practice (with basic medical skills) involves mastering the basic manipulation techniques of a nurse in a therapeutic department of a hospital, as well as studying hygienic, preventive and therapeutic measures that are within the competence of nursing staff and are used to create comfortable conditions for the patient's stay in a medical institution, promote the patient's speedy recovery, and prevent the development of complications. Since the study of

this component occurs after mastering the basic issues of propaedeutics of internal medicine, basic practical skills include the ability to interpret the main results of a general clinical examination of the patient (physical, basic laboratory and instrumental).

The subject of study of the component "propaedeutics of internal medicine" is a set of theoretical and practical issues aimed at mastering by the student the basic methods of examining a patient in the clinic of internal diseases and the rules for establishing a syndromic diagnosis of the most common diseases of internal organs.

The subject of study of the component "Nursing practice, basic medical skills in the therapeutic department" is a set of functional responsibilities and professional actions of a nurse of a therapeutic hospital, as well as a set of measures aimed at creating favorable conditions for the successful treatment of patients.

In accordance with this sequence of training, the discipline program is structured into three sections (modules), each of which is divided into content modules:

Module 1. Basic methods of examination of patients in the internal medicine clinic
Content modules:

1. Introduction to the internal medicine clinic. Basic rules of questioning and examination of the patient.
2. Physical and instrumental methods of researching the state of the broncho-pulmonary system.
3. Physical methods of studying the cardiovascular system.
4. Instrumental methods of research of the cardiovascular system.
5. Basic methods of research of organs of the gastrointestinal tract and kidneys.

Module 2. Symptoms and syndromes in diseases of internal organs
Content modules:

1. Main symptoms and syndromes in diseases of the cardiovascular system.
2. Main symptoms and syndromes in respiratory diseases.
3. Main symptoms and syndromes in diseases of the gastrointestinal tract and excretory system.
4. Pathology of the blood system and interpretation of the results of laboratory examination methods.

Module 3. Nursing practice and basic medical skills in the therapeutic department
Content modules:

1. Principles of activity, organization of work and professional actions of a nurse of a therapeutic hospital.
2. Basic medical skills in assessing the patient's condition and conducting examinations in the therapeutic department.

The educational process is organized according to the European Credit Transfer System, based on a combination of unit-based learning technologies and assessment credits - units of measurement of the student's academic workload necessary to master a discipline or its section.

2. Purpose, expected learning outcomes and criteria for assessing learning outcomes

2.1. The general purpose of studying the discipline "Propaedeutics of Internal Medicine, including Nursing Practice, Basic Medical Skills in the Therapeutic Department" is to achieve the main goals of the components of the discipline**:**

- The purpose of studying the component of the educational discipline "Propaedeutics of Internal Medicine" is to form in the student the foundations of clinical thinking and acquire professional competencies in examining the patient and assessing the main manifestations of diseases of internal organs in compliance with the principles of medical ethics and deontology**.**

- The purpose of studying the component of the educational discipline "Nursing Practice, Basic Medical Skills in the Therapeutic Department" is to master the basic techniques of the professional activity of a nurse and improve the skills of conducting basic medical examinations of the patient and interpreting their results based on deep knowledge and understanding of the peculiarities of the functioning of the sick person's body in compliance with the principles of medical ethics and deontology.

2.2. The main objectives of studying the discipline are:

– Mastering the theoretical knowledge necessary for the detection of human diseases

– Mastering practical techniques and methods of physical and laboratory and instrumental examination of patients

– Mastering general methodological approaches to clinical examination of the patient

– Diagnosis of individual internal human diseases with their typical manifestations

– Mastering the basic knowledge of the duties of paramedical staff of therapeutic departments of the hospital

– Acquiring basic practical skills of a nurse of therapeutic departments of the hospital

– Deepening the theoretical knowledge necessary for organizing comfortable conditions and providing the necessary list of diagnostic and therapeutic measures at all stages of the patient's stay in the hospital

– Formation of moral, ethical and deontological qualities in students during professional communication with the patient

2.3. Competencies and learning outcomes, the formation of which is facilitated by the discipline.

The discipline contributes to the formation of the main competencies defined in the educational and professional training program in the specialty "Medicine", namely:

integrated competence: the ability to solve complex problems, including those of a research and innovative nature in the field of medicine, the ability to continue training with a high degree of autonomy.

general competencies (GC):

GC 1. The ability to abstract thinking, analysis and synthesis.

GC 2. The ability to learn and master modern knowledge.

GC 3. The ability to apply knowledge in practical situations.

GC 4. Knowledge and understanding of the subject area and understanding of professional activity.

GC 5. The ability to adapt and act in a new situation.

GC 6. The ability to make informed decisions.

GC 7. The ability to work in a team.

GC 8. Ability to interact with others.

GC 10. Ability to use information and communication technologies.

GC 11. Ability to search, process and analyze information from various sources.

GC 12. Determination and persistence in the tasks set and responsibilities assumed.

GC 13. Awareness of equal opportunities and gender issues.

GC 14. Ability to exercise one's rights and obligations as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of man and citizen in Ukraine.

GC 15. The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.

professional competencies (PC):

PC 1. Ability to collect medical information about the patient and analyze clinical data.

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

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

PC 4. Ability to determine the necessary work and rest regime in the treatment and prevention of diseases.

PC 5. Ability to determine the nature of nutrition in the treatment and prevention of diseases.

PC 6. Ability to determine the principles and nature of treatment and prevention of diseases.

PC 7. Ability to diagnose emergency conditions.

PC 8. Ability to determine tactics and provide emergency medical care

PC 9. Ability to conduct medical and evacuation measures.

PC 10. Ability to perform medical manipulations

Program Competency Matching Matrix

OK 20 Propaedeutics of Internal Medicine,

including nursing practice, basic medical skills in the therapeutic department

Програмні компетентності		Освітні компоненти																					
		ОК 1	ОК 2	ОК 3	ОК 4	ОК 5	ОК 6	ОК 7	ОК 8	ОК 9	ОК 10	ОК 11	ОК 12	ОК 13	ОК 14	ОК 15	ОК 16	ОК 17	ОК 18	ОК 19	ОК 20	ОК 21	ОК 22
ЗАГАЛЬНІ КОМПЕТЕНТНОСТІ	ЗК 1	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 4	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 5	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 6	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 7	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 9	+	+			+	+	+	+		+	+	+	+				+	+	+			
	ЗК 10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 13	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 14	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	ЗК 15	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ФАХОВІ КОМПЕТЕНТНОСТІ	ФК 1																				+	+	+
	ФК 2									+											+	+	+
	ФК 3																				+	+	+
	ФК 4														+	+					+	+	+
	ФК 5														+	+					+	+	+
	ФК 6																+				+	+	+
	ФК 7																				+	+	+
	ФК 8																				+	+	+
	ФК 9																				+		
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	ФК 19																+						
	ФК 20																+						
	ФК 21						+	+	+		+	+	+	+		+	+	+	+	+		+	+
	ФК 22																						
	ФК 23						+	+	+	+	+	+	+	+		+	+	+	+	+		+	+
	ФК 24						+	+	+		+	+	+	+				+	+	+		+	+
	ФК 25	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+		+	+

Matrix of ensuring program learning outcomes (PLN)

OK 20 Propaedeutics of internal medicine,

including nursing practice, basic medical skills in the therapeutic department

Програмні результати навчання	Освітні компоненти																				
	ОК 1	ОК 2	ОК 3	ОК 4	ОК 5	ОК 6	ОК 7	ОК 8	ОК 9	ОК 10	ОК 11	ОК 12	ОК 13	ОК 14	ОК 15	ОК 16	ОК 17	ОК 18	ОК 19	ОК 20	ОК 21	ОК 22
ПРН 1	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+		+		+
ПРН 2	+	+				+	+	+	+	+	+	+	+	+	+	+	+	+		+		
ПРН 3	+	+				+	+	+	+	+	+	+	+	+	+	+	+	+		+		
ПРН 4					+	+	+											+		+	+	
ПРН 5		+																+		+	+	+
ПРН 6																						+
ПРН 7																	+	+		+		+
ПРН 8																		+		+	+	
ПРН 9																				+		+
ПРН 10														+	+							+
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ПРН 18			+	+																+		+
ПРН 19																+						
ПРН 20																+						
ПРН 21		+	+	+		+	+			+	+	+	+	+	+	+	+	+		+	+	+
ПРН 22		+	+	+		+	+			+		+	+	+	+	+	+			+	+	+
ПРН 23			+	+				+							+	+		+	+		+	
ПРН 24			+	+			+		+	+		+	+	+	+					+	+	+
ПРН 25							+			+		+	+	+	+	+				+	+	
ПРН 26															+		+			+		
ПРН 27	+	+					+			+		+	+	+	+	+				+	+	+
ПРН 28																+	+			+		
ПРН 29																					+	

Learning outcomes

As a result of studying the discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills in the therapeutic department", the student should:

I. Master modern **knowledge** regarding:

- the most important etiological and pathogenetic factors of the formation of pathological processes in the human body;
- the basics of clinical examination of the patient, the scheme of patient examination and writing a medical history;
- the methodological basics of questioning and physical examination of the patient - examination, palpation, percussion, auscultation;
- the most important symptoms and syndromes in the clinic of internal diseases and their semiological interpretation;
- clinical and diagnostic interpretation of the indicators of the most important laboratory and instrumental studies;
- medical Greco-Latin terminology in determining the main manifestations of diseases and in use in professional vocabulary.

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

1. Demonstrate mastery of the moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of internal diseases.
2. Conduct a survey and physical examination of patients and analyze their results in the clinic of internal diseases.
3. Draw up a plan for examining a patient in the typical course of the most common therapeutic diseases.
4. Analyze the results of basic laboratory and instrumental research methods.
5. Identify leading symptoms and syndromes in the clinic of internal diseases.
6. Demonstrate the ability to methodically and correctly present the results of a patient's examination in the form of a medical history with a justification for a syndromic diagnosis.
7. Use Greek-Latin medical terms in the practical activities of a specialist.
8. Demonstrate mastery of the skills of organizing the regime of stay of patients in departments of a therapeutic profile.
9. Demonstrate first aid skills for patients with disorders of the cardiovascular, respiratory, and digestive systems.

As a result of studying the component “Nursing practice, basic medical skills in the therapeutic department”, the student must:

– Demonstrate the technique of performing subcutaneous, intramuscular, intravenous injections
– Demonstrate the rules for filling transfusion systems and conducting intravenous infusions
– Demonstrate the methodology and technique of taking a general blood test, blood test for sugar content, for biochemical and bacteriological studies
– Determine the blood glucose content using a glucometer, ketone bodies in urine using an express method

– Interpret the main indicators of general and biochemical blood tests
– Record an electrocardiogram in standard, enhanced and chest leads, its decoding for the analysis of basic elements
– Interpret the basic requirements for disinfection, pre-sterilization cleaning of instruments, conduct quality control of pre-sterilization cleaning of instruments for the presence of blood and detergents
– Master the basic rules preparing the patient for endoscopic examinations (gastroscopy, sigmoidoscopy, colonoscopy), ultrasound examination of the abdominal organs
– Demonstrate the technique of using various methods of intestinal cleansing
– Collect feces for the presence of helminths, occult blood, coprogram
– Demonstrate the rules for collecting urine for studies using the methods of Zimnytsky, Nechyporenko, Addis-Kakovsky, Amburger
– Interpret the main indicators of general urine analysis, studies using Zimnytsky and Nechyporenko
– Methodically and correctly prepare probes, catheters, endoscopes for medical manipulations
– Interpret the mechanisms of therapeutic action on the body of physiotherapeutic procedures (hydrotherapeutic, light, electromagnetic), having mastered the knowledge of the methods of their implementation

Integrative **final program learning outcomes** (PLO), the achievement of which is facilitated by the academic discipline:

PLO 1. To have thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. Be responsible for professional development, the ability to further professional training with a high level of autonomy.
PLO 2. Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient to solve professional tasks in the field of health care.
PLO 3. Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.
PLO 4. Identify and identify leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data from the patient's history, examination data from the patient, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
PLO 5. Collect complaints, anamnesis of life and disease, assess the patient's psychomotor and physical development, the state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information on the diagnosis (according to list 4), taking into account the patient's age.
PLO 7. Assign and analyze additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4), patients with diseases of organs and systems of the body for differential diagnosis of diseases (according to list 2).

PLO 8. Determine the main clinical syndrome or what determines the severity of the victim's condition (according to list 3) by making a reasoned decision and assessing the person's condition under any circumstances (in a healthcare facility, outside it), including in an emergency and combat situations, in the field, in conditions of lack of information and limited time.
PLO 9. Determine the nature and principles of treatment of patients (conservative, surgical) with diseases (according to list 2), taking into account the patient's age, in a healthcare facility, outside it and at the stages of medical evacuation, including in the field, based on a preliminary clinical diagnosis, adhering to relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, if necessary, expanding the standard scheme, be able to justify personalized recommendations under the supervision of a head physician in a medical facility.
PLO 14. Determine tactics and provide emergency medical care in emergency situations (according to list 3) in conditions of limited time in accordance with existing clinical protocols and treatment standards.
PLO 15. Organize the provision of medical care and medical evacuation measures to the population and military personnel in emergency situations and combat operations, including in field conditions.
PLO 16. Form rational medical routes for patients; organize interaction with colleagues in their own and other institutions, organizations and institutions; apply tools for promoting medical services in the market, based on an analysis of the needs of the population, in the conditions of the functioning of a health care institution, its unit, in a competitive environment.
PLO 17. Perform medical manipulations (according to list 5) in a medical institution, at home or at work based on a preliminary clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, adhering to relevant ethical and legal norms.
PLO 18. Determine the state of functioning and limitations of a person's vital activities and the duration of incapacity with the execution of relevant documents, in a health care institution based on data on the disease and its course, the characteristics of the person's professional activity, etc. Maintain medical documentation for the patient and the population based on regulatory documents.
PLO 21. Find the necessary information in professional literature and databases of other sources, analyze, evaluate and apply this information.
PLO 22. Apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex health care problems.
PLO 24. Organize the necessary level of individual safety (one's own and those cared for) in the event of typical dangerous situations in the individual field of activity.
PLO 25. Clearly and unambiguously communicate one's own knowledge, conclusions and reasoning on health care problems and related issues to specialists and non-specialists.
PLO 26. Manage work processes in the field of health care that are complex, unpredictable and require new strategic approaches, organize the work and professional development of personnel taking into account the acquired skills of effective teamwork, leadership positions, appropriate quality, accessibility and fairness, ensuring the provision of integrated health care.
PLO 27. Communicate fluently in the state and English languages, both orally and in writing, to discuss professional activities, research and projects.
PLO 28. Make effective decisions on health care problems, assess the necessary resources, take

into account social, economic and ethical consequences.

The criteria for assessing educational achievements are implemented in the assessment norms, which establish the relationship between the requirements for knowledge, skills and abilities and the assessment indicator in points. Learning outcomes are assessed during current, intermediate and final control. During current control, the assessment is carried out according to the traditional scale (“excellent” – 5, “good” – 4, “satisfactory” – 3, “unsatisfactory” – 2), after which the assessment is converted into points.

Generalized criteria for evaluating program-learning outcomes:

Evaluation according to the 4-point system	Evaluation criteria
5 («exellent»)	The student shows special creative abilities, knows how to acquire knowledge independently, finds and processes the necessary information without help of a teacher, knows how to use the acquired knowledge and skills to make decisions in non-standard situations, convincingly argues the answers, possesses at least 90% knowledge of the topic during the survey, performance of tasks and all types of control.
4 («good»)	The student possesses the studied amount of material, applies it in practice, solves exercises and problems in standardized situations, independently corrects errors, the number of which is insignificant, possesses at least 80% of knowledge on the topic during the survey, tasks and all types of control.
3 («satisfactory»)	The student reproduces the majority of the theoretical material, demonstrates knowledge and understanding of the main provisions with the help of the teacher, can analyze the educational material, correct errors, among which there are a significant number of essential ones, possesses at least 60% knowledge of the topic during the survey, performing tasks and all types of control
2 («unsatisfactory»)	The student possesses the material at the level of elementary recognition, experiences difficulties in reproducing the majority of the elements of the educational material, possesses less than 60% knowledge of the topic both during the survey and in all types of control

* Criteria for the current assessment of individual types of student work in practical classes are presented in section 10.

The organization of the educational process is carried out in accordance with the requirements of the European Credit Transfer and Accumulation System, which is based on determining the educational workload of a higher education applicant necessary to achieve certain learning outcomes and is recorded in credits (based on a combination of teaching technologies by sections and credit assessment credits - units of measurement of the student's educational workload necessary to master a discipline or its section).

3. Program of the academic discipline

Section "Propaedeutics of internal medicine"

Module 1. "BASIC METHODS OF PATIENT EXAMINATION IN THE CLINIC OF INTERNAL DISEASES"

Content module 1. Introduction to the internal medicine clinic. Basic rules of questioning and examination of the patient.

Topic 1. The role and place of propaedeutics of internal medicine among the clinical disciplines of the therapeutic profile.

Propaedeutics of internal medicine as an introduction to clinical practice. The history of the development of propaedeutics of internal medicine in Ukraine. Contribution of well-known clinicians G.A. Zakhar'in, S.P. Botkin, T.G. Yanovsky, V.P. Obraztsov, M.G. Kurlov, M.M. Gubergritsa, M.D. Strazheska, B.S .Shklyara in the development of the domestic propaedeutic school. The main goals and objects of study of propaedeutic medicine. The main methods of examination of patients in the clinic of internal diseases: physical, instrumental, laboratory.

Topic 2. Scheme of medical history. The anamnestic part of the medical history.

Medical history of illness: its main sections and rules of compilation. The method of questioning the patient, its diagnostic value, the systematicity of the conduct taking into account the individual, intellectual and psychological characteristics of the patient. The main structural parts of the anamnesis (passport part, patient complaints, disease anamnesis, questioning of organs and systems, life anamnesis). The role of domestic scientists-clinicians in the development of the professional art of interviewing the patient.

Topic 3. General examination of the patient. Examination of individual parts of the body.

Methodology of conducting a general examination of the patient. Determination of the general condition of the patient (types of general conditions of the patient and their criteria), assessment of his state of consciousness (types of consciousness disorders), posture, gait (types of posture and gait in various pathologies), position in bed (active, passive, forced, their types) . Physique and main criteria of normal constitutional types. Skin, its properties (color, elasticity, moisture, temperature, rash elements, nevi, scars, scars) and pathological changes; assessment of the condition of hair and nails. Subcutaneous tissue (obesity, distribution, types of obesity), condition of muscles and musculoskeletal system. Sequence of palpation of lymph nodes. The diagnostic value of the symptoms obtained during the general examination of the patient.

Methodology and sequence of examination of the head and neck, limbs and trunk, abdomen and chest. The diagnostic value of the symptoms obtained during the examination of individual parts of the patient's body.

Content module 2. Physical and instrumental methods of researching the state of the broncho-pulmonary system.

Topic 4. Main complaints of patients with respiratory diseases. Examination and palpation of the chest.

The sequence of clarification and detailing of the most important subjective symptoms and their semiological evaluation. Peculiarities of finding out the anamnesis of the disease and life. The technique of conducting a static and dynamic examination of the chest. Determination of topographic areas and physiological formations on the chest and their diagnostic value. Physiological and pathological forms of the chest, their criteria. Pathological forms of breathing (Cheyne-Stokes, Biot, Kussmaul, Grokko), their characteristics and causes. The sequence of chest palpation, determination of voice tremor and semiological evaluation of its results.

Topic 5. Percussion as a method of physical examination of the lungs. Methodology and technique of lung percussion.

The history of the formation of percussion as a method of physical examination. The role of percussion in determining the state of the lungs. Classification of percussion by goals, by the force of percussive impact, by the method of conducting. Varieties and conditions of occurrence of percussive tones. The main topographic areas, lines and landmarks on the surface of the chest. The main tasks and methods of conducting comparative and topographic percussion of the lungs. The causes of dull, tympanic, dull-tympanic, box percussion tones above the lungs. Algorithm for comparative lung percussion. Characteristic consistency and diagnostic value of the obtained data. The sequence of conducting topographic percussion of the lungs (determination of the standing height of the tops of the lungs in front and behind, the width of the Krenig fields, the lower border of the lungs, active and passive mobility of the lower lung edge, Traube's space).

Topic 6. Auscultation as a method of physical examination of the lungs. Lung auscultation technique. Basic and additional respiratory sounds.

The history of the development of auscultation as a method of physical examination of the patient. Rules for using a stethoscope and stethoscope. Methodology of preliminary comparative lung auscultation. Basic respiratory noises: vesicular and bronchial breathing, their quantitative and qualitative changes, conditions of occurrence. The method of determining bronchophonia and its diagnostic value. Classification of additional respiratory noises (wheezing, crepitation, pleural friction noise). Causes of dry and wet wheezing, their types. Diagnostic significance of consonant and non-consonant wheezing. Conditions for crepitation and pleural friction noise. Differential signs of additional respiratory sounds. Additional auscultatory phenomena (Hippocrates splash noise, falling drop noise, "water pipe" noise), their causes and diagnostic significance.

Content module 3. Physical methods of research of the cardiovascular system.

Topic 7. Physical methods of research of the cardiovascular system. Questioning and general examination of patients with pathology of the cardiovascular system, examination and palpation of the atrial region.

The diagnostic value of the main physical methods of examination of the circulatory system (questioning, examination, palpation, percussion, auscultation). The sequence of clarifying and detailing the complaints of a patient with cardiovascular pathology. Peculiarities of collecting medical and life anamnesis. Conducting a general examination of a cardiology patient.

The sequence of examination of the heart area. The diagnostic value of a heart hump, pulsations in the heart and neck area. Methodology and technique of palpation of the precardial area:

apical impulse (localization, area, force, height, resistance, displaceability, causes of negative apical impulse); heart attack, causes of its appearance and method of detection; pulsation of the abdominal part of the aorta, liver, Plesh's symptom, pulsation of the ascending part of the aorta and its arch, detection of pulsation of the pulmonary trunk. Presystolic and systolic tremor (symptom of "cat's purr"), causes of occurrence.

Topic 8. Study of pulse (arterial, venous, pseudocapillary) and blood pressure. Percussion determination of the heart borders

Vessels available for determination of pulse (arterial, venous). Rules and sequence of the study of the pulse on the radial artery. Determination of the main properties of the pulse (synchronicity, rhythmicity, frequency, tension, filling, height, speed, uniformity), detection of deficiency, lability, paradoxicality, dicroticity of the pulse. Rules for measuring blood pressure on the upper and lower extremities. Basic methods of blood pressure determination. Korotkov's concept of tones. The main parameters determining systolic and diastolic blood pressure. The concept of pulse and average dynamic blood pressure. Normal blood pressure values according to WHO/MTH criteria.

The concept of relative and absolute heart dullness, their percussive definition (sequence: right, upper, left border) and changes in pathological conditions. Structures forming a vascular bundle, percussive determination of its width.

Topic 9. Auscultation of the heart: heart tones, their splitting and bifurcation of tones, additional tones, 3-part rhythms (quail rhythm, gallop rhythm).

Methods and techniques of auscultation of the heart in accordance with the traditions of the Kyiv therapeutic school. Main and additional points of auscultation. Places of projection and best auscultation of heart valves. Mechanism of formation of heart sounds. Reasons for strengthening and weakening of tones. Tone accent. Tone changes by timbre (clap, muffled, velvety, metallic, cannon tones). The concept of splitting and bifurcation of heart sounds, their causes and time characteristics. Additional tones are the opening tone of the mitral valve, gallop tones (protodiastolic, mesodiastolic and presystolic gallop rhythm). Methodological features of auscultation of the heart - directly with the ear, stethoscope, phonendoscope: in the position of the patient standing, lying down, in a state of rest and after physical exertion.

Topic 10. Auscultation of the heart: organic and functional heart sounds.

Causes and classification of heart murmurs (intracardiac and extracardiac, organic and functional, systolic and diastolic, expulsion, filling, regurgitation). The rules of listening and the algorithm for characterizing heart sounds: relation to the phases of cardiac activity, the best place for listening, venues, nature, intensity, shape, connection with heart sounds, changes depending on the position of the body (vertical, horizontal) and physical exertion. Determination of auscultatory symptoms of Sirotinin-Kukoverov and Udintsev. The concept of functional murmurs and their differences from organic heart murmurs. Extracardiac murmurs. Pericardial friction murmur, pleuropericardial murmur, cardiopulmonary murmur. The noise of "spindle" on the jugular vein. Traube's double tone and Vinogradov-Durozier murmur on the femoral artery: method of determination, causes and mechanism of occurrence.

Content module 4. Electrocardiographic method of studying the cardiovascular system.

Topic 11. Electrocardiographic method of heart function research. Methodology of ECG registration and decoding. ECG signs of hypertrophy of the atria and ventricles.

Clinical and diagnostic value of the electrocardiography method. Biophysical and physiological foundations of ECG. Structure and function of drivers of heart rhythm and conduction system. The main and additional ways of impulse conduction. Methodology and technique of ECG registration: standard leads, unipolar leads from the extremities, chest leads. The main elements of the ECG: the value of the duration and amplitude of the waves, the duration of intervals and segments in the norm. Algorithm and technique of ECG decoding. ECG signs of hypertrophy of the right and left atria, right and left ventricles.

Topic 12. Electrocardiographic examination of patients with disorders of automatism and excitability.

The main structures that ensure the automatic function of the heart. ECG signs of automaticity disorders: sinus tachycardia, sinus bradycardia, sinus arrhythmia, sinus node weakness syndrome. Types of extrasystoles. ECG signs of sinus, atrial, atrio-ventricular and ventricular extrasystoles. Differentiation of right and left ventricular extrasystoles. Classification of ventricular extrasystoles. Types of allorhythms.

Topic 13. Electrocardiographic examination of patients with conduction disorders. ECG signs of combined heart rhythm disorders.

Time of conduction of the impulse through different departments of the conduction system of the heart. ECG signs of sinoatrial and intraatrial blockade. Classification and ECG signs of atrio-ventricular blockade. Morgagni–Adams–Stokes attacks, their causes and clinical manifestations. Intraventricular blockades, differentiation of blockade of the left and right bundle of His bundle. Acquaintance with the indications for conducting and the rules for performing electroimpulse therapy.

ECG and clinical signs of atrial fibrillation and flutter. Clinical manifestations and ECG signs in ventricular flutter, paroxysmal ventricular tachycardia, ventricular fibrillation.

Content module 5. Basic methods of research of organs of the gastrointestinal tract and kidneys

Topic 14. Questioning and examination of patients with diseases of the gastrointestinal tract. Examination and superficial palpation of the abdomen.

The sequence of clarifying and detailing the complaints of a patient with a pathology of the gastrointestinal tract. Peculiarities of collecting medical and life anamnesis. Changes in the appearance of the patient with various pathologies of the gastrointestinal tract. The sequence of the examination of the abdomen (shape, dimensions, symmetry, condition of the skin and navel, fatness, condition of subcutaneous vessels, pattern of hair). The concept of topographic zones and topographic lines on the surface of the abdomen. Tasks and methods of superficial palpation of the abdomen (palpation to the arc of the greater and lesser radius, checking for symptoms of peritoneal irritation, detection of separation of rectus abdominis muscles, presence of umbilical hernias and hernias of the white line of the abdomen). Methods of detecting ascites (survey, percussion, fluctuations).

Topic 15. Deep sliding methodical palpation of the intestines and stomach.

The role of domestic clinicians in the development of the palpation method of abdominal organs. Projection of parts of the gastrointestinal tract on the surface of the abdomen. The sequence of conducting deep sliding methodical palpation of the intestinal sections according to the Obraztsov-Strazheska method: normal parameters of the sigmoid, cecum, terminal ileum, ascending, descending and transverse colon. Methods of determining the lower border of the stomach (percussion, palpation, stetoacoustic, by the sound of a splash). Rules of palpation of the goalkeeper.

Topic 16. Deep sliding methodical palpation of the liver, spleen, kidneys.

Percussion determination of the size and borders of the liver according to the methods of Obraztsov and Kurlov. Reasons for increasing and decreasing the size of the liver. The technique of deep sliding palpation of the liver. Characteristics of the normal palpation picture and possible changes of the lower edge of the liver in pathology. The technique of percussive determination of the size of the spleen, the main reasons for its increase. Rules for palpation of the spleen. The diagnostic value of determining Pasternacki's symptom. Methods of palpation of the kidneys in standing and lying positions.

Module 2. "SYMPTOMS AND SYNDROMES IN DISEASES OF INTERNAL ORGANS"

Content module 6: Main symptoms and syndromes in diseases of the cardiovascular system

Topic 17. Mitral and aortic heart defects: main symptoms and syndromes based on clinical and instrumental examination methods.

Definition and spread of heart defects, frequency of damage to heart valves.

The main causes and mechanisms of the development of mitral insufficiency and mitral stenosis. Hemodynamic changes in mitral heart defects. The value of the Kitaev reflex. The main complaints of patients with mitral stenosis and mitral valve insufficiency. Data of examination, palpation of the atrial region and percussion in mitral heart defects. Auscultatory picture of mitral stenosis and mitral insufficiency. ECG and FCG signs of mitral heart defects. X-ray signs of mitral defects. The concept of mitral valve prolapse.

Etiological factors and mechanisms of development of aortic insufficiency and aortic stenosis. Hemodynamic changes in aortic heart defects. The main complaints of patients with aortic stenosis and aortic valve insufficiency. Data of examination, palpation of the atrial region and percussion in aortic heart defects. Auscultatory picture of stenosis of the aortic orifice and aortic insufficiency. ECG and FCG signs of aortic heart defects. X-ray signs of aortic defects.

Topic 18. Main symptoms and syndromes in hypertension and symptomatic arterial hypertension. Hypertensive crises.

WHO/MTH definitions for arterial hypertension, essential hypertension (hypertensive disease) and symptomatic hypertension. The main risk factors of hypertension and mechanisms of its development. Classification of hypertensive disease according to blood pressure level and target organ damage. The main complaints of a hypertensive patient, examination data, palpation of the precardial region, percussion of the borders of cardiac dullness and auscultation of the heart. ECG signs of myocardial changes in hypertension. Symptomatic hypertension. Complicated and uncomplicated hypertensive crises.

Topic 19. Ischemic heart disease: main symptoms and syndromes in angina pectoris and myocardial infarction.

Definition of the term "coronary heart disease" (CHD). Main pathogenetic mechanisms and risk factors of CHD. Modern classification of CHD. Definition and main clinical manifestations of angina pectoris. Functional classes of angina pectoris. Methods of objective diagnosis of angina pectoris (ECG, daily ECG monitoring, stress tests, coronary angiography, heart scintigraphy). Unstable angina, concept of acute coronary syndrome. Definition and main clinical manifestations of acute myocardial infarction. Data of physical methods of examination of patients with acute myocardial infarction. Periodization of myocardial infarction. ECG changes in various forms of myocardial infarction in different periods of its course. Modern laboratory markers of myocardial necrosis.

Definition of the concept of heart failure, modern classification of heart failure (stages of heart failure, hemodynamic variant, functional classes of patients). The main clinical manifestations of heart failure.

Content module 7. Main symptoms and syndromes in respiratory diseases.

Topic 20. Main clinical manifestations of chronic bronchitis and bronchial asthma. Bronchial obstruction syndromes, increased airiness of the lungs. Chronic obstructive pulmonary disease.

Definition and main mechanisms of development of chronic bronchitis and bronchial asthma. Main complaints and physical examination data of patients with chronic bronchitis and bronchial asthma. Syndrome of bronchial obstruction, mucociliary insufficiency and increased airiness of the lungs. Basic methods of instrumental diagnostics. Laboratory signs of bronchial asthma based on general blood analysis and sputum examination. Definition and main clinical manifestations of bronchiectasis. The concept of chronic obstructive pulmonary disease.

Topic 21. Pneumonia and pleurisy: symptoms and syndromes based on clinical, instrumental and laboratory research methods. Syndromes of compaction of lung tissue, accumulation of fluid and air in the pleural cavity, respiratory failure

Definition and modern classification of pneumonias (hospital, non-hospital, aspiration, pneumonia in immunocompromised persons), classification by the nature of lung damage (pleuropneumonia, bronchopneumonia, interstitial pneumonia). The main etiological factors of pneumonia. Complaints of patients and peculiarities of these physical methods of examination of patients with pleuro- and bronchopneumonia. Criteria for a severe course of pneumonia. Possibilities of instrumental diagnosis of pulmonary tissue compaction. Laboratory signs of inflammatory syndrome in pneumonia. Pulmonary tissue compaction syndrome.

Causes of inflammation of the pleural sheets. Ways of formation and circulation of intrapleural fluid in normal and pathological conditions. Peculiarities of complaints of a patient with dry and exudative pleurisy, differences in physical examination data in various forms of pleurisy. Syndromes of fluid and air accumulation in the pleural cavity. Possibilities of instrumental diagnostics. Pleural puncture: study of the contents of the pleural cavity. The difference between exudate and transudate according to physical and laboratory examination. The main clinical manifestations and stages of respiratory failure syndrome in lung diseases.

Content module 8. Main symptoms and syndromes in diseases of the

gastrointestinal tract and excretory system.

Topic 22. Clinical-instrumental and laboratory research of patients with chronic gastritis, peptic ulcer of the stomach and duodenum. Main symptoms and syndromes.

Definition and modern classification of gastritis and peptic ulcer of the stomach and duodenum. The main etiological factors of these diseases. Prevalence of helicobacteriosis, conditions of damage to the mucous membrane of the stomach and duodenum. The main complaints of patients with chronic gastritis and peptic ulcer. Peculiarities of the pain syndrome depending on the localization of the pathological focus and the state of the acid-producing function of the stomach. Manifestations of dyspeptic syndrome in chronic gastritis and peptic ulcer of the stomach and duodenum. Possibilities of instrumental and laboratory examination of patients. The main complications of peptic ulcer of the stomach and duodenum. Gastric bleeding syndrome. The main symptoms and syndromes in patients with enteritis and colitis: intestinal dyspepsia syndrome, malabsorption and maldigestion syndromes, irritable bowel syndrome.

Topic 23. Main symptoms and syndromes in diseases of the hepatobiliary system: chronic cholecystitis, cholangitis, cholelithiasis; main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis

Definition and principles of modern classification of chronic cholecystitis and cholangitis. The concept of biliary tract dyskinesias and their types. The main complaints of patients with cholecystitis and cholangitis. Data of physical examination of patients with chronic cholecystitis and cholangitis. The concept of cutaneous-visceral and viscero-cutaneous symptoms in diseases of the biliary tract. Instrumental research methods for biliary tract pathology, laboratory diagnostics and results of duodenal sounding. Gallstone disease: main complaints and physical examination data. Features of pain syndrome. The main manifestations of jaundice syndrome and cholestasis syndrome, their laboratory signs.

Definition and principles of modern classification of chronic hepatitis and liver cirrhosis. The main etiological factors of the development of hepatitis and liver cirrhosis. The main complaints of patients with hepatitis and liver cirrhosis, features of examination results and physical examination data. Morphological and biochemical signs of liver damage. Concept of histological activity index and Child-Pugh criteria. Syndromes of portal hypertension, liver failure and hepatoileal syndrome with liver damage. The main complications of liver cirrhosis.

Topic 24. Main symptoms and syndromes in kidney diseases - acute and chronic glomerulonephritis and pyelonephritis. Chronic kidney disease

Definition and modern classification of glomerulonephritis and pyelonephritis. The main mechanisms of development of glomerulonephritis and pyelonephritis. Complaints of patients with kidney damage and results of physical examination of patients with glomerulonephritis and pyelonephritis. Edema syndrome and arterial hypertension syndrome in kidney diseases. Possibilities of instrumental diagnosis of kidney pathology. Laboratory examination of urine, analysis and interpretation of results of general clinical analysis of urine, examination of urine according to Nechiporenko, Ambyurzhe, Adis-Kakovskii, Zimnytskyi. Urinary, nephrotic syndromes in kidney diseases. The results of a biochemical study of blood in kidney pathology. Renal failure and renal colic syndromes. Definition and classification of chronic kidney disease.

Content module 9. Pathology of the blood system and interpretation of the results of laboratory examination methods.

Topic 25. Main symptoms and syndromes in anemia, hemorrhagic syndromes. General clinical blood analysis.

Definition and modern classification of anemias. Basic laboratory criteria of anemia. The mechanism of iron deficiency in the body and the occurrence of iron deficiency anemia. Main clinical manifestations of sideropenic and general hypoxic syndromes in iron deficiency anemia. Laboratory criteria of iron deficiency anemia. Causes and pathogenesis of B12 foliodeficiency anemia. Manifestations of the general anemic syndrome, syndromes of damage to the digestive organs, funicular myelosis and damage to the peripheral blood in B12-folate-deficient anemia. Main laboratory signs of B12-folate-deficient anemia. Congenital and acquired hemolytic anemias: manifestations of general anemia, jaundice syndromes, splenomegaly and hemosiderosis of internal organs. Basic laboratory criteria of hemolytic anemias and features of bilirubin metabolism disorders. Analysis and interpretation of a general clinical blood test.

The main components of the blood coagulation system. Developmental factors of bleeding and causes of hemorrhagic syndromes - thrombocytopenia, coagulopathy, hemorrhagic vasculitis. Characteristics of the hemorrhagic syndrome in hemophilia, thrombocytopenic purpura and Schönlein-Henoch disease. Basic methods of laboratory diagnosis of hemorrhagic syndromes

SECTION 2. Nursing practice

Module 3. NURSING PRACTICE AND BASIC MEDICAL SKILLS IN THE THERAPEUTIC DEPARTMENT

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

Topic 1. Moral-ethical and legislative principles of nursing in Ukraine. Organization of the work and duties of the nurse of the main structural divisions of the therapeutic hospital

Ethical foundations of nursing. Code of Ethics of a nurse of Ukraine. Code of the International Council of Nurses. Oath of Florence Nightingale. Moral and legal responsibility of a nurse before society. Guarantees and protection of legal rights of a nurse. List of orders of the Ministry of Health of Ukraine, which regulate the activities of the nurse of the therapeutic department.

Structure and functions of a therapeutic hospital. The main units of the therapeutic hospital: reception department, therapeutic profile department, diagnostic departments, clinical laboratories. Responsibilities of the nurse of the main units of the therapeutic hospital. List of documentation maintained by a nurse in various departments of a therapeutic hospital. Basic rules for storing medicinal products and tools. Responsibilities of the nurse to support the medical and protective and sanitary and hygienic regimes of the therapeutic department.

Topic 2. Responsibilities and actions of the post and manipulation nurse of the therapeutic department

Organization of the work of a nurse. The documentation to be filled out by the post nurse and

the rules for its management. Registration of patients entering the department. Thermometry, measurement of blood pressure, pulse research with entering data into a temperature sheet. Work with the appointment sheet. Rules for providing patients with tablet and soluble medicines.

Organization of the work of the nurse of the manipulation office. Basic documentation of the manipulation cabinet. Rules for storage and accounting of medicinal products and medical instruments in the manipulation room. Prescribing, accounting and storage of potent, narcotic and poisonous substances in accordance with the current order.

Methodology and technique of taking a general blood test, blood sugar test, biochemical and bacteriological studies. Preparation of the manipulation table for work. The technique of performing subcutaneous, intramuscular, intravenous injections. Calculation of the dose of a soluble antibiotic. Rules for filling systems for transfusion and intravenous infusions. Basic requirements for disinfection, pre-sterilization cleaning of instruments. Quality control of pre-sterilization cleaning of instruments for the presence of blood and detergents. Sterilization of instruments for multiple use.

Topic 3. Peculiarities of the operation of the procedure room of the therapeutic department and the responsibilities of the nurse regarding their provision

Organization of the work of the procedure room nurse. Rules for storing medical instruments in the treatment room. The main types of compresses. Rules for applying warming, cold, medical compresses. The technique of using a heating pad, ice pack. Processing and disinfection of means for multiple use. The use of medicinal leeches, their storage conditions. Rules for using pocket and stationary inhalers. Methodology and technique of supplying humidified oxygen and using an oxygen pillow.

Familiarization with the conduct of physiotherapeutic procedures (hydrotherapeutic, light, electromagnetic): the method of releasing them, monitoring patients and providing first aid in case of deterioration of the patient's condition during the conduct of physiotherapeutic procedures.

Content module 2. Basic medical skills in assessing the patient's condition and conducting examinations in the therapeutic department.

Topic 4. Assessment of the general condition of a patient with diseases of the broncho-pulmonary system based on physical, instrumental and laboratory examination

Peculiarities of questioning and examination of a patient with pathology of respiratory organs, carrying out palpation, percussion, auscultation of the chest; semiological significance of the symptoms found during the physical examination to assess the general condition of the patient.

Rules for preparing the patient for conducting instrumental examinations of the respiratory organs. Familiarization with the technique of spirometry, pneumotachometry, bronchoscopy. Pleural puncture (familiarization with the technique of conducting and laboratory examination of puncture). Laboratory study of sputum.

Topic 5. Assessment of the general condition of a patient with diseases of the cardiovascular system based on physical and instrumental examination.

Peculiarities of questioning and examination of a patient with a pathology of the cardiovascular system, conducting palpation, percussion, auscultation of the heart; blood pressure measurement;

semiological significance of the symptoms found during the examination to assess the general condition of the patient. Introduction to phonocardiography and echocardiography techniques, their diagnostic significance. The most important echocardiographic parameters are the volumes of the heart cavities, the ejection fraction, the thickness of the interventricular septum and the posterior wall of the left ventricle.

Topic 6. ECG registration and basic skills of interpreting the results of an ECG examination of a patient with combined heart rhythm disorders.

The main functions of the heart (automaticity, excitability, conduction, refractoriness, aberrantness) and the possibilities of their study using the ECG method. Rules for applying electrodes and ECG registration. ECG decoding algorithm. Mechanisms of development of the most common arrhythmias. ECG signs of combined disorders of automaticity and excitability. ECG with atrial and ventricular fibrillation and flutter. ECG with a combination of disorders of excitability and conduction functions. Differentiation of different types of extrasystoles.

Topic 7. Basic skills of interpreting the results of an ECG examination of a patient with coronary circulation disorders, hypertrophy of various parts of the heart

ECG signs of coronary circulation disorders (ischemia, damage, necrosis). Significance of T-wave changes, ST-segment elevation and depression, pathological Q-wave formation in the diagnosis of coronary circulation disorders. ECG in stable and unstable forms of coronary heart disease. ECG changes in acute coronary syndromes without ST segment elevation and with ST segment elevation. ECG periodization of myocardial infarction. Determining the location of damage/necrosis of the myocardium using an ECG study.

The role of the ECG method in determining the state of heart departments. ECG signs of hypertrophy of the right and left atrium, right and left ventricle.

Topic 8. Assessment of the general condition of a patient with diseases of the gastrointestinal tract based on physical and instrumental examination

Peculiarities of questioning and examination of a patient with a pathology of the gastrointestinal tract, carrying out palpation, percussion, auscultation of the abdomen; semiological significance of the symptoms found during the examination to assess the general condition of the patient.

Preparation of the patient for instrumental studies of the gastrointestinal tract. The main types of enemas and the rules for their use. Familiarization with the indications for fibrogastro-duodenoscopy and fibrocolonoscopy. Modern methods of studying the secretory and acid-producing activity of the stomach. Methodology of intragastric pH-metry, fractional study of gastric contents, analysis of the obtained data. Methodology of multi-moment duodenal probing, analysis of received data.

Topic 9. Rules for conducting a clinical blood test in a therapeutic hospital. Basic skills of interpretation of general and biochemical blood analysis

General analysis of blood, its components, indicators of blood controlled by means of a general analysis. Normal indicators of a general blood test, their changes in the most common pathological processes: anemia, inflammation, allergic reactions. Rules of interpretation of a general blood test, medical terminology characterizing relevant blood changes.

Biochemical examination of blood, a list of biochemical indicators that allows you to assess the condition and function of the liver, kidneys, and pancreas. The minimum list of indicators characterizing lipid, protein, carbohydrate metabolism; interpretation of their changes. Coagulogram and its main components, changes in coagulogram indicators with increasing and decreasing blood coagulation activity. Medical terminology used to determine the direction and nature of changes in blood biochemical indicators.

Topic 10. Rules for conducting a clinical examination of urine in a therapeutic hospital. Basic skills of interpretation of general urinalysis, urinalysis according to the method of Zimnytskyi.

Preparation of patients and rules for taking urine for general analysis, special studies (for glucose content, according to the methods of Zimnytskyi, Nechiporenko, Ambyurge, Addis-Kakovskyi), their diagnostic significance. The general analysis of urine is normal: physical and chemical properties and basic microscopic parameters; reasons and options for their changes. Algorithm for interpretation of general urinalysis, medical terminology used to characterize changes. Methods of quantitative determination of formed elements of blood in urine (Nechiporenko, Ambyurzhe, Addis-Kakovskii), indicators of normal tests, causes of pathological changes. Evaluation of excretory and concentration function of kidneys using Zimnytsky's analysis, rules of interpretation of its results. Basic methods of determining and formulas for calculating the rate of glomerular filtration (Rehberg, Cockroft-Hault, CKD-EPI, MDRD), interpretation of the obtained indicators.

Topic 11. Final control of the acquisition of practical skills in methods of examination of the patient and basic medical manipulations in the therapeutic department.

Checking the level of mastery of practical skills according to the following sections: 1) questioning the patient, 2) conducting a general examination and examination of individual parts of the body, 3) the sequence and method of performing palpation, percussion and auscultation during the study of the respiratory, cardiovascular, and digestive systems, 4) conducting instrumental research methods (measurement of blood pressure, ECG recording), 5) execution of subcutaneous, intramuscular and intravenous injections (according to the list of practical skills that the student must learn while studying the discipline).

Topic 12 Final control of theoretical training in the discipline, students' knowledge of identifying the main symptoms and syndromes when analyzing the results of instrumental and laboratory methods of patient examination.

Checking the students' theoretical knowledge of propaedeutics of internal medicine, nursing practice and basic medical manipulations in the therapeutic department (according to the list of theoretical questions that the student should learn during the study of the discipline) by answering test control questions, solving situational tasks on ECG decoding and interpretation of blood and urine test results.

4. Structure of the educational discipline

Names of modules and topics	Number of hours (full-time education)				
	Totaly	Lecture	Practice	Individual work	Independent work

Names of modules and topics	Number of hours (full-time education)				
	Totaly	Lecture	Practice	Individual work	Independent work
Module 1. Basic methods of patient examination at the clinic of internal diseases					
Content module 1. Introduction to the clinic of internal diseases. Basic rules of questioning and examination of the patient.					
Topic 1. Role and place of propaedeutics of internal medicine among the clinical disciplines of the therapeutic profile.	1,0	0,5	–	–	0,5
Topic 2. Scheme of case history. Anamnestic part of case history.	4,0	1	2,5	–	0,5
Topic 3. General examination of the patient. Examination of separate parts of the body.	3,5	0,5	2,5	–	0,5
Total for Content module 1.	***8,5***	***2,0***	***5,0***	***–***	***1,5***
Content module 2. Physical and instrumental methods of bronchopulmonary system examination.					
Topic 4. Main complaints of patients with respiratory diseases. Examination and palpation of the chest.	3,0	–	2,5	–	0,5
Topic 5. Percussion as a method of physical examination of the lungs. Methodology and technique of lung percussion.	4,0	1	2,5	–	0,5
Topic 6. Auscultation as a method of physical examination of the lungs. Lung auscultation technique. Basic and additional respiratory sounds.	4,5	1	2,5	–	1
Total for Content module 2.	***11,5***	***2,0***	***7,5***	*	***2,0***
Content module 3. Physical methods of cardiovascular system examination.					
Topic 7. Physical methods of cardiovascular system examination. Questioning and general examination of patients with pathology of the cardiovascular system, examination and palpation of the precardial area.	3,0	–	2,5	–	0,5
Topic 8. Examination of pulse (arterial, venous, pseudocapillary) and blood pressure. Percussion determination of the heart borders.	3,5	–	2,5	–	1
Topic 9. Auscultation of the heart: heart tones, their splitting and reduplication of tones, additional tones, triple rhythms (quail rhythm, gallop rhythm).	4,5	1	2,5	–	1
Topic 10. Auscultation of the heart. Functional and organic cardiac murmurs.	4,0	1	2,5	–	0,5

Names of modules and topics	Number of hours (full-time education)				
	Totaly	Lecture	Practice	Individual work	Independent work
Total for Content module 3.	***15,0***	***2,0***	***10,0***	*	***3,0***
Content module 4. Instrumental methods of cardiovascular system examination					
Topic 11. Electrocardiography. ECG registration technique and analysis: standard, chest and augmented leads. ECG signs of ventricular and atrium hypertrophy.	4,5	1	2,5	–	1
Topic 12. ECG diagnostics of arrhythmia associated with altered automaticy and excitability functions.	4,0	0,5	2,5	–	1
Topic 13. ECG diagnostics of arrhythmia associated with altered conductivity. Electrocardiography examination in combinative arrhythmias.	4,0	0,5	2,5	–	1
Total for Content module 4.	***12,5***	***2,0***	***7,5***	*	***3,0***
Content module 5. Basic methods the gastrointestinal tract and kidneys examination.					
Topic 14. Inquiry and general inspection of the patients with digestive system pathology. Inspection and superficial palpation of the abdomen.	5,0	2	2,5	–	0,5
Topic 15. Deep sliding systematic palpation of the abdomen.	3,0	–	2,5	–	1,0
Topic 16. Deep sliding systematic palpation of the liver, spleen and kidneys. Intermediate control basic methods of patient examination learning	3,5	–	2,0 0,5	–	0,5 0,5
Total for Content module 5.	***11,5***	***2,0***	***7,5***	*	***2,0***
* Individual work (from the list of proposed topics)				1,0	
Total hours for module 1	**60**	**10**	**37,5**	**1**	**11,5**
Module 2. Symptoms and syndromes in clinic of internal organ disease					
Content module 6: Main symptoms and syndromes in patients with cardiovascular pathology					
Topic 17. Mitral and aortic valve defects: main symptoms and syndromes based on clinical and instrumental examination methods.	3,5	–	2,5		1
Topic 18. Main symptoms and syndromes on arterial hypertension. Hypertensive crisis.	4,5	1	2,5		1
Topic 19. Coronary heart disease: main	4,5	1	2,5		1

Names of modules and topics	Number of hours (full-time education)				
	Totaly	Lecture	Practice	Individual work	Independent work
symptoms and syndromes on angina pectoris and myocardial infarction.					
Total for content module 6.	***12,5***	***2,0***	***7,5***	*	***3,0***
Content module 7. Main symptoms and syndromes in patients with respiratory organs diseases.					
Topic 20. Main clinical manifestations of chronic bronchitis and bronchial asthma. Bronchial obstruction syndromes, increased airiness of the lungs. Chronic obstructive pulmonary disease.	4,5	1	2,5		1
Topic 21. Pneumonia and pleurisy: symptoms and syndromes based on clinical, instrumental and laboratory methods of examination. Syndromes of lung tissue consolidation, accumulation of fluid and air in the pleural cavity, respiratory failure.	4,5	1	2,5		1
Total for content module 7.	***9,0***	***2,0***	***5,0***	*	***2,0***
Content module 8. Main symptoms and syndromes of gastrointestinal tract and excretory system diseases.					
Topic 22. Clinical, instrumental and laboratory examination of the patient with chronic gastritis, peptic ulcer disease and intestine pathology. The main symptoms and syndromes.	3,5	1	2,5		1
Topic 23. Main symptoms and syndromes at diseases of the hepatobiliary system: chronic cholecystitis, cholangitis, cholelithiasis; main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis.	3,5	1	2,5		1
Topic 24. Main symptoms and syndromes at kidney diseases - acute and chronic glomerulonephritis and pyelonephritis. Chronic kidney disease.	5,5	2	2,5		1
Total for content module 8.	***12,5***	***4,0***	***7,5***	*	***3,0***
Content module 9. Pathology of blood system and interpretation of the laboratory examination methods results.					
Topic 25. Main symptoms and syndromes at anemia, hemorrhagic syndromes. General clinical blood analysis.	4,5	2	2,5		1
Total for content module 9.	***4,5***	***2,0***	***2,5***	*	***1,0***
Individual work (curation of patients with medical history writing)*	3,5			3,5*	
Total hours for module 2	**45**	**10,0**	**22,5**	**3,5**	**9,0**

Names of modules and topics	Number of hours (full-time education)				
	Totaly	Lecture	Practice	Individual work	Independent work
TOTAL FROM PROPEDEUTICS OF INTERNAL MEDICINE	**105**	**20**	**60**	**25**	
Module 3. Nursing practice and basic medical skills at the therapeutic department					
Content module 1. Principles of activity, organization of work and professional actions of nurse from therapeutic hospital.					
Topic 1. Moral-ethical and legislative principles of nursing at Ukraine. Organization of work and duties of nurse at the main structural divisions of the therapeutic hospital	4,5	–	2,5	–	2
Topic 2. Responsibilities and actions of the post and manipulation nurse of the therapeutic department	6,0	–	2,5	–	3,5
Topic 3. Features of the procedure room work in the therapeutic department and the duty of the nurse to provide it	6,0	–	2,5	–	3,5
Total according to content module 1.	***16,5***	**–**	***7,5***	**–**	***9,0***
Content module 2. Basic medical skills in assessing the patient's condition and conducting examinations in the therapeutic department.					
Topic 4. Assessment of the general condition of a patient with diseases of the bronchopulmonary system based on physical, instrumental and laboratory examination	4,5	–	2,5	–	2
Topic 5. Assessment of the general condition of a patient with diseases of the cardiovascular system based on physical and instrumental examination.	4,5	–	2,5	–	2
Topic 6. ECG registration and basic skills of interpreting the results of an ECG examination of patient with combined heart rhythm disorders.	4,5	–	2,5	–	2
Topic 7. Basic skills of interpreting the results of an ECG examination of a patient with coronary circulation disorders, hypertrophy of various parts of the heart	4,5	–	2,5	–	2
Topic 8. Assessment of the general condition of a patient with diseases of the gastrointestinal tract based on physical and instrumental examination	4,5	–	2,5	–	2
Topic 9. Rules for conducting a clinical blood test in a therapeutic hospital. Basic	5,5	–	2,5	–	3

Names of modules and topics	Number of hours (full-time education)				
	Totaly	Lecture	Practice	Individual work	Independent work
skills of interpretation of general and biochemical blood analysis					
Topic 10. Rules for clinical examination of urine in a therapeutic hospital. Basic skills of interpretation of general urinalysis, urinalysis according to the method of Zimnytskyi.	5,5	–	2,5	–	3
Total for content module 2.	***33,5***	**–**	***17,5***	**–**	***16,0***
Final control of practical skills learning about patient examination methods and basic medical manipulations at the therapeutic department.	5,0	–	2,5	–	2,5
Final control of theoretical training in the discipline, students' knowledge of identifying the main symptoms and syndromes when analyzing the results of instrumental and laboratory methods of patient examination	5,0	–	2,5	–	2,5
Total hours from Module 3 (NURSING PRACTICE)	**60,0**	**–**	**30,0**	**–**	**30,0**
TOTAL HOURS FROM DISCIPLINE	**165**	**20**	**90**	**4,5**	**50,5**
				55	

5. Lecture topics

№ з/п	Topic name	Number of hours
Module 1. Basic methods of patient examination at the clinic of internal diseases		
1.	Propaedeutics of internal medicine as an introduction to the clinic of internal diseases. The main methods of examination in the clinic of internal diseases.	2
2.	Symptoms of respiratory diseases based on palpation, percussion and auscultation of the chest	2
3.	Symptoms of diseases of the organs of cardiovascular system on the basis of questioning and examination of the patient, examination of the pulse and measurement of blood pressure	2
4.	Auscultation of the heart: the main symptoms during listening of tones and murmurs of the heart	2
5.	Main symptoms and syndromes of gastrointestinal tract diseases: clinical features of pain and dyspeptic syndromes	2
	Total from module 1	***10***
Module 2. Symptoms and syndromes in clinic of internal organ disease		
1.	Main syndromes of respiratory organs diseases. Clinical, instrumental and laboratory signs of bronchial obstruction syndromes, consolidation of lung tissue, accumulation of fluid in the pleural cavity, respiratory failure	2
2.	Main syndromes of cardiovascular system diseases. Clinical, instrumental and laboratory signs of arterial hypertension syndromes, heart failure, coronary syndrome	2
3.	Main syndromes of stomach and hepatobiliary system diseases. Clinical, instrumental and laboratory signs during syndromes of impaired secretory activity of the stomach, biliary tract dyskinesia, portal hypertension, hepatocellular insufficiency	2
4.	Main symptoms and syndromes of kidney diseases. Clinical, instrumental and laboratory signs of urinary, nephrotic, nephritic syndromes, renal failure syndrome	2
5.	Main symptoms and syndromes of anemia. Hemorrhagic syndromes. Methods of clinical, laboratory and instrumental observation.	2
	Total from module 2	***10***
	TOTAL FROM THE DISCIPLINE	**20**

6. Topics of practical classes (seminar and laboratory classes are not included in the program)

№ з/п	Topic name	Number of hours
Module 1. Basic methods of patient examination at the clinic of internal diseases		

№ з/п	Topic name	Number of hours
1.	Main tasks of propaedeutics of internal medicine. Scheme of medical history. Questionary of the patient.	2,5
2.	General examination of the patient. Examination of separate parts of the body: head, neck, trunk, limbs. Diagnostic value of the symptoms detected during the examination of the patient.	2,5
3.	Main complaints of patients with respiratory diseases. Static and dynamic examination of the chest. Palpation of the chest.	2,5
4.	Percussion as a method of physical examination of respiratory organs. Methodology and technique of lung percussion.	2,5
5.	Auscultation of the lungs: basic and additional respiratory sounds.	2,5
6.	Questioning and general examination of patients with pathology of the cardiovascular system. Inspection and palpation of the precardial region.	2,5
7.	Examination of the pulse and measurement of blood pressure. Percussion determination of cardiac dullness borders.	2,5
8.	Auscultation of the heart: heart sounds, their splitting, reduplication, additional tones, 3-part rhythms.	2,5
9.	Auscultation of the heart: organic and functional heart murmurs.	2,5
10.	Methodology of ECG registration and decoding. ECG signs of hypertrophy of the atrials and ventricles.	2,5
11.	ECG signs of automaticity and excitability disorders.	2,5
12.	ECG signs of conduction disorders. Fibrillation and flutter of the atria and ventricles.	2,5
13.	Questioning and examination of patients with diseases of the digestive organs. Examination and superficial palpation of the abdomen.	2,5
14.	Deep sliding methodical palpation of the intestines and stomach.	2,0
15.	Deep sliding methodical palpation of the liver, spleen, kidneys. Intermediate control of knowledge learning	3,0
	Total from module 1	**37,5**
	Module 2. Symptoms and syndromes in clinic of internal organ disease	
16.	Mitral and aortic heart defects: main symptoms and syndromes based on clinical and instrumental examination methods.	2,5
17.	Main symptoms and syndromes during hypertension and symptomatic arterial hypertension. Hypertensive crises.	2,5
18.	Coronary artery disease: main symptoms and syndromes of angina pectoris and myocardial infarction.	2,5
19.	Main clinical manifestations of chronic bronchitis and bronchial asthma. Chronic obstructive pulmonary disease. Syndrome of increased airiness of lung tissue.	2,5
20.	Pneumonia and pleurisy: symptoms and syndromes based on clinical-instrumental and laboratory investigation methods. Syndromes of consolidation of lung tissue, accumulation of fluid and air in the pleural cavity and respiratory failure in the pathology of the broncho-pulmonary system.	2,5
21.	Clinical-instrumental and laboratory investigation of patients with chronic	2,5

№ з/п	Topic name	Number of hours
	gastritis, peptic ulcer of the stomach and duodenum. Main symptoms and syndromes.	
22.	Main symptoms and syndromes of hepatobiliary system diseases: chronic cholecystitis, cholangitis, cholelithiasis; main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis.	2,5
23.	Main symptoms and syndromes of kidney diseases - acute and chronic glomerulonephritis and pyelonephritis. Chronic kidney disease.	2,5
24.	Main symptoms and syndromes of anemia, hemorrhagic syndromes. General clinical blood analysis.	2,5
Total from module 2		**22,5**
TOTAL FROM PROPEDEUTICS OF INTERNAL MEDICINE		**60**
MODULE 3. Nursing practice and basic medical skills at the therapeutic department		
1.	Moral-ethical and legislative principles of nursing in Ukraine. Organization of the work and duties of the nurse at main structural divisions of the therapeutic hospital	2,5
2.	Responsibilities and actions of the post and manipulation nurse of the therapeutic department	2,5
3.	Features at the work of the procedure room at therapeutic department and the responsibilities of the nurse regarding its provision	2,5
4.	Assessment of the general condition of a patient with diseases of the broncho-pulmonary system based on a physical examination	2,5
5.	Assessment of the general condition of a patient with diseases of the cardiovascular system based on a physical examination	2,5
6.	Basic skills of interpreting the results of an ECG examination of a patient with combined heart rhythm disorders	2,5
7.	Basic skills of interpreting the results of an ECG examination of a patient with coronary circulation disorders, hypertrophy of various parts of the heart	2,5
8.	Assessment of the general condition of a patient with diseases of the gastrointestinal tract based on a physical examination	2,5
9.	Rules for conducting a clinical blood test in a therapeutic hospital. Basic skills of general and biochemical blood analysis interpretation	2,5
10.	Rules for clinical examination of urine in a therapeutic hospital. Basic skills of general urinalysis and urinalysis according to the method of Zimnytskyi interpretation	2,5
11.	Final control of learning practical skills in patient examination methods and basic medical manipulations at the therapeutic department	2,5
12.	Final control of theoretical training in the discipline, students knowledge of identifying the main symptoms and syndromes while analyzing the results of instrumental and laboratory methods of patient examination "Propaedeutics of internal medicine, including nursing practice, basic medical skills in the therapeutic department"	2,5
Total from nursing practice *(module 3)*		***30***

№ з/п	Topic name	Number of hours
TOTAL FROM DISCIPLINE "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department"		**90**

7. Independent work

№ з/п	Title of the topic (or content of the work)	Number of hours
Module 1. Basic methods of patient examination at the clinic of internal diseases		
1.	Preparation for practical classes – theoretical preparation for classes, and study of methods of patients physical examination	9,5
2.	Learning the ability to analyze data of electrocardiographic examinations	1,5
3.	Individual work from the list of proposed topics	1,0
4.	Preparation for intermediate control on basic methods of patient examination	0,5
TOTAL FROM MODULE 1		***12,5***
Module 2. Symptoms and syndromes in clinic of internal organ disease		
1.	Pre-auditor theoretical preparation for practical classes according to the plan of practical classes	9
2.	Curation of the patient with the writing of the medical history	3,5
TOTAL FROM MODULE 2		***12,5***
TOTAL of propaedeutics of internal medicine		**25**
Module 3 "Nursing practice and basic medical skills at the therapeutic department"		
1.	Pre-audition preparation for practical classes	10
2.	Work at the therapeutic department of the hospital and simulation classes to learn and practice practical skills	8
3.	Learning the ability to interpret: - the results of a general blood test - results of a biochemical blood test - the results of a general urine analysis - the results of a urine test according to Zimnytskyi	 1 1 1 1
4.	Completion of the main reporting documentation – Production Practice Diary and the Final Report	3
5.	Preparation for the final control of knowledge and skills at patient examination methods and basic medical skills in the therapeutic department	5
TOTAL FROM MODULE 3 (nursing practice)		***30***
TOTAL from the discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department"		**55**

8. Individual tasks

Necessary type of individual work for students, which is evaluated separately by the teacher, is curation of patients and writing a detailed case history. At the same time, the tasks for this type of work are (one to be chosen by the student):

1. Supervision of a patient (interrogation, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the cardiovascular system with the writing of a case history and the presentation of a clinical case in a practical session
2. Supervision of a patient (interrogation, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of the broncho-pulmonary system with the writing of a case history and the presentation of a clinical case at a practical session
3. Supervision of a patient (interrogation, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of digestive system with the writing of a case history and the presentation of a clinical case at a practical session
4. Supervision of a patient (interrogation, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology of urinary system with the writing of a case history and the presentation of a clinical case at a practical session
5. Supervision of a patient (interrogation, physical examination, evaluation of the results of instrumental and laboratory examinations) with pathology blood system with the writing of a case history and the presentation of a clinical case at a practical session

Curation of the patient is carried out outside of class time, the results are analyzed by the student and drawn up in the form of an educational history of the disease, which, after its verification by the teacher, is separately evaluated.

At the student's request, while studying relevant topics to deepen knowledge, he can perform other types of individual work.

Approximate list of individual tasks:

1. Conducting inquiry of the patient, general examination, head, neck, limbs examination highlighting the main symptoms and syndromes of the disease.
2. Studies of respiratory function in exponential patients, analysis of obtained data and report in class
3. ECG registration, participation in conduction of instrumental investigations of the cardiovascular system in patients with illustrative data processing and report in class
4. Conduct physical and instrumental examination of the patient demonstration with a review of the scientific literature on the studied case
5. Work with literature and other sources of information and preparation of abstract reports on modern methods of examination of patients in clinic internal diseases
6. Working with literature and other sources of information and preparation of abstract report on peculiarities of syndromic diagnosis of the disease with a typical course, chosen at the student's request.

The results of individual work are reported in a practical class and taken into account in the current assessment of the student on the relevant topic.

9. Learning methods

During studying the discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department", various teaching methods recommended for higher education are used:

- verbal (explanation, lecture, conversation, discussion);
- visual (demonstration);
- practical (practical work, mastery of practical skills), which are given special emphasis when studying the discipline;

During studying a discipline, the following methods of organizing educational classes can be introduced (depending on the subject of the class):

- method of clinical cases,
- method of individual educational and research tasks,
- method of competitive groups,
- method of training technologies,
- method of conducting scientific conferences using interactive technologies.

Types of educational activities of the student are lectures, practical classes, independent work of students.

Practical classes with a duration of 2.5 academic hours are held at the therapeutic clinic (departments of the therapeutic profile of the department's clinical bases).

10. Methods and forms of control, distribution of points received by students, assessment of discipline

During assessing students' knowledge, preference is given to standardized control methods: standardized control of practical skills, testing (oral, written), structured written works, work with standard medical documentation.

Methods of control:

Theoretical knowledge – written and computer testing, individual interviews, interviews that are structured in content writing.

Practical skills – control the execution of standardized technique of performance of practical skills:

- questioning of the patient,
- general and local review,
- palpation, percussion, auscultation,
- evaluation of the results of instrumental and laboratory methods of examination of the patient according to a standardized algorithm,
- interpretation of the results of instrumental examination of the patient
- interpretation of the results of the patient's laboratory examination
- summarization of results of the subjective, physical, laboratory and instrumental examination of the patient with the preparation of a standardized case history,
- making a plan for further examination of the patient,
- performing medical manipulations that are within the competence of the nurse of the therapeutic department (according to the list of practical skills)

Forms of control

Current control is carried out at each practical class according to the specific objectives of the topic. All practical classes uses objective control of theoretical preparation and the assimilation of practical skills.

Intermediate control is carried out at the last lesson of module 1 and involves standardized control of assimilation of the thematic block of information on the main methods of examining the patient.

Control of the independent work implementation, which is provided at the topic along with classroom work, is carried out during the current control of the topic at the corresponding classroom session. Control of topics learning that are assigned only to independent work and are not included in the topics of classroom training sessions is carried out during the final control. Control of learning practical skills is carried out both during the current control and during the final control.

One of the activities of the student and his supervision by the teacher during the study of module 3 "Nursing Practice" is keeping a Practice Diary (Appendix 1), which is filled in by the student after studying and working on each topic and signed by the teacher after completing the independent part of the student's work. At the end of the practice module, the student fills out the Final Report on the

completed work (Appendix 2). Presence of a completed and certified by the teacher's signature of the Diary and the Final Report is mandatory for the admission of the student to the final control of the discipline.

Final control is carried out upon completion of the study of the discipline in the last two practical classes: on one - control of practical preparation of students, on the other - control of mastering theoretical knowledge.

Final control is allowed for students who have attended at least 75% of the auditorium classes (lectures, practical classes) provided for in the calendar plan, completed intermediate controls and defend the case history with a positive mark.

Final control involves verification the student's theoretical knowledge, demonstrating the implementation of practical skills and solving situational problems with the interpretation of the results of instrumental and laboratory methods of examination of patients.

Distribution of points received by students

№ з/п	Topic name	Number of points corresponding to the traditional assessment			
		«5»	«4»	«3»	«2»
	Propaedeutics of internal medicine				
1.	Main tasks of propaedeutics of internal medicine. Scheme of medical history. Examination of the patient.	3	2,5	2	0
2.	General examination of the patient. Examination of separate parts of the body: head, neck, trunk, limbs. Diagnostic value of the symptoms detected during the examination of the patient.	3	2,5	2	0
3.	Main complaints of patients with respiratory diseases. Static and dynamic examination of the chest. Palpation of the chest.	3	2,5	2	0
4.	Percussion as a method of physical examination of respiratory organs. Methodology and technique of lung percussion.	3	2,5	2	0
5.	Auscultation of the lungs: basic and additional respiratory sounds.	3	2,5	2	0
6.	Questioning and general examination of patients with pathology of the cardiovascular system. Inspection and palpation of the precardial region.	3	2,5	2	0
7.	Examination of the pulse and measurement of blood pressure. Percussion determination of cardiac dullness borders.	3	2,5	2	0
8.	Auscultation of the heart: heart sounds, their splitting, reduplication, additional tones, 3-part rhythms.	3	2,5	2	0
9.	Auscultation of the heart: organic and functional heart murmurs.	3	2,5	2	0
10.	Methodology of ECG registration and decoding. ECG signs of hypertrophy of the atrials and ventricles.	3	2,5	2	0
11.	ECG signs of automaticity and excitability disorders.	3	2,5	2	0
12.	ECG signs of conduction disorders. Fibrillation and flutter of the atria and ventricles.	3	2,5	2	0

№ з/п	Topic name	Number of points corresponding to the traditional assessment			
		«5»	«4»	«3»	«2»
13.	Questioning and examination of patients with diseases of the digestive organs. Examination and superficial palpation of the abdomen.	3	2,5	2	0
14.	Deep sliding methodical palpation of the intestines and stomach.	3	2,5	2	0
15.	Deep sliding methodical palpation of the liver, spleen, kidneys.	3	2,5	2	0
16.	Mitral and aortic heart defects: main symptoms and syndromes based on clinical and instrumental examination methods.	3	2,5	2	0
17.	Main symptoms and syndromes during hypertension and symptomatic arterial hypertension. Hypertensive crises.	3	2,5	2	0
18.	Coronary artery disease: main symptoms and syndromes of angina pectoris and myocardial infarction.	3	2,5	2	0
19.	Main clinical manifestations of chronic bronchitis and bronchial asthma. Chronic obstructive pulmonary disease. Syndrome of increased airiness of lung tissue.	3	2,5	2	0
20.	Pneumonia and pleurisy: symptoms and syndromes based on clinical-instrumental and laboratory investigation methods. Syndromes of consolidation of lung tissue, accumulation of fluid and air in the pleural cavity and respiratory failure in the pathology of the broncho-pulmonary system.	3	2,5	2	0
21.	Clinical-instrumental and laboratory investigation of patients with chronic gastritis, peptic ulcer of the stomach and duodenum. Main symptoms and syndromes.	3	2,5	2	0
22.	Main symptoms and syndromes of hepatobiliary system diseases: chronic cholecystitis, cholangitis, cholelithiasis; main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis.	3	2,5	2	0
23.	Main symptoms and syndromes of kidney diseases - acute and chronic glomerulonephritis and pyelonephritis. Chronic kidney disease.	3	2,5	2	0
24.	Main symptoms and syndromes of anemia, hemorrhagic syndromes. General clinical blood analysis.	3	2,5	2	0
25.	Intermediate control of basic methods of patient examination learning	3	2,5	2	0
26.	Case history	5	4	3	0
	Total for the current educational activity	Maximum mark – 80 points			
Nursing practice and basic medical skills at the therapeutic department					
1.	Moral-ethical and legislative principles of nursing in Ukraine. Organization of the work and duties of the nurse at main structural divisions of the therapeutic hospital	8	6,5	5	0
2.	Responsibilities and actions of the post and manipulation	8	6,5	5	0

№ з/п	Topic name	Number of points corresponding to the traditional assessment			
		«5»	«4»	«3»	«2»
	nurse of the therapeutic department				
3.	Features at the work of the procedure room at therapeutic department and the responsibilities of the nurse regarding its provision	8	6,5	5	0
4.	Assessment of the general condition of a patient with diseases of the broncho-pulmonary system based on a physical examination	8	6,5	5	0
5.	Assessment of the general condition of a patient with diseases of the cardiovascular system based on a physical examination	8	6,5	5	0
6.	Basic skills of interpreting the results of an ECG examination of a patient with combined heart rhythm disorders	8	6,5	5	0
7.	Basic skills of interpreting the results of an ECG examination of a patient with coronary circulation disorders, hypertrophy of various parts of the heart	8	6,5	5	0
8.	Assessment of the general condition of a patient with diseases of the gastrointestinal tract based on a physical examination	8	6,5	5	0
9.	Rules for conducting a clinical blood test in a therapeutic hospital. Basic skills of general and biochemical blood analysis interpretation	8	6,5	5	0
10.	Rules for clinical examination of urine in a therapeutic hospital. Basic skills of general urinalysis and urinalysis according to the method of Zimnytskyi interpretation	8	6,5	5	0
	Total points for the current learning activity	Maximum mark – 80			
	Final control	Maximum mark – 120			
	Total score for discipline	**Maximum mark – 200 Minimum mark – 111**			

Maximum score that student can receive for the current educational activity during studying the discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department" is 80 points, it is calculated as the arithmetic average of the grades for the components of "Propaedeutics of internal medicine " and “Nursing practice, basic medical skills at the therapeutic department”.

Grade for the "Propaedeutics of Internal Medicine" component is the sum of the grades for the following types of activities:

- Amounts of current grades for practical classes (24 classes, maximum 72 points)
- Assessments for case history (maximum 5 points)
- Grades for monitoring the mastery of basic methods of patient examination (maximum 3 points)

In general, during studying this part of the discipline, the student must get 26 marks.

The grade for the component "Nursing practice, basic medical skills at the therapeutic department" is the sum of the current grades for practical classes (10 classes).

Current grades for practical classes correspond to the criteria for evaluating the program learning outcomes:

Grade "excellent" is given at case when student knows content of the lesson and lecture material in full, illustrating answers with various examples; gives exhaustively accurate and clear answers without any leading questions; teaches the material without errors and inaccuracies; freely solves problems and performs practical tasks of varying degrees of complexity; actively masters the practical part of the lesson and methodically correctly demonstrates the practical skills provided by the program, correctly acts in modulated clinical situations; shows initiative during independent work, performing a greater volume of work than the planned minimum number of manipulations and procedures.

Grade "good" is given under condition if student knows content of the lesson and understands it well, answers the questions correctly, consistently and systematically, but they are not exhaustive, although student answers additional questions without mistakes; solves problems and performs practical tasks, experiencing difficulties only at the most difficult cases; performs practical skills provided for mastering, but may make some minor mistakes, which he corrects on his own; actively works during independent work, performing the planned minimum of manipulations and procedures.

Grade "satisfactory" is assigned to the student based on his knowledge of the entire content of the lesson and at a satisfactory level of his understanding. Student is able to solve modified (simplified) tasks with help of leading questions; solves problems and performs practical skills, experiencing difficulties in simple cases; is not able to give an answer systematically on his own, but answers correctly to directly asked questions; is able to perform basic practical tasks and act in modulated clinical situations only after appropriate comments and assistance from the teacher; when conducting independent work, difficulties arise, which the student can potentially solve with the help of a teacher or medical staff of the hospital

An "unsatisfactory" grade is issued in cases where the student's knowledge and skills do not meet the requirements for a "satisfactory" grade; the student behaves passively in class and during independent work, has obvious difficulties in solving situational tasks, learning practical skills.

If student received an overall grade of "unsatisfactory" (0 points) for the practical lesson, he has the right to improve his knowledge of the topic during the next practical lesson (without receiving points).

Writing of the case history provided for during the study of "Propaedeutics of Internal Medicine" is carried out on the basis of the student's examination of the patient or the solution of a simulated clinical situation (if the training is carried out remotely by order of the NMU).

Assessment of case history:

5 points - written methodically correct, without comments;

4 points - written methodically correct, the sequence and content of the sections are respected, but separate sections are not sufficiently detailed;

3 points - there are comments on the detail and the sequence of the sections description;

0 points - the scheme and rules for writing the case history are broken (in this case, the student must rewrite the history of the disease, taking into account the teacher's comments).

After student has learned basic methods of examination of the broncho-pulmonary, cardiovascular and digestive systems, an intermediate control of knowledge is expected. The survey includes a block of 3 test tasks posted on the Likar platform, which the student solves online within 30 minutes.

Evaluation criteria: correct answer to 33-35 tasks - "excellent" (3 points)

30–32 tasks – “good” (2.5 points)

27–29 tasks – “satisfactory” (2 points)

< 27 tasks – "unsatisfactory" (0 points)

If student receives an unsatisfactory grade for an intermediate control, he must retake it, but without the right to receive points.

Students are admitted to the final control of the discipline provided that they attend at least 75% of classroom classes with the entire accumulated amount of points during study of the discipline. Considering that amount of classroom hours at the discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department" is 110, student can miss no more than 27.5 classroom hours (therefore, he must attend at least 82.5 classroom hours). Student who misses more than 27.5 hours of classroom classes is considered to have failed the curriculum in the discipline, so he must retake the discipline.

Final control is carried out after studying all topics of the discipline in two stages:

Theoretical part:

1) answer to test-control questions (40 questions);

2) test of Latin terminology learning from the discipline (10 terms).

Practical part:

3) performance of practical skills at methods of examination of the patient and medical manipulations (or demonstration of knowledge of the algorithm for their implementation in the case of distance learning)

4) decoding and analysis of the ECG.

5) solving situational tasks on the analysis and interpretation of the results of laboratory studies (4 different studies)

Grade for the final control consists of sum of points for its components:

1) test control (maximum score – 20 points)

2) Latin terminology (maximum score – 10 points)

3) ECG interpretation (maximum score – 20 points)

4) analysis of laboratory research results (maximum score – 40 points)

5) practical skills (maximum score – 30 points)

Maximum score that student can receive for the final control is 120 points (20 + 10 + 20 + 40 + 30).

Evaluation of the discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department" is given on a 200-point scale and is defined as the sum of the current educational activity in points (maximum amount of points - 80) and the final control evaluation (maximum amount of points is 120). Enrollment of credits for the studied discipline is carried out on the condition that student accumulates 111 points (corresponding to the minimum value of the grade E according to the ECTS Scale).

By decision of the Academic Council of the University, incentive points may be added to the number of points in the discipline for students who have scientific publications or won prizes in international and all-Ukrainian Olympiads and competitions in the discipline, but the total amount of points for the discipline cannot exceed 200 points.

Assessment of knowledge in the discipline is carried out taking into account the appropriate scales:

Mark in points	Mark according to the national scale	Mark by ECTS scale	
		Mark	Explanation
170 – 200	Excellent	A	Excellent (excellent performance with only minor mistakes)
155 – 169	Good	B	Very good (above average with a few minor mistakes)

140 – 154		C	Good (generally correct execution with a small number of significant mistakes)
125 – 139	Satisfactory	D	Satisfactory (not bad, but with a significant number of flaws)
111 – 124		E	Sufficient (performance meets minimum criteria)
60 – 110	Unsatisfactory	FX	Unsatisfactory (with the possibility of reassembly)
1 – 59		F	Unsatisfactory (with mandatory repeated study of the discipline)

If student receive unsatisfactory grade at discipline within the range of 60–110 points (FX), he has right to retake it: once by department commission with participation of head of the department, last time – by the commission with participation of head of the department and a representative of the dean's office.

If student receive unsatisfactory grade at discipline within the range of 1-59 points (F), he is obliged to re-study discipline. The decision is taken by the management of NMU in accordance with the regulatory documents approved in the prescribed manner.

Policy on academic integrity

In the process of study, it is mandatory to observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of the module "Patient Care in the Therapeutic Department";
- reference to sources of information in the case of using ideas, developments, statements, information;
- compliance with the norms of the legislation on copyright and related rights;
- provision of reliable information about the results of one's own educational (scientific) activities, research methods used and sources of information;
- all works performed by the student in the form of essays, educational and research works, etc. are accepted by the teacher only after checking for academic plagiarism with the "StrikePlagiarism" software with the provision of a conclusion of such a check.

11. Methodological support

Methodological support have all kinds of training activities: lectures, practical classes, independent work of students.

Methodological support of the lecture course:

1. Methodical development of lectures.
2. Video presentations of lectures.
3. Audio recordings with heart and lung auscultation data.
4. Video films and educational films on physical and instrumental examination of the patient.
5. Demonstration materials for analysis of thematic patients and clinical cases.

Methodical support of practical classes:

1. Methodical development of practical classes.
2. Variants of test questions and tasks to check the entry level of knowledge on each topic.

3. Variants of situational tasks to check learning of topics, content modules.
4. Standardized data of instrumental and laboratory examination methods.
5. Variants of tasks (theoretical and practical) for final control.

Methodological support of independent work of students:

1. Methodical instructions for independent work of students during preparation for practical classes.
2. Workbook from discipline.
3. Methodological recommendations on the methods of physical examination of the patient and writing of case history.
4. Video films of physical and instrumental examination of the patient.
5. Videolectures of patient examination methods, main symptoms and syndromes during diseases of internal organs, basic medical manipulations in the therapeutic department (presented on the Doctor educational platform).

Methodological support for final control:

1. Test tasks of format A.
2. Structured tasks for written work.
3. Practical tasks to check learning of practical skills.
4. Sets of medical terms to control the learning of Latin terminology
5. Sets of results of general clinical laboratory examination of patients:
   – General blood test
   – Biochemical examination of blood
   – Urinalysis
   – Urine analysis according to the methods of Zimnytskyi, Nechiporenko
   – Analysis of duodenal contents
   – Results of intragastric pH-metry
6. Sets of results of instrumental examinations of patients:
   – X-rays
   – Electrocardiograms
   – Echocardiograms
   – Phonocardiograms
   – Ultrasound of abdominal organs

Development of test-control questions and the formation of structured tasks for written works, which are used to diagnose theoretical success of studies, is based on the list of questions that student must learn when studying discipline "Propaedeutics of internal medicine, including nursing practice, basic medical skills at the therapeutic department" .

List of theoretical questions:

1. Kyiv School of Therapists: contribution of prominent clinicians V.P. Obraztsov, T.G. Yanovsky, M.D. Strazhesko, V.M. Ivanov, V.H. Vasilenko, M.M. Hubergritz to the development of clinical medicine.
2. Main methods at diagnostic of internal diseases.
3. Scheme of questioning of the patient. Main structural parts of the anamnesis.
4. Sequence of general examination of the patient.
5. Types of body-structure and main criteria of different constitutional types.
6. Sequence of lymph nodes palpation and analysis of obtained results.
7. Rules for head and neck inspection.
8. Sequence of examination of the trunk and limbs.
9. Static and dynamic inspection of the chest, diagnostic value of the main symptoms.
10. Examination of the precardial region, diagnostic value of the main symptoms.
11. Sequence of abdominal examination, determination of main symptoms.
12. Main properties of the pulse, the rules and sequence of their determination.
13. Rules of measuring blood pressure. Determination of systolic and diastolic pressure by the Korotkov method.
14. Palpation of the chest: sequence of conductuction, clinical significance of the main symptoms.
15. Palpation of the heart region: sequence of conduction, interpretation of the founded symptoms.

16. Superficial palpation of the abdomen: an algorithm for conducting and analyzing the obtained data.
17. Theoretical basis and principles of deep sliding palpation according to Obraztsov- Strazhesko method.
18. Palpatory examination of the sigmoid, caecum, terminal part of ileum, their normal properties.
19. Rules of the ascending and descending colon palpation, their normal properties.
20. Methods of determining the lower border of the stomach, their diagnostic value.
21. Palpation of transverse colon: main characteristics.
22. Rules of liver palpation, diagnostic value of the main symptoms.
23. Methods of determining the presence of fluid in the abdominal cavity.
24. Sequence of comparative lung percussion. Basic percussive tones and the mechanism of their formation.
25. Algorithm of topographic percussion of the lungs conducting. Topographic parameters of the lungs during normal and pathological conditions.
26. Percussion examination of the heart - relative cardiac dullness: normal limits and their displacement during changes in the heart chambers.
27. Percussion examination of the heart - absolute cardiac dullness: normal limits and their displacement due to cardiac and extracardiac causes.
28. Percussion of the liver according to Obraztsov's method: sequence of conduct, parameters in normal and pathological conditions.
29. Percussion of the liver according to Kurlov's method: sequence of performance, parameters in normal and pathological conditions.
30. Percussion determination of the spleen borders. Rules of conduct, reasons for enlargement of the spleen.
31. Auscultation of the lungs – mechanism of formation and determination of the main respiratory sounds, their qualitative and quantitative changes.
32. Auscultation of the lungs - determination of additional respiratory noises (wheezing, crepitation, pleural friction noise), their classification, diagnostic significance and methods of differentiation. Algorithm for characterizing the auscultatory picture of the lungs.
33. Rules and sequence of bronchophonia research, its diagnostic value.
34. Auscultation of the heart - heart sounds, mechanism of their formation and changes in strength and timbre.
35. Splitting and reduplication of heart tones, concept of second tone accentuation.
36. Additional heart tones; mechanism of formation of quail rhythm and gallop rhythm.
37. Auscultation of heart sounds: their classification and conditions of occurrence.
38. Auscultation of heart murmurs: sequence of characteristics, differences between organic and functional murmurs.
39. Diastolic functional murmurs (Flint, Coombs, Graham-Steele): conditions of occurrence and diagnostic value.
40. Rules of ECG registration and analysis. Heart rate calculation and determination of the position of the electrical axis of the heart.
41. ECG signs of automaticity disorders.
42. ECG signs of excitability disorders. Differentiation of the main types of extrasystoles.
43. ECG signs of paroxysmal heart rhythm disorders.
44. ECG signs of conduction disorders. Classification of conduction disorders.
45. ECG signs of atrial flutter and fibrillation. Mechanisms of their occurrence.
46. ECG signs of ventricular flutter and fibrillation. Clinical manifestations of ventricular heart rhythm disorders.
47. Bronchitis: classification, main clinical manifestations, diagnosis.
48. Bronchial asthma: classification, main clinical manifestations, diagnosis.
49. Hospital and community-acquired pneumonia: classification, main clinical manifestations, diagnosis.
50. Dry and exudative pleurisy: symptoms, diagnosis.
51. Mitral valve diseases: main clinical manifestations, diagnosis.
52. Aortic valve diseases: main clinical manifestations, diagnosis.
53. Coronary heart disease: main clinical manifestations and diagnosis of angina pectoris.
54. Coronary heart disease:: main clinical manifestations and diagnosis of acute myocardial infarction.
55. Arterial hypertension: modern classification, clinical manifestations, diagnosis.
56. Symptomatic hypertension: classification; data of physical, instrumental and laboratory examination, which allow us to suspect secondary arterial hypertension.
57. Chronic gastritis: classification, main clinical manifestations, diagnosis.
58. Peptic ulcer of the stomach and duodenum: classification, main clinical manifestations, diagnosis.

59. Chronic cholecystitis and cholangitis: classification, main clinical manifestations, diagnosis.
60. Gallstone disease: stages of development, symptoms, diagnosis.
61. Hepatitis: main clinical manifestations, diagnosis.
62. Cirrhosis of the liver: main clinical manifestations, diagnosis.
63. Acute and chronic glomerulonephritis: classification, main clinical manifestations, diagnosis.
64. Acute and chronic pyelonephritis: classification, main clinical manifestations, diagnosis.
65. Anemias: classification, main syndromes.
66. Iron deficiency anemia: pathogenesis, clinical manifestations, laboratory criteria.
67. B12-folate deficiency anemia: pathogenesis, clinical manifestations, laboratory criteria.
68. Hemolytic anemia: classification, main syndromes, laboratory criteria.
69. Thrombocytopenic purpura: main clinical manifestations, laboratory diagnosis.
70. Hemorrhagic vasculitis: main clinical manifestations, laboratory diagnosis.
71. Basic legislative documents that regulate the activity of a nurse in a therapeutic department. The main provisions of the Code of Ethics of a nurse of Ukraine.
72. Responsibilities of the nurse of main units of the therapeutic hospital.
73. List of documentation maintained by a nurse in various departments of a therapeutic hospital.
74. Accounting of medicinal products in various units of the therapeutic department.
75. Rules for prescribing and storing strongly acting and narcotic drugs.
76. Main ways of introducing medicines into the patient's body, indications for their use, advantages and disadvantages of each of them.
77. Methods of taking a general blood test, blood sugar test, coagulation test, biochemical and bacteriological studies.
78. Basic requirements for disinfection, pre-sterilization cleaning of instruments. Quality control of pre-sterilization cleaning of instruments for the presence of blood and detergents.
79. Basic rules for preparing a patient for conducting instrumental studies of the gastrointestinal tract and respiratory organs.
80. Main types of enemas and rules for their use.
81. Rules for taking a urine analysis for research according to the methods of Zimnytskyi, Nechiporenko, Addis-Kakovskyi, their diagnostic value.
82. Main types of compresses. Rules of their superimposition. Indications and contraindications for their use.
83. Technique of using a heating pad, ice pack. Indications and contraindications for their use.
84. Main types of physiotherapeutic procedures are hydrotherapeutic, light, electromagnetic, duties of a nurse during their release.

Sets of practical tasks are formed directly from the list of practical skills that the student must master during the study of the discipline, which are practical works standardized by the method of execution.

The list of practical skills:

1. Questioning of the patient. Make a conclusion about the obtained anamnestic data.
2. Conduct questioning of a patient with lung pathology. Identify the main symptoms.
3. Conduct questioning of a patient with a pathology of the cardiovascular system. Identify the main symptoms.
4. Conduct questioning of a patient with pathology of gastrointestinal tract. Identify the main symptoms.
5. Conduct general examination of the demonstrative patient. Identify leading symptoms.
6. Carry out an examination of the head and neck of the demonstrative patient. Determine the clinical significance of the symptoms.
7. Carry out an examination of the body and limbs of the presenting patient. Determine the clinical significance of the symptoms.
8. Carry out an examination of the chest of a patient with broncho-pulmonary pathology, evaluate static signs.
9. Carry out an examination of the chest of a patient with broncho-pulmonary pathology, evaluate dynamic signs.
10. Carry out an examination of the precardial area, determine clinical significance of the symptoms.
11. Carry out an examination of the abdomen, determine clinical significance of the symptoms.
12. Carry out palpation of the chest to determine clinical significance of the symptoms.
13. Carry out palpation of lymph nodes, evaluate the results.

14. Conduct a palpation of the pulse, determine the clinical significance of the symptoms.
15. Conduct palpation of the precardial area, determine the clinical significance of the symptoms.
16. Carry out superficial palpation of the abdomen, determine clinical significance of the symptoms.
17. Conduct palpation of the sigmoid colon, determine clinical significance of the symptoms.
18. Carry out palpation of the cecum, determine clinical significance of the symptoms.
19. Conduct palpation of the ascending part of the colon to determine clinical significance of the symptoms.
20. Carry out palpation of the descending part of the colon, determine clinical significance of the symptoms.
21. Conduct palpation of the transverse colon, determine clinical significance of the symptoms.
22. Carry out palpation of the liver, determine clinical significance of the symptoms.
23. Carry out palpation of the spleen, determine diagnostic significance of the symptoms.
24. Carry out a palpation and percussion examination of the kidneys, determine the diagnostic value of the symptoms.
25. Determine the lower border of the stomach, evaluate obtained data.
26. Determine the presence of fluid in the abdominal cavity, give a clinical assessment.
27. Measure blood pressure on the upper extremities, evaluate obtained data.
28. Measure blood pressure on the lower extremities, evaluate obtained data.
29. Carry out comparative percussion of the lungs and determine clinical significance of the symptoms.
30. Carry out topographic percussion of the lungs and determine diagnostic value of the symptoms.
31. Conduct percussive examination of the heart, determine the limits of relative dullness of the heart, give a clinical assessment.
32. Use the percussion method to determine limits of the liver, assess the diagnostic value of the symptoms.
33. Conduct lung auscultation, determine quantitative and qualitative changes in breathing, give a clinical assessment.
34. Carry out auscultation of the lungs, identify additional respiratory sounds, give a clinical assessment.
35. Conduct research on bronchophonia, give a clinical assessment.
36. Conduct auscultation of the heart, determine changes in its tones, give a clinical assessment.
37. Conduct auscultation of the heart, determine the diagnostic value of heart murmurs.
38. Register ECG at standard and reinforced leads.
39. To analyze ECG of patient with disorders of heart automatism.
40. Analyze the ECG of patient with cardiac excitability disorder. Carry out a differential diagnosis of extrasystole.
41. Analyze ECG of patient with heart conduction disturbances.
42. To analyze ECG of patient with a combined disturbance of excitability and conduction of the heart.
43. To evaluate ECG of patient with an acute myocardial infarction, to determine the character and localization of heart muscle damage.
44. Interpret general clinical analysis of urine of a patient with kidney disease, analysis of urine according to Zimnytskyi and Nechiporenko. Identify the main symptoms and syndromes.
45. Interpret the results of the patient's general blood analysis. Determine character of the main symptoms and syndromes.
46. Interpret the results of a biochemical blood test. Determine the main symptoms, make a conclusion about the character of damage.
47. Demonstrate on a dummy the technique of subcutaneous, intramuscular, intravenous injection.
48. Calculate the dose of soluble antibiotic and prepare necessary means for the test.
49. Fill the transfusion system and prepare it for intravenous infusions.
50. Fill out the temperature sheet with the results of thermometry, pulse examination and blood pressure measurement.

12. RECOMMENDED LITERATURE

Main

1. Macleod's Clinical Examination / Ed. G.Douglas, F.Nicol, C.Robertson.– 15th ed.– Elsevier. 2023. – 464 p.
2. Bates' Guide to Physical Examination and History Taking /Ed. Rainier P. Soriano. – Wolters Kluwer, 2025. – 1312 p.

3. Case history in internal medicine: tutorial / I. M. Skrypnyk, G. S. Maslova, T. V. Lymanets [et al.] ; ed. by I. Skrypnyk. – 2nd ed. – Lviv : Publisher Marchenko T. V., 2024. – 202 p.
4. Propaedeutics of Internal Medicine: Workbook. Clinical manual for 3rd year students. Second edition/ V.Ye. Kondratiuk, V.A. Khomaziuk, O.A. Bychkov. I.V. Krasiuk, T.H. Ostashevska, – Kyiv: AUS Medicine Publishing, 2022. – 186 p.
5. Patient Assessment and Care Planning in Nursing. Peter Ellis, Mooi Standing. - SAGE Publications Ltd, 2023. – 200 p.

Additional

1. Propedeutics of Internal Medicine. Section 1: Collection of tests for the third-year foreign students / L.V. Lukashenko et al.- Zaporizhzhia: ZSMU, 2022. - 133 p.
2. Kondratiuk V.Ye., Khomaziuk V.A. Practice in Patient Care at the Therapeutic Department of a Hospital: Workbook. Clinical manual. – Kyiv: AUS Medicine Publishing, 2020. – 112 p.
3. Propedeutics to Internal Medicine: textbook for English learning students of higher medical school. Part 1. Diagnostics / O.M. Kovalyova, T.V. Ashcheulova. – 4th ed. – Vinnytsia: Nova Knyha, 2019. – 417 p.
4. Propedeutics of internal medicine: textbook for English learning students of higher medical schools. Part 2. Syndromes and diseases / O.M. Kovalyova, S.O.Shapovalova, O.O. Nizhegorodtseva. - 4th ed. - Vinnytsia: Nova Knyha, 2019. – 258 p.
5. Patient Care (Practical Course): textbook / O.M. Kovalyova, V.M. Lisovyi, R.S. Shevchenko et al. – 2nd edition. – Medicine, 2018. – 320p

13. Information resources

A series of online lectures at propaedeutics of internal medicine, created by the staff of the department of propaedeutics of internal medicine of NMU:

1. OSCE-1.Bogomolets National Medical University. Respiratory system (official) https://www.youtube.com/watch?v=eeK25NiKOKs&t=25s
2. OSCE-1.Bogomolets National Medical University. Examination of cardiovascular system (official) https://www.youtube.com/watch?v=XzfgpYj06Cw&list=PLDlhn5aYOA9RHcRbBrpFmg_Ut_RgUI0tW&index=7
3. OSCE-1.Bogomolets National Medical University.BP Measurement(Official) https://www.youtube.com/watch?v=dSxlqEGvzCA&list=PLDlhn5aYOA9RHcRbBrpFmg_Ut_RgUI0tW&index=1
4. Blood pressure measurement - OSCE guide https://www.youtube.com/watch?v=f6HtqolhKqo&list=PLwYICl63HBzk9-kb-i3uDQthQAz3JuRTW&index=9
5. OSCE-1.Bogomolets National Medical University.Recording and analysis of ECG(official) https://www.youtube.com/watch?v=1RUpDZliFC8&list=PLDlhn5aYOA9RHcRbBrpFmg_Ut_RgUI0tW&index=3
6. OSCE-1.Bogomolets National Medical University.Examination of gastrointestinal system(official) https://www.youtube.com/watch?v=K0RN4NM6IbY&list=PLDlhn5aYOA9RHcRbBrpFmg_Ut_RgUI0tW&index=8
7. Lecture “Questioning of the patient, palpation and percussion of the chest” https://www.youtube.com/watch?v=kAhq_hVQHyM&t=1s
8. Lecture “Basic symptoms and syndromes of coronary heart disease” https://www.youtube.com/watch?v=UKFBSe2MCu8&t=1s
9. Lecture “Auscultation of the lungs” https://www.youtube.com/watch?v=71rJsT1lTqg&t=1s
10. Lecture “The main symptoms of the gastrointestinal tract diseases” https://www.youtube.com/watch?v=FGVY20c-5Bg&t=1s
11. Lecture “Basic symptoms and sydromes of hypertension” https://www.youtube.com/watch?v=lo9sbTY_Z5k&t=1s
12. Lecture “Pulse and blood pressure” https://www.youtube.com/watch?v=YHcIdfGlZT4&t=1s

Appendix 1.

Diary

passing nursing practice

student III course, ESIM|\faculty _____ group

_____

(Name, Surname)

Place of practice:

Department of propaedeutics of internal medicine

Clinical base _____

Date, working hours *	Content of the completed work **	Teacher's signature ***

* hours of work during classroom preparation and independent work are indicated separately

** a list of performed manipulations and tasks is given, indicating in brackets their number, the name of the department or manipulation class where they were directly performed

*** performance of manipulations and tasks during classroom training is certified by the signature of the group teacher, during independent work - by the department teacher on duty or the senior nurse / department nurse on duty.

Appendix 2.

Final report

on the work performed during nursing practice
within the scope of duties of a nurse of the **therapeutic** department
of a third-year student, ESIM /faculty _____, group _____

_____

(Full name)

Place of practice:
Department of Propaedeutics of Internal Medicine
Clinical base _

_____

№ з/п	Name of Manipulations and Procedures	Execution Mark or Quantity
1.	Medication accounting in the treatment room	
2.	Filling out the temperature chart	
3.	Pulse assessment	
4.	Blood pressure measurement	
5.	Blood sampling for biochemical analysis	
6.	Urine collection for general analysis, Zimnytsky, and Nechyporenko tests	
7.	Stool sampling for bacteriological and coprological examination	
8.	Subcutaneous injections	
9.	Intramuscular injections	
10.	Intravenous injections	
11.	Intravenous drip administration of drugs	
12.	Calculation of dosage and drug dilution	
13.	Pre-sterilization cleaning of instruments	
14.	Quality control of pre-sterilization cleaning	
15.	Administration of enemas	
16.	Patient preparation for ultrasound and X-ray examinations	
17.	ECG recording	
18.	Application of compresses	
19.	Participation in the delivery of physiotherapeutic procedures	
20.	Other (specify)	

Teacher's signature _____