

MINISTRY OF HEALTH OF UKRAINE
BUKOVINIAN STATE MEDICAL UNIVERSITY

"APPROVE"

Vice-rector for scientific and pedagogical work
Associate Professor I.V. Gerush
" 27 " 08 2021

**STUDENT GUIDE
(SYLLABUS)
of studying the discipline
propedeutics of internal medicine**

Field of knowledge 22 Healthcare
(code and name of the field of knowledge)

Specialty 222 Medicine
(code and name of the specialty)

Educational degree master
(master, bachelor, junior bachelor)

Educational year 3

Form of study full-time
(full-time, part-time, distance)

Department of propedeutics of internal diseases
(name of the department)

Approved at the methodical session of the department propedeutics of internal diseases "08" June 2021 (Protocol № 23).

Head of the department of propedeutics
of internal diseases, professor



T.O. Ilashchuk

Approved by the subject methodical commission on the therapeutic subjects "29" June 2021 (Protocol № 13).

Chairman of the subject methodical
commission



V.K. Tashchuk

1. GENERAL INFORMATION ABOUT SCIENTIFIC AND PEDAGOGICAL WORKERS WHO TEACH THE SUBJECT

Department	propedeutics of internal diseases
Surname, name of scientific and pedagogical staff, scientific degree, academic status	Prysyazhnyuk Vasyl, Doctor of Medicine, Professor prysjazhnyuk.vasyl@bsmu.edu.ua Malkovych Nataliia, PhD, Associate Professor malkovich@bsmu.edu.ua Glubochenko Olena, PhD, Associate Professor glubochenko.olen@bsmu.edu.ua Mykytyuk Oksana, PhD, Associate Professor mikiitiuk.oksana@bsmu.edu.ua Bobkovych Kateryna, PhD, Associate Professor bobkovych.kateryna@bsmu.edu.ua Doholich Olexandra, PhD, Associate Professor doholich.oleksandra@bsmu.edu.ua Gorevych Svitlana, Assistant gorevych.s@bsmu.edu.ua
Web page of the department on the official website of the university	https://www.bsmu.edu.ua/prop_therapy/
Department website	http://prop_therapy@bsmu.edu.ua/
E-mail	prop_therapy@bsmu.edu.ua
Address	Chernivtsi, Holovna street, 100
Contact phone	+38 (0372) 55-13-61

2. GENERAL INFORMATION ABOUT THE DISCIPLINE

Status of the discipline	normative
Number of credits	3
Total amount of hours	180
Lectures	30
Practical lessons	70
Individual work	80
Type of final control	final module control

3. DESCRIPTION OF THE DISCIPLINE (ABSTRACT)

Propaedeutics of internal medicine is an educational clinical discipline that studies methods and techniques of clinical examination of the patient, features of professional communication between doctor and patient, subjective and objective manifestations of diseases (symptoms and syndromes), highlights the relationship between pathology of the oral cavity and internal organs, develops rapid examination skills. and providing emergency care to patients in the prehospital phase and in emergencies.

POLICY OF THE SUBJECT

3.1. List of normative documents:

- Regulations on the organization of the educational process (<https://www.bsmu.edu.ua/wp-content/uploads/2020/03/polozhennya-pro-organizacziyu-osvitnogo-proczesu-u-vdnzu-bukovinskij-derzhavnij-medichnij-universitet.pdf>);
- Instructions for assessing the educational activities of BSMU students in the implementation of the European credit transfer system of the educational process (<https://www.bsmu.edu.ua/wp-content/uploads/2020/03/bdmu-instrukcziya-shhodo-oczinyuvannya-%D1%94kts-2014-3.pdf>);
- Regulations on the procedure for reworking missed and uncredited classes (<https://www.bsmu.edu.ua/wp-content/uploads/2019/12/reworks.pdf>);

- Regulations on the appeal of the results of the final control of knowledge of higher education (<https://www.bsmu.edu.ua/wp-content/uploads/2020/07/polozhennya-pro-apelyacziyu-rezultativ-pidsumkovogo-kontrolyu-znan.pdf>);
- Codex of Academic Integrity (https://www.bsmu.edu.ua/wp-content/uploads/2019/12/kodeks_academic_faith.pdf);
- Moral and ethical codex of students (https://www.bsmu.edu.ua/wp-content/uploads/2019/12/ethics_code.docx);
- Regulations on the prevention and detection of academic plagiarism (<https://www.bsmu.edu.ua/wp-content/uploads/2019/12/antiplagiat-1.pdf>);
- Regulations on the procedure and conditions for students to choose elective courses (https://www.bsmu.edu.ua/wp-content/uploads/2020/04/nakaz_polozhennyz_vybirkovi_dyscypliny_2020.pdf);
- Rules of internal labor regulations of the Higher State Educational Institution of Ukraine "Bucovynian State Medical University" (<https://www.bsmu.edu.ua/wp-content/uploads/2020/03/17.1-bdmu-kolektivnij-dogovir-dodatok.doc>).

3.2. Policy on adherence to the principles of academic integrity of higher education students:

- independent performance of educational tasks of current and final controls without the use of external sources of information;
- cheating during control of knowledge is prohibited;
- independent performance of individual tasks and correct registration of references to sources of information in case of borrowing of ideas, statements, information.

3.3. Policy on adherence to the principles and norms of ethics and deontology by higher education students:

- actions in professional and educational situations from the standpoint of academic integrity and professional ethics and deontology;
- compliance with the rules of internal regulations of the university, to be tolerant, friendly and balanced in communication with students and teachers, medical staff of health care institutions;
- awareness of the importance of examples of human behavior in accordance with the norms of academic integrity and medical ethics.

3.4. Attendance policy for higher education students:

- attendance at all training sessions (lectures, practical (seminar) classes, final modular control) is mandatory for the purpose of current and final assessment of knowledge (except for respectable reasons).

4.5. Deadline policy and completion of missed or uncredited classes by higher education students:

- reworks of missed classes are held according to the schedule of missed or uncredited classes and consultations.

4. PRECISIONS AND POST-REQUIREMENTS OF THE EDUCATIONAL DISCIPLINE (INTERDISCIPLINARY RELATIONS)

List of disciplines, on which the study of academic discipline is based	List of academic disciplines, for which the basis is laid as a result of studying the discipline
Human anatomy and physiology	Internal medicine
Medical ethics and deontology	Clinical pharmacology
Medical biology	Family medicine
Medical and biological physics	
Microbiology with basis of immunology	
Pathological physiology	
pharmacology	

5. PURPOSE AND TASKS OF THE EDUCATIONAL DISCIPLINE:

5.1. The purpose of studying the discipline is formation of the student's basics of clinical thinking and acquisition of professional competencies of examination of the patient and assessment of the main manifestations of diseases of internal organs in compliance with the principles of medical ethics and deontology.

5.2. The main tasks of studying the discipline are:

- Mastering by the student the theoretical knowledge necessary for detection of human diseases
- Mastering the practical techniques and methods of physical and laboratory-instrumental examination of patients
- Assimilation of general methodological approaches to clinical examination of the patient
- Diagnosis of certain internal human diseases with their typical manifestations
- Formation of students' moral, ethical and deontological qualities in professional communication with the patient.

6. COMPETENCIES, THE FORMATION OF WHICH IS CONTRIBUTED BY THE DISCIPLINE:

6.1. Integral competence: ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

6.2. General competencies:

3K 2. Ability to apply knowledge in practical situations.

3K 4. Ability to abstract thinking, analysis and synthesis, to learn and be modernly trained.

K3 6. Knowledge and understanding of the subject area and understanding of the profession.

6.3. Professional (special) competencies:

1. Skills of interviewing and clinical examination of the patient.
2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.
3. Ability to establish a syndromic diagnosis of the disease.
4. Ability to diagnose emergencies.
5. Emergency care skills.
6. Skills of medical manipulations.
7. Ability to keep medical records.
8. Ability to carry out sanitary and hygienic and preventive measures.
9. Ability to ensure the required mode of stay of the patient in the hospital in the treatment of diseases.

7. RESULTS OF STUDYING THE DISCIPLINE.

As a result of studying the discipline student must:

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

- collect information about the general condition of the patient (consciousness, constitution) and appearance (examination of the skin, subcutaneous fat layer, palpation of lymph nodes and thyroid gland);

- examine the condition of the cardiovascular system (examination and palpation of the heart and superficial vessels, determination of percussion boundaries of the heart and blood vessels, auscultation of the heart and blood vessels);

examine the condition of the respiratory organs (examination of the chest and upper respiratory tract, palpation of the chest, percussion and auscultation of the lungs);

- examine the condition of the abdominal organs (examination of the abdomen, palpation and percussion of the intestine, stomach, liver, spleen, kidneys);
- examine the condition of the musculoskeletal system (examination and palpation).

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

7.2. Be able to:

1. Identify and record the leading clinical symptom or disease syndrome: anemic syndrome, anuria and oliguria, hypertension, hypotension, chest pain, abdominal pain, vomiting, bronchoobstructive syndrome, pleural effusion, hemorrhagic hemorrhagic hemorrhagic syndrome, headache, dysuria, dyspepsia, dysphagia, diarrhea, jaundice, shortness of breath, constipation, dizziness, cardiomegaly, cough, hemoptysis, edematous syndrome, nephrotic syndrome, polyuria, portal hypertension, cardiac arrhythmias and conduction disorders, urinary syndrome, indigestion syndrome, heart failure syndrome, respiratory failure syndrome, liver failure syndrome, cyanosis, gastrointestinal decision-making using preliminary data of the patient's anamnesis, data of physical examination of the patient, knowledge of the person, his bodies and systems, adhering to the corresponding ethical and legal norms.

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

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

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

5. Under the conditions of the health care institution, its unit to keep medical records of the patient (outpatient / inpatient card, medical history), using standard technology, on the basis of regulatory documents.

6. Carry out preventive measures, in the conditions of the health care institution, its subdivision on the basis of data on the state of health of patients and the presence of environmental impact on it, using existing methods, within the primary health care, regarding:

- mode of activity and rest;
- primary disease prevention;
- prevention of harmful habits;
- promotion of a healthy lifestyle.

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

7.3. Demonstrate:

1. Possession of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic of internal medicine.
2. Conduct surveys and physical examinations of patients and analyze their results in the clinic of internal medicine.
3. To make the plan of inspection of the patient at a typical course of the most widespread therapeutic diseases.
4. Analyze the results of basic laboratory and instrumental research methods.
5. Identify the leading symptoms and syndromes in the clinic of internal medicine.

8. INFORMATIONAL SCOPE OF THE DISCIPLINE

180 hours are allocated for the study of the discipline "Propaedeutics of Internal Medicine" - 6.0 ECTS credits, 100 hours of which are classroom training (in the form of lectures - 30 hours and practical classes - 70 hours) and 80 hours - independent work of students

Description of each module of the discipline:

Module 1. "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIGNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE RESPIRATORY AND CARDIOVASCULAR SYSTEMS"

Content module 1. Introduction to the clinic of internal medicine. 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. The history of the disease. Anamnestic part of the medical history.

Propaedeutics of internal medicine as an introduction to clinical practice. History of formation of propaedeutics of internal medicine in Ukraine and abroad. The contribution of famous clinicians M.Ya. Mudrov, G.A. Zakhar'in, S.P. Botkin, O.O. Ostroumov, T.G. Yanovsky, V.P. Obratsov, M.G. Kurlov, M.M. Hubergritsa, MD Strazheska, MP Konchalovsky, MV Chernorutsky, GF Lang, OL Myasnikov, BS Shklyar in the development of the national propaedeutic school. The main goals and objects of study of propaedeutic medicine. The main methods of examination of patients in the clinic of internal medicine: physical, instrumental, laboratory.

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

Topic 2. General examination of the patient. Examination of individual parts of the body.

Methods of 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 the state of his consciousness (types of disorders of consciousness), posture, gait (types of posture and gait in various pathologies), position in bed (active, passive, forced, their types). Physique and basic criteria of normal

constitutional types. Skin, its properties (color, elasticity, humidity, temperature, rash elements, nevi, scars, scars) and pathological changes; assessment of hair and nails. Subcutaneous tissue (fatness, distribution, types of obesity), condition of muscles and musculoskeletal system. Sequence of palpation of lymph nodes. Diagnostic value of symptoms obtained during the general examination of the patient.

Methods and sequence of examination of the head and neck, limbs and torso, abdomen and chest. Diagnostic value of the symptoms received during inspection of separate parts of a body of the patient.

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

Topic 3. The 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 assessment. Features of finding out the anamnesis of the disease and life. Methods of 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 respiration (Cheyne-Stokes, Biota, Kussmaul, Grocco), their characteristics and causes. The sequence of chest palpation, determination of vocal tremor and semiological evaluation of its results.

Topic 4. Percussion as a method of physical examination of the lungs. Methods of comparative and topographic percussion of the lungs.

History of percussion as a method of physical examination. The role of percussion in determining the condition of the lungs. Classification of percussion by purpose, by the force of percussion, by the method of conducting. Varieties and conditions of percussion tones. The main topographic areas and landmarks on the surface of the chest. The main tasks and methods of comparative percussion of the lungs. The sequence of characteristics and diagnostic value of the obtained data. Causes of dull, tympanic, dull-tympanic, box percussion tones over the lungs.

Basic topographic lines on the surface of the chest. The main tasks and sequence of topographic percussion of the lungs. Determining the height of the apices of the lungs in front and behind, the width of the Krenig fields. The sequence of determining the lower limit of the lungs, active and passive mobility of the lower lung edge. Traube space, its importance in lung pathology.

Topic 5. Auscultation as a method of physical examination of the lungs. Methods of lung auscultation. Principal respiratory sounds.

History of auscultation development as a method of physical examination of the patient. Rules for using a stethoscope and phonendoscope. Methods of approximate comparative auscultation of the lungs. The principal respiratory sounds: vesicular and bronchial respiration, their quantitative and qualitative changes, conditions of occurrence. Methods for determining bronchophonia and its diagnostic value.

Topic 6. Auscultation of the lungs: additional respiratory sounds (wheezing, crepitation, pleural friction rub).

Classification of additional respiratory noises (wheezing, crepitation, pleural friction rub). Causes of dry and wet rales, their varieties. Diagnostic value of consonant and non-consonant rales. Conditions of crepitation and noise of pleural friction. Differential signs of additional respiratory noises. Additional auscultatory phenomena (noise of Hippocrates' splash, noise of a falling drop, noise of a "water pipe"), the reasons of their occurrence and diagnostic value.

Topic 7. Instrumental and laboratory methods of respiratory research. Spirometry, spirometry. Peak flowmetry. Pulse oximetry.

Indications and methods of spirometry and pneumotachometry, the main indicators are normal, changes in obstructive and restrictive variants of respiratory disorders. Familiarity with the method and diagnostic value of bronchoscopy and bronchography. Pleural puncture (technique and laboratory examination of the puncture site). Laboratory examination of sputum. X-ray examination of the chest, its types and diagnostic value. Computed tomography of the chest, the main indications for its implementation.

Intermediate control of mastering of content modules 1, 2.

Content module 3. The main symptoms and syndromes in respiratory diseases.

Topic 8. Syndrome of bronchial obstruction. Pulmonary airway syndrome. The main clinical manifestations of chronic bronchitis and bronchial asthma. Pulmonary emphysema. Examination of sputum in bronchial asthma, bronchitis.

Definition and main mechanisms of chronic bronchitis and bronchial asthma. The main complaints and data of physical examination of patients with chronic bronchitis and bronchial asthma. Syndrome of bronchial obstruction, mucociliary insufficiency and increased lung ventilation. Basic methods of instrumental diagnostics. Laboratory signs of bronchial asthma according to general blood tests and sputum research. Definition and main clinical manifestations of bronchiectasis. The concept of chronic obstructive pulmonary disease.

Topic 9. The main symptoms and syndromes of pneumonia on the basis of clinical-instrumental and laboratory research methods. Pneumosclerosis. Lung cancer. Pleurisy.

Definition and modern classification of pneumonia (inpatient, non-hospital, aspiration, pneumonia in immunocompromised individuals), classification by the nature of lung damage (pleuropneumonia, bronchopneumonia, interstitial pneumonia). The main etiological factors of pneumonia. Complaints of patients and features of these physical methods of examination of patients with pleuro- and bronchopneumonia. Criteria for severe pneumonia. Possibilities of instrumental diagnostics of lung tissue compaction. Laboratory signs of inflammatory syndrome in pneumonia. The main causes of pneumosclerosis. Data of physical and instrumental examination of a patient with pneumosclerosis. The main clinical forms of lung cancer: features of manifestations in the central and peripheral localization of cancer. Pulmonary compaction syndrome.

Causes of inflammation of the pleural leaves. Ways of formation and circulation of intrapleural fluid in normal and in pathology. Features of the patient's complaints with dry and exudative pleurisy, the difference between the data of physical examination (palpation, percussion, auscultation of the lungs) in different forms of pleurisy. Syndromes of accumulation of fluid and air 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 4. Physical methods of research of cardiovascular system.

Topic 10. Physical methods of research of cardiovascular system. Interrogation and general examination of patients with pathology of the cardiovascular system.

Diagnostic value of the main physical methods of examination of the circulatory system (interrogation, examination, palpation, percussion, auscultation). The sequence of clarification and detailing of complaints of a patient with cardiovascular pathology. Features of collecting medical history and life. Conducting a general examination of a cardiac patient.

Curation of the patient to write anamnestic section of the medical history.

Topic 11. Pulse examination (arterial, venous, pseudocapylar) and blood pressure.

Vessels available to determine the pulse (arterial, venous). Rules and sequence of pulse examination on the radial artery. Determination of the main properties of the pulse (synchronicity,

rhythm, frequency, voltage, filling, height, speed, uniformity), detection of deficit, lability, paradoxicality, dichroic pulse. Rules for measuring blood pressure in the upper and lower extremities. Basic methods of determining blood pressure. The concept of Korotkov's tones. The main parameters that determine the indicators of systolic and diastolic blood pressure. The concept of pulse and mean dynamic blood pressure. Normal blood pressure values according to WHO / MTG criteria.

Topic 12. Examination and palpation of the precordial area. Percussion of the boundaries of relative and absolute cardiac dullness, determination of the width of the vascular bundle.

The sequence of examination of the heart. Diagnostic value of cardiac hump, pulsations in the heart and neck. Methods and techniques of palpation of the precordial area: apical shock (localization, area, force, height, resistance, displacement, causes of negative apical shock); heartbeat, causes of its occurrence and methods of determination; pulsation of the abdominal aorta, liver, Plesch's symptom, pulsation of the ascending aorta and its arch, detection of pulsation of the pulmonary trunk. Presystolic and systolic tremor (symptom of "cat purr"), causes. The concept of relative and absolute cardiac dullness, their percussion definition (sequence: right, upper, left border) and changes in pathology. Structures that form the vascular bundle, percussion determination of its width.

Topic 13-14. Auscultation of the heart. Normal heart tones, splitting and bifurcation of tones, additional tones (quail rhythm, gallop rhythm).

Methods and techniques of heart auscultation in accordance with the traditions of the Kiev therapeutic school. Main and additional points of auscultation. Places of projection and the best listening of heart valves. The mechanism of formation of heart tones. Causes of strengthening and weakening of tones. Tone accent. Tone changes in tone (clapping, muted, velvet, metallic, cannon tones). The concept of splitting and bifurcation of heart tones, the reasons for their occurrence and temporal characteristics. Additional tones - mitral valve opening tone, gallop tones (protodiastolic, mesodiastolic and presystolic gallop rhythm). Methodological features of auscultation of the heart - directly by the ear, stethoscope, phonendoscope: in the position of the patient standing, lying down, at rest and after exercise.

Topic 15-16. Auscultation of the heart: organic and functional heart murmurs.

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

Content module 5. Instrumental methods of cardiovascular research.

Topic 17. Electrocardiographic method of studying heart function. Methods of ECG recording and decoding. ECG signs of atrial and ventricular hypertrophy.

Clinical and diagnostic value of the method of electrocardiography. Biophysical and physiological bases of an ECG. The structure and function of drivers of heart rhythm and conduction system. The main and additional ways of conducting the pulse. Methods and techniques of ECG recording: standard leads, unipolar leads from the extremities, chest leads. The main elements of the ECG: the value of the duration and amplitude of the teeth, the duration of the intervals and segments are normal. Algorithm and technique of ECG decoding. ECG signs of hypertrophy of the right and left atria and ventricles.

Topic 18. Electrocardiographic examination of patients with disorders of automatism and excitability.

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

Topic 19. Electrocardiographic examination of patients with conduction disorders. ECG signs of combined heart rhythm disorders.

Pulse conduction time in different parts of the conduction system of the heart. ECG signs of sino-auricular and intraatrial block. Classification and ECG signs of atrioventricular block. Morgan-Adams-Stokes attacks, their cause and clinical manifestations. Intraventricular blockade, differentiation of blockade of the left and right leg of the His bundle. Acquaintance with indications for carrying out and rules of performance of electropulse therapy. ECG and clinical signs of atrial fibrillation and flutter. Clinical manifestations and ECG signs in ventricular fibrillation, paroxysmal ventricular tachycardia, ventricular fibrillation.

Topic 20. ECG signs in ischemia and myocardial necrosis.

ECG forms depending on the prevalence of myocardial necrosis: focal, small focal, transmural, intramural. Complications of AMI early and late. Cardiogenic shock. Cardiac arrhythmias. Acute left ventricular failure. Thromboembolic complications. Acute heart aneurysm. Heart rupture. Postinfarction Dressler's syndrome.

Content module 6. The main symptoms and syndromes in diseases of the cardiovascular system

Topic 21. Mitral heart disease: the main symptoms and syndromes based on clinical and instrumental methods of examination.

Identification and prevalence of heart defects, heart rate. Rheumatism, modern classification and main clinical manifestations. The main causes and mechanisms of mitral regurgitation and mitral stenosis. Changes in hemodynamics in mitral heart disease. The value of the Chinese reflex. The main complaints of patients with mitral stenosis and mitral valve insufficiency. Examination data, palpation of the atrial area and percussion in mitral heart disease. Auscultatory picture of mitral stenosis and mitral regurgitation. ECG and FCG signs of mitral heart disease. Radiological signs of mitral regurgitation. The concept of mitral valve prolapse.

Topic 22. Aortic heart defects: main symptoms and syndromes based on clinical and instrumental methods of examination.

Etiological factors and mechanisms of aortic insufficiency and aortic stenosis. Changes in hemodynamics in aortic heart disease. The main complaints of patients with aortic stenosis and aortic valve insufficiency. Examination data, palpation of the atrial area and percussion in aortic heart disease. Auscultatory picture of aortic stenosis and aortic insufficiency. ECG and FCG signs of aortic heart defects. Radiological signs of aortic defects.

Topic 23. The main symptoms and syndromes of hypertension. Hypertensive crises. Ischemic heart disease: main symptoms and syndromes in angina and myocardial infarction.

WHO / MTG determination for hypertension, essential hypertension (hypertension) and symptomatic hypertension. The main risk factors for hypertension and the mechanisms of its development. Classification of hypertension by blood pressure level and target organ damage. The main complaints of the patient with hypertension, examination data, palpation of the precardiac area, percussion of the boundaries of cardiac dullness and auscultation of the heart. ECG signs of myocardial

changes in hypertension. Symptomatic hypertension. Complicated and uncomplicated hypertensive crises. Definition of "coronary heart disease" (CHD). The main pathogenetic mechanisms and risk factors for coronary heart disease. Modern classification of coronary heart disease. Definition and main clinical manifestations of angina. Functional classes of angina. Methods of objective diagnosis of angina (ECG, daily ECG monitoring, stress tests, coronary angiography, heart scintigraphy). Unstable angina, the 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 different forms of myocardial infarction in different periods of its course. Modern laboratory markers of myocardial necrosis.

Topic 24. Final modular control, including test control of theoretical training. Control of practical skills.

Module 2. "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIGNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE GASTROINTESTINAL TRACT, KIDNEYS, MUSCULOSKELETAL SYSTEM"

Content module 1. The main methods of research of the organs of the gastrointestinal tract and kidneys

Topic 1. Questioning and examination of patients with diseases of the gastrointestinal tract. Examination and superficial palpation of the abdomen.

The sequence of clarification and detailing of complaints of a patient with pathology of the gastrointestinal tract. Features of collecting medical history and life. Changes in the appearance of the patient with various pathologies of the gastrointestinal tract. Sequence of examination of the abdomen (shape, size, symmetry, condition of the skin and navel, fatness, condition of subcutaneous vessels, the nature of hair growth). 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 large and small radius, checking the symptoms of peritoneal irritation, detecting differences in the rectus abdominis, the presence of umbilical hernias and hernias of the white line of the abdomen). Methods of ascites detection (survey, percussion, fluctuations).

Topic 2. Deep sliding methodical palpation of the intestine and stomach. Deep sliding methodical palpation of the liver, spleen, kidneys.

The role of domestic clinicians in the development of the method of palpation of the abdominal cavity. Projection of the gastrointestinal tract on the surface of the abdomen. The sequence of deep sliding methodical palpation of the intestinal tract by the method of Obraztsov-Strazhesk: normal parameters of the sigmoid, cecum, terminal part of the ileum, ascending, descending and transverse colon.

Methods for determining the lower limit of the stomach (percussion, palpation, stethoacoustic, splash noise). Rules of palpation of the goalkeeper.

Percussion determination of the size and boundaries of the liver by the methods of Obraztsov and Kurlov. Causes of increase and decrease in the size of the liver. Methods of deep sliding palpation of the liver. Characteristics of the normal palpation picture and possible changes in the lower edge of the liver in pathology. Methods of percussion determination of the size of the spleen, the main reasons for its increase. Rules of palpation of the spleen. Diagnostic value of determining Pasternatsky's symptom. Methods of palpation of the kidneys in a standing and lying position.

Content module 2. The main symptoms and syndromes in diseases of the gastrointestinal tract and excretory system.

Topic 3. Clinical and instrumental and laboratory studies of patients with chronic gastritis, peptic ulcer of the stomach and duodenum, intestinal diseases. The 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 *Helicobacter pylori*, conditions of damage to the gastric mucosa and duodenum.

The main complaints of patients with chronic gastritis and peptic ulcer. Features of the pain syndrome depending on the location of the pathological focus and the state of 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 4. The main symptoms and syndromes in diseases of the biliary tract: chronic cholecystitis, cholangitis, gallstone disease. Investigation of duodenal contents.

Definitions and principles of modern classification of chronic cholecystitis and cholangitis. The concept of dyskinesia of the biliary tract and their types. The main complaints of patients with cholecystitis and cholangitis. Physical examination data 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 in pathology of the biliary tract, laboratory diagnosis and the results of duodenal sounding. Gallstone disease: main complaints and physical examination data. Features of the pain syndrome. The main manifestations of jaundice and cholestasis syndrome, their laboratory signs.

Topic 5. The main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis.

Definition and principles of modern classification of chronic hepatitis and liver cirrhosis. The main etiological factors of hepatitis and liver cirrhosis. The mechanism of liver damage in hepatitis of viral etiology. 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. The concept of histological activity index and Child-Pew criteria. Syndromes of portal hypertension, liver failure and hepatolienal syndrome in liver lesions. The main complications of liver cirrhosis.

Topic 6. Diagnostic value of physical properties of urine, the presence of urine protein, bilirubin, urobilinogen, glucose and ketone (acetone bodies). Clinical significance of changes in urine sediment. The main symptoms and syndromes of kidney disease - acute and chronic glomerulonephritis and pyelonephritis.

Definition and modern classification of glomerulonephritis and pyelonephritis. The main mechanisms of glomerulonephritis and pyelonephritis.

Complaints of patients with kidney damage and the results of physical examination of patients with glomerulonephritis and pyelonephritis. Edema syndrome and hypertension syndrome in kidney disease. Possibilities of instrumental diagnosis of renal pathology. Laboratory study of urine, analysis and interpretation of the results of general clinical analysis of urine, study of urine by Nechiporenko, Amburge, Addis-Kakowski, Zymnitsky. Urinary, nephrotic syndromes in kidney disease. The results of biochemical blood tests in renal pathology. Syndromes of renal failure and renal colic. Definition and classification of chronic kidney disease.

Content module 3. Endocrine diseases of the musculoskeletal system, pathology of the blood system and interpretation of the results of laboratory methods of examination.

Змістовий модуль 3. Ендокринні захворювання та захворювання опорно-рухового апарату, патологія системи крові та інтерпретація результатів лабораторних методів обстеження.

Topic 7. General clinical analysis of blood and its diagnostic value. Clinical and hematological manifestations of HIV infection.

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

Topic 8. The main symptoms and syndromes of anemia, acute and chronic leukemia.

The main components of the blood coagulation system. Factors in the development of bleeding and the causes of hemorrhagic syndromes - thrombocytopenia, coagulopathy, hemorrhagic vasculitis. Characteristics of hemorrhagic syndrome in hemophilia, thrombocytopenic purpura and Shenlein-Henoch disease. Manifestations of joint, abdominal, renal and anemic syndromes in these diseases. Basic methods of laboratory diagnosis of hemorrhagic syndromes. Causes of development and pathogenesis of disseminated intravascular coagulation syndrome (DIC). Stages and clinical manifestations of DIC syndrome, its main laboratory criteria.

Topic 9. Curation of patients. Writing a medical history.

Medical history as the most important tool of medical research of the patient, scientific and methodical and legal document. The main sections of medical history and their presentation. The main and secondary complaints of the patient, the importance of the patient's history for the diagnosis of the disease. Collection of complaints from a specific patient assigned to curation. Analysis of complaints and their division into primary and "secondary". History of the disease. Dynamics of occurrence and course of symptoms of the main and concomitant diseases according to the patient and his ambulatory card. Life history of the patient. Data on childhood development, vaccinations, diseases. Age and causes of death of close and distant blood relatives of the patient. Bad Habits. Allergic, occupational and sexual history.

Physical examination of the patient. General overview. Position in bed. State of consciousness. Face expression. Physique, constitution. Anthropometric data. Condition of skin and mucous membranes. Hair, nails. Obesity, cachexia. Musculoskeletal system. Joints, edema. Respiratory organs. Review. Palpation. Percussion. Auscultation. Circulatory organs. Examination and palpation of blood vessels. Examination, palpation, percussion, auscultation of the heart. Blood pressure measurement. Digestive organs. Review. Condition of the dental-maxillary system and tongue. Palpation, percussion, abdominal auscultation. Organs of the genitourinary system. Palpation, percussion, auscultation. Organs of the endocrine system. Examination, palpation. Isolation of the main syndromes; Establishing a preliminary diagnosis.

Drawing up a plan of laboratory and instrumental methods of examination. Evaluation of their results and clinical diagnosis.

Topic 10. Protection of medical history.

Differential diagnosis with diseases with similar clinical signs (at least 4 diseases). Formation of the final diagnosis: the main, complications of the main, concomitant diseases.

Non-drug, drug and surgical treatment (if necessary). Existing treatment standards. Primary and secondary prevention. Forecast and efficiency.

The main emergencies that may occur in the supervised patient. Emergency care for them. Tactics of the dentist in case of need of intervention in an oral cavity at the supervised patient. Used literature.

Protection of medical history. Rationale for diagnosis, treatment standards.

Topic 11. Final modular control, including test control of theoretical training. Control of practical skills.

9. STRUCTURE OF EDUCATIONAL DISCIPLINE

Names of modules and topics	Amount of hours				
	Total	Lectures	Practical classes	Independent work of students	
				Individ.	Indep.
Module 1. The principal method of patient's examination, signs, symptoms and syndromes in diseases of respiratory and cardiovascular systems					
<i>Content module 1. Introduction to the clinic of internal medicine. Basic rules of questioning and examination of the patient</i>					
Topic 1. The role and place of propaedeutics of internal medicine among the clinical disciplines of the therapeutic profile. The history of the disease. Anamnestic part of the medical history.	5	2	2	–	1
Topic 2 .General examination of the patient. Examination of individual parts of the body.	4		2	–	2
<i>Together with the content module 1.</i>	9,0	2,0	4,0	–	3
<i>Content module 2. Physical and instrumental methods of studying the state of the broncho-pulmonary system</i>					
Topic 3. The main complaints of patients with respiratory diseases. Examination and palpation of the chest.	4		2	–	2
Topic 4. Percussion as a method of physical examination of the lungs. Methods of comparative and topographic percussion of the lungs.	4	-	2	–	2
Topic 5. Auscultation as a method of physical examination of the lungs. Methods of lung auscultation. Principal respiratory sounds.	4	-	2	–	2
Topic 6. Auscultation of the lungs: additional respiratory sounds (wheezing, crepitation, pleural friction rub).	6	2	2	–	2
Topic 7. Instrumental and laboratory methods of respiratory research. Spirometry, spirometry. Peak flowmetry. Pulse oximetry.	8	2	2	2	2
<i>Together with the content module 2.</i>	26,0	4,0	10,0	2,0	10,0
<i>Content module 3. The main symptoms and syndromes in respiratory diseases.</i>					

Names of modules and topics	Amount of hours				
	Total	Lectures	Practical classes	Independent work of students	
				Individ.	Indep.
Topic 8. Syndrome of bronchial obstruction. Pulmonary airway syndrome. The main clinical manifestations of chronic bronchitis and bronchial asthma. Pulmonary emphysema. Examination of sputum in bronchial asthma, bronchitis.	6	2	2	-	2
Topic 9. The main symptoms and syndromes of pneumonia on the basis of clinical-instrumental and laboratory research methods. Pneumosclerosis. Lung cancer. Pleurisy.	6	2	2	-	2
<i>Together with the content module 3.</i>	<i>12,0</i>	<i>4,0</i>	<i>4,0</i>	<i>-</i>	<i>4,0</i>
<i>Content module 4. Physical methods of research of cardiovascular system.</i>					
Topic 10. Physical methods of research of cardiovascular system. Interrogation and general examination of patients with pathology of the cardiovascular system.	4	-	2	-	2
Topic 11. Pulse examination (arterial, venous, pseudocapylar) and blood pressure.	6	2	2	-	2
Topic 12. Examination and palpation of the precordial area. Percussion of the boundaries of relative and absolute cardiac dullness, determination of the width of the vascular bundle.	5	1	2	-	2
Topic 13-14. Auscultation of the heart. Normal heart tones, splitting and bifurcation of tones, additional tones (quail rhythm, gallop rhythm).	12	2	4	2	4
Topic 15-16. Auscultation of the heart: organic and functional heart murmurs.	9	-	4	1	4
<i>Together with the content module 4.</i>	<i>34,0</i>	<i>4,0</i>	<i>14,0</i>	<i>3,0</i>	<i>13,0</i>
<i>Content module 5. Instrumental methods of cardiovascular research.</i>					
Topic 17. Electrocardiographic method of studying heart function. Methods of ECG recording and decoding. ECG signs of atrial and ventricular hypertrophy.	5	2	2	-	1
Topic 18. Electrocardiographic examination of patients with disorders of automatism and excitability.	4	-	2	-	2
Topic 19. Electrocardiographic examination of patients with conduction disorders. ECG signs of combined heart rhythm disorders.	4	-	2	-	2
Topic 20. ECG signs in ischemia and myocardial necrosis. .	4	-	2	-	2
<i>Together with the content module 5.</i>	<i>17,0</i>	<i>2,0</i>	<i>8,0</i>	<i>-</i>	<i>7,0</i>

Names of modules and topics	Amount of hours				
	Total	Lectures	Practical classes	Independent work of students	
				Individ.	Indep.
<i>Content module 6. The main symptoms and syndromes in diseases of the cardiovascular system .</i>					
Topic 21. Mitral heart disease: the main symptoms and syndromes based on clinical and instrumental methods of examination.	5	–	2	-	3
Topic 22. Aortic heart defects: main symptoms and syndromes based on clinical and instrumental methods of examination.	5	–	2	-	3
Topic 23. The main symptoms and syndromes of hypertension. Hypertensive crises. Ischemic heart disease: main symptoms and syndromes in angina and myocardial infarction.	6	2	2	-	2
Topic 24. Final modular control, including test control of theoretical training. Control of practical skills. .	4	-	2	-	2
<i>Together with the content module 6.</i>	20,0	2,0	8,0	-	10,0
<i>Total hours from the module 1.</i>	118	18	48	5	47
Module 2. "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIHNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE GASTROINTESTINAL TRACT, KIDNEYS, MUSCULOSKELETAL SYSTEM"					
<i>Content module 1. The main methods of research of the organs of the gastrointestinal tract and kidneys</i>					
Topic 1. Questioning and examination of patients with diseases of the gastrointestinal tract. Examination and superficial palpation of the abdomen.	3	-	2		1
Topic 2. Deep sliding methodical palpation of the intestine and stomach. Deep sliding methodical palpation of the liver, spleen, kidneys.	5	-	2	-	3
<i>Together with the content module 1.</i>	8,0	-	4,0	-	4,0
<i>Content module 2. The main symptoms and syndromes in diseases of the gastrointestinal tract and excretory system.</i>					
Topic 3. Clinical and instrumental and laboratory studies of patients with chronic gastritis, peptic ulcer of the stomach and duodenum, intestinal diseases. The main symptoms and syndromes.	6	2	2	1	1
Topic 4. The main symptoms and syndromes in diseases of the biliary tract: chronic cholecystitis, cholangitis, gallstone disease. Investigation of duodenal contents.	4	-	2	1	1
Topic 5. The main clinical and laboratory manifestations of chronic hepatitis and liver cirrhosis.	6	2	2	1	1
Topic 6. Diagnostic value of physical properties of urine, the presence of urine protein, bilirubin, urobilinogen, glucose and ketone (acetone bodies). Clinical significance of changes in urine					

Names of modules and topics	Amount of hours				
	Total	Lectures	Practical classes	Independent work of students	
				Individ.	Indep.
sediment. The main symptoms and syndromes of kidney disease - acute and chronic glomerulonephritis and pyelonephritis.	4	-	2	1	1
<i>Together with the content module 2.</i>	20,0	4,0	8,0	4,0	4,0
<i>Змістовий модуль 3. Ендокринні захворювання та захворювання опорно-рухового апарату, патологія системи крові та інтерпретація результатів лабораторних методів обстеження.</i>					
Topic 7. General clinical analysis of blood and its diagnostic value. Clinical and hematological manifestations of HIV infection.	6	2	2	1	1
Topic 8. The main symptoms and syndromes of anemia, acute and chronic leukemia. .	6	2	2	1	1
The main symptoms and syndromes in diabetes mellitus. The main clinical features of thyroid gland's diseases.	4	2	-	1	1
Locomotor apparatus disorders. The clinical, laboratory and instrumental methods of examination. Diffuse diseases of connective tissue: lupus erythematosus, scleroderma, dermatomyositis.	5	2	-	2	1
<i>Together with the content module 3.</i>	21,0	8,0	4,0	5,0	4,0
Topic 9. Curation of patients. Writing a medical history.	5		2	1*	2
Topic 10. Protection of medical history.	4	-	2		2
Topic 11. Final module control, including test control of theoretical training. Control of practical skills.	4		2		2
<i>Total hours from the module 2</i>	62	12	22	10	18
TOTAL HOURS FROM THE DISCIPLINE	180	30	70	15	65
				80	

4. Module 1. Basic methods of patient's investigation in internal diseases clinic

4.1. Thematic plan of lectures

№	Topic	Hours quantity
1.	Propedeutics of internal diseases as introduction into clinics of internal diseases. Symptoms in pulmonary diseases on the basis of patient interviewing, palpation ad percussion of the chest.	2
2.	Symptoms in pulmonary diseases on the basis of lungs auscultation.	2
3.	Symptoms and signs in cardio-vascular diseases. Heart auscultation. Normal cardiac sounds.	2
4.	The principal symptoms and syndromes revealing in the listening of pathological cardiac sounds. Symptoms and syndromes revealing in the listening of cardiac murmurs.	2

5	Instrumental methods of cardiovascular system examination. Cardiac rhythm alteration. Conductivity alteration. Clinical and electrocardiographic aspects .	2
6	The principal symptoms and syndromes in gastric and bowel diseases. The methods of endoscopic and ultrasound examinations in gastroenterology.	2
Total		12

4.2. Thematic plan of practical tutorials (seminars)

№	Topic	Hours quantity
1	Schedule of case history. Conduction of patient questioning. General inspection of a patient. Inspection of the separate body parts: head, neck, trunk, extremities.	2
2	Principal complains of patients with diseases of the respiratory organs. Static and dynamic inspection of the chest. Palpation of the chest.	2
3	Percussion of the lungs. Method and technique of comparative percussion conduction.	2
4	Percussion of the lungs. Method and technique of topographic percussion conduction.	2
5	Auscultation of the lungs: principal respiratory sounds (vesicular and bronchial respiration)	2
6	Auscultation of the lungs: additional respiratory sounds (crepitation, rales, pleural friction noise)	2
7	Instrumental methods of respiratory organs examination.	2
8	Clinical interpretation of sputum and pleural punctate investigation in respiratory organs' diseases	2
9	Questioning and general inspection of patients with cardiovascular pathology. Pulse (arterial, venous, pseudocapillary) and arterial pressure investigation.	2
10	Inspection and palpation of precardiac area. Detection of relative and absolute heart dullness borders by percussion. Percussion of the heart in pathological states. Changes of heart borders caused by heart diseases and extracardiac reasons. Demonstration of roentgenograms with different configurations of the heart.	4
11	Auscultation of the heart. Normal cardiac tones, additional tones. Auscultation of the heart in pathology, changes of tones strength (intensity): increase and weakening of both of heart tones and each separately, tones splitting and segregation, quail rhythm, gallop rhythm, pendulum-like rhythm and embriocardia.	4
12	Auscultation of the heart. Organic cardiac murmurs. Functional cardiac murmurs, mechanism of their origin. Differences between organic (valvular) and functional murmurs. Extracardiac murmurs: pericardial friction noise, pleuropericardial, cardiopulmonary murmurs. Analysis of phonocardiograms.	4
13	Methodics of electrocardiogram registration and decoding. ECG-signs of atriums and ventricles hypertrophy.	2
14	ECG-signs of automatism and excitability violations.	2
15	ECG-signs of conductivity violations. Basis for electroimpulse therapy conduction.	2
16	Instrumental methods of cardiovascular system investigation.	2
17	Questioning and inspection of patients with pathology of digestive organs. Inspection and superficial palpation of the abdomen.	2
18	Profound methodical sliding topographic palpation of the gut parts and the stomach. Profound methodical sliding topographic palpation of the liver,	4

	spleen, kidneys.	
19	Instrumental methods of gastroenterological tract investigation. Investigation of the gastric and duodenal content. Investigation of the faeces and their clinical interpretation.	2
20	Final module control, incl. test-control of theoretical training. Control of the practical skills. Analysis of the results of instrumental investigations.	2
Total		46

4.3. Kinds of independent work.

№	Topic	Hours quantity
1.	Preparation to practical tutorials – theoretical and mastering methods of patient physical examination:	
	- questioning of a patient with internal organs pathology	2
	- general inspection of a patient, inspection of the separate body parts (head, neck, trunk, extremities, chest, abdomen)	2
	- chest palpation	1
	- comparative and topographic percussion of the lungs	1
	- lungs auscultation	1
	- palpation of precardiac area	1
	- determination of pulse properties	1
	- percussion of the borders of heart relative and absolute dullness	1
	- heart auscultation	2
	- superficial palpation of the abdomen, profound methodical sliding topographic palpation of the gut, the stomach, the liver, spleen, kidneys.	1
	- determination of borders of the liver and the spleen by percussion	1
2.	Gaining skills of conduction of instrumental investigations:	
	- spirometry and pneumotachometry	1
	- ECG and PhCG registration	1
3.	Gaining expertness to analyse:	
	- results of investigation of external breathing functions	1
	- results of electrocardiographic and phonocardiographic investigations	4
	- results of investigation of the gastric and duodenal content.	1
4.	Independent working out topics not included to curriculum of class tutorials: - electrocardiographic investigation in case of combined violations of the heart rhythm	1
5.	Curation of the patients with writing of anamnestic part of the case history	1
6.	Individual work: Conduction of investigation of external breathing functions in significant model patients, working of obtained data and report at the tutorial ECG registration, participation in conduction of instrumental investigations in significant model patients with working of obtained data and report at the tutorial Conduction of investigation of significant model patient and preparation of literature review concerning investigated case	1 1 1
7.	Preparation to final control of module 1 adoption	2
Total		29

5. Module 2. SYMPTOMS AND SYNDROMES IN INTERNAL ORGANS DISEASES.

5.1 Thematic plan of lectures

№	Topic	Hours quantity
1.	Acquired mitral defects. Principal symptoms and syndromes. Acquired aortal defects. Principal symptoms and syndromes.	
2.	Essential hypertension and symptomatic arterial hypertensions. Hypertonic crisis.	
3.	Symptoms and syndromes in angina pectoris and myocardial infarction. Syndrome of heart and vessel failure in cardiovascular diseases.	2
4.	Syndrome of bronchial obstruction. Pulmonary emphysema. Principal symptoms and syndromes in pneumonias, dry and exudative pleurisies.	2
5.	Principal symptoms and syndromes in liver diseases (chronic hepatits, liver cirrhosis).	2
6.	Principal symptoms and syndromes in diseases of the kidneys. Symptomatology of acute and chronic glomerulonephritis and pyelonephritis.	2
7.	Principal symptoms and syndromes in anemias. Methods of clinical, laboratory and instrumental examinations in haemorrhagic syndromes and leukaemia/ AIDS.	2
8.	Methods of clinical, laboratory and instrumental diagnostics of endocrine system diseases and metabolic disorders. Diabetes mellitus. Etiology, clinical appearances, the principles of treatment.	2
9.	Principal symptoms and syndromes in diseases of the locomotor system. Diffuse diseases of connective tissue: rheumatoid arthritis, lupus erythematosus, scleroderma, dermatomyositis.	2
Total		18

5.2. Thematic plan of practical tutorials (seminars)

№	Topic	Hours quantity
1	Mitral defects of the heart: principal symptoms and syndromes on the basis of clinical-instrumental investigation methods.	2
2	Aortal defects of the heart: principal symptoms and syndromes on the basis of clinical-instrumental investigation methods.	2
3	Principal symptoms and syndromes in arterial hypertension and symptomatic arterial hypertensions. Hypertensive crises. Ischemic heart disease: principal symptoms and syndromes in stenocardia and myocardial infarction	2
4	Principal clinical manifestations in chronic bronchitis and bronchial asthma. Chronic obstructive diseases of the lungs.	2
5	Pneumonias: symptoms and syndromes on the basis of clinical-instrumental and laboratory investigation methods. Pneumosclerosis. Cancer of the lungs. HIV-infection. Principal symptoms and syndromes in dry and exudative pleurisy. Syndrome of respiratory insufficiency in pathology of broncho-pulmonary system	2
6	Clinical-instrumental and laboratory investigation of the patients with chronic gastritis, ulcerative disease of the stomach and the duodenum. Principal symptoms and syndromes. Principal symptoms and syndromes in biliferous ducts diseases: chronic cholecystitis, cholangitis, gall-bladder calculous disease.	2
7	Principal clinical and laboratory manifestations of chronic hepatitis and hepatic cirrhosis.	2

8	Principal symptoms and syndromes in diseases of the kidneys - acute and chronic glomerulonephritis and pyelonephritis. Diagnostic meaning of urine physical properties, presence of protein, bilirubin, urobilinogen, glucose and ketonic (acetic) bodies in the urine. Clinical value of the urine sediment changes. Nechiporenko, Kakovsky-Addis probes, Zymnitsky probe and their clinical interpretation. Solution of the clinical tasks. Demonstration of the methods of urine clinical investigation.	2
9	Principal symptoms and syndromes in anemias. General blood analysis. Diagnostic value of general blood analysis.	2
10	Patients curation. Writing of case history.	2
11	Defence of case history.	2
12	Final module control, incl. Test-control of theoretical preparation Control of practical skills Analysis of results of instrumental and laboratory investigations	0,5 0,5 1
Total		24

5.3. Kinds of independent work.

№	Topic	Hours quantity
1.	Preauditory theoretical preparation to practical tutorials according to plan of practical tutorials	10
2.	Working out topics not presented during practical tutorials:	
	Cardiac insufficiency syndrome: principal clinical and instrumental investigation methods.	1
	Haemorrhagic syndromes and pathology of blood coagulation system. Syndrome of disseminated intravascular microcoagulation of the blood.	2
	Principal syndromes in leucemias. Chronic lympholeucosis and myeloleucosis.	1
	Principal symptoms and syndromes in diabetes mellitus. Principal clinical manifestations of thyroid gland diseases.	2
3.	Individual work: curation of one patient with writing of case history.	1
4.	Preparation to final control of module 1 adoption	1
Total		16

13. LIST OF INDIVIDUAL TASKS

- Speeches at the scientific student group.
- Participation in scientific conferences.
- Publication of reports in the form of abstracts and articles in periodicals (journals, collections of scientific papers).
- Production of visual aids according to educational programs (tables, models, visual aids, graphological schemes of practical classes).
- Writing essays

14. LIST OF QUESTIONS FOR FINAL CONTROL

Adopting of module 1 in propedeutics of internal MEDICINE: "Module 1. "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIGNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE RESPIRATORY AND CARDIOVASCULAR SYSTEMS"

1. Kyiv school of internal medicine: the input of outstanding domestic clinicians V.P.Obraztsov, T.G.Yanovski, M.D.Strazhesko, V.M. Ivanov, V.H.Vasylenko, M.M.Gubergritz into development of clinical medicine.
2. Methodological principles of internal diseases diagnostics.
3. Basic methods of internal diseases diagnostics.
4. A chart for questioning of an investigated person. Basic structural parts of anamnesis.
5. The sequence of conduction of patient general examination.
6. Types of body build and their principal criteria.
7. The sequence of lymphatic nodes palpation and characteristics of obtained data.
8. The rules of head and neck inspection conduction.
9. The sequence of body and extremities inspection conduction.
10. Chest static inspection, diagnostic value of principal symptoms.
11. Chest dynamic inspection, diagnostic value of principal symptoms.
12. Inspection of precardiac area, diagnostic value of principal symptoms.
13. The sequence of abdomen examination conduction, determination of principal symptoms.
14. Principal pulse properties, rules and sequence of their detection.
15. Rules of arterial pressure measurement. Determination of systolic and diastolic pressure by Korotkov, calculation of average dynamic and pulse pressure.
16. Palpatory investigation of the chest: sequence of conduction, clinical value of principal symptoms.
17. Palpatory investigation of precardiac area, determination of clinical value of principal symptoms.
18. Sequence of conduction of lungs comparative percussion. Principal percussion sounds and their formation mechanisms.
19. Algorithm of lungs topographic percussion conduction. Topographic parameters of the lungs in norm and pathology.
20. Percussion investigation of the heart – heart relative dullness: normal borders and their displacement in case of heart chambers changes.
21. Percussion investigation of the heart – heart absolute dullness: normal borders and their displacement due to cardiac and extracardiac reasons.
22. Determination of vascular bunch by percussion, its diagnostic value.
23. Percussion of the liver by Obraztsov method: sequence of conduction, parameters in norm and pathology.
24. Percussion of the liver by Kurlov method: sequence of conduction, parameters in norm and pathology.
25. Determination of the spleen borders by percussion. Rules of conduction, reasons for spleen enlargement.
26. Auscultation of the lungs – determination of principal respiratory noises, their qualitative and quantitative changes.
27. Auscultation of the lungs – determination of additional respiratory noises, their qualitative and quantitative changes.
28. Mechanisms of formation and varieties of rales, their diagnostic value.
29. Principal reasons of crepitation and pleural friction noise formation. Their diagnostic value and ways of differentiation.
30. Rules and sequence of bronchophony investigation, its diagnostic value.

31. Lung tissue condensation syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
32. Syndrome of increased airiness of the lungs tissue: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
33. Syndrome of fluid accumulation in the pleural cavity: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
34. Syndrome of air accumulation in the pleural cavity: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
35. Bronchial obstruction syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
36. Cardiac pain syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
37. Syndrome of blood circulation insufficiency: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
38. Syndrome of heart's left ventricle insufficiency: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
39. Syndrome of heart's right ventricle insufficiency: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
40. Syndrome of vascular insufficiency: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
41. Syndrome of arterial hypertension: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
42. Auscultation of the heart – cardiac tones, mechanism of their formation and force and tone changes.
43. Splitting and segregation of cardiac tones, concepts about II tone accenting.
44. Additional cardiac tones - quail rhythm, gallop rhythm.
45. Cardiac murmurs auscultation: classification and terms of origin.
46. Cardiac murmurs auscultation: sequence of characteristics, differences between organic and functional murmurs.
47. Diastolic functional murmurs (Flint's, Cumbs', Graehem-Still's). Terms of origin and diagnostic value.
48. Rules of ECG analysis. Calculation of heart beats frequency and determination of heart electric axis position.
49. ECG-signs of automatism violations.
50. ECG-signs of excitability violations. Differentiation of basic kinds of extrasystoles.
51. ECG-signs of conductivity violations. Classification of conductivity violations.
52. ECG-signs of blinking arrhythmia and atrial fibrillation. Mechanisms of their origin.

Adopting of Module 2 "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIHNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE GASTROINTESTINAL TRACT, KIDNEYS, MUSCULOSKELETAL SYSTEM"

Superficial palpation of the abdomen: algorithm of conduction and analysis of obtained data.

1. Theoretic principles of profound methodical sliding topographic palpation of the abdomen by Obraztsov-Strazhesko method.
2. Palpatory investigation of sigmoid, caecal colon, terminal part of the ileum, their properties in norm.
3. Rules of ascending and descending parts of the colon palpation, their properties in norm.
4. Methods of determination of the lower border of the stomach.
5. Palpatory investigation of the transverse colon, principal properties.
6. Rules of liver palpation, diagnostic value of principal symptoms.
7. Palpatory investigation of the spleen.
8. Ways of detection of fluid presence in the abdominal cavity.

9. Dyspeptic syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
10. Dysphagic syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
11. Dyskinesia types of biliferic tracts: principal clinical manifestations, laboratory and instrumental diagnostic methods.
12. Syndrome of portal hypertension: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
13. Jaundice syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
14. Syndrome of gastro-intestinal bleeding; aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
15. Nephrotic syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
16. Uric syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
17. Acute renal insufficiency syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
18. Chronic renal insufficiency syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
19. Anaemic syndrome: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
20. Hyperplasic syndrome in hemopoietic organs diseases: aetiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
21. Haemorrhagic syndromes: classification, pathogenesis, clinical and laboratory diagnostic methods.
22. Hyperthyroidal syndrome principal reasons, clinical manifestations, laboratory and instrumental diagnostic methods.
23. Hypothyroidal syndrome principal reasons, clinical manifestations, laboratory and instrumental diagnostic methods.
24. Chronic gastritis: classification, principal clinical manifestations, diagnostics.
25. Stomach and duodenum ulcerative disease: classification, principal clinical manifestations, diagnostics.
26. Chronic cholecystitis and cholangitis: classification, principal clinical manifestations, diagnostics.
27. Cholelithic disease: stages of development, symptomatic, diagnostics.
28. Hepatitis: modern classification, principal clinical manifestations, diagnostics.
29. Cirrosis of the liver: modern classification, principal clinical manifestations, diagnostics.
30. Acute and chronic glomerulonephritis: classification, principal clinical manifestations, diagnostics.
31. Acute and chronic pyelonephritis: classification, principal clinical manifestations, diagnostics.
32. Anaemias: classification, principal syndromes.
33. Ferrum-defficient anaemia: pathogenesis, clinical manifestations, laboratory criteria.
34. B₁₂-folic-defficient anaemia: pathogenesis, clinical manifestations, laboratory criteria.
35. Haemolytic anaemia: classification, principal syndromes, laboratory criteria.
36. Chronic leucosis: principal syndromes, appearance of the blood.
37. Haemophilia: classification, principal clinical manifestations, diagnostics.
38. Trombocytopenic purpura: Verlgoff's disease: principal clinical manifestations, laboratory diagnostics.
39. Haemorrhagic vasculitis (Shoenlein-Genoch's disease): principal clinical manifestations, laboratory diagnostics.
40. Diabetes mellitus: classification, principal symptoms and syndromes, laboratory diagnostics.

8. LIST OF PRACTICAL SKILLS AND TASKS for final module control.

Adopting of module 1 in propedeutics of internal MEDICINE: "Module 1. "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIGNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE RESPIRATORY AND CARDIOVASCULAR SYSTEMS"

1. To interview a patient. To make a conclusion about obtained anamnestic data.
2. To conduct chest palpatory investigation, to define clinical value of symptoms.
3. To conduct questioning of a patient with lungs pathology. To define basic symptoms.
4. To conduct questioning of a patient with cardiovascular system pathology. To define basic symptoms.
5. To conduct general inspection of a model patient. To define basic symptoms.
6. To conduct head and neck inspection of a model patient. To define clinical value of symptoms.
7. To conduct body and extremities inspection of a model patient. To define clinical value of symptoms.
8. To conduct chest inspection of a patient with broncho-pulmonar pathology, to evaluate static signs.
9. To conduct chest inspection of a patient with broncho-pulmonar pathology, to evaluate dynamic signs.
10. To conduct precardiac area examination, to define clinical value of symptoms.
11. To conduct arterial pressure measurement on the upper extremities, to estimate obtained data.
12. To conduct arterial pressure measurement on the lower extremities, to estimate obtained data.
13. To conduct comparative percussion of the lungs and to define clinical value of symptoms.
14. To conduct topographic percussion of the lungs and to define clinical value of symptoms.
15. To determine active mobility of the lungs lower borders, to define clinical value of symptoms.
16. To conduct percussion investigation of the heart, to determine borders of relative dullness of the heart and to give clinical estimation.
17. To conduct percussion investigation of the heart, to determine borders of absolute dullness of the heart and to give clinical estimation.
18. To determine breadth of vascular bunch by percussion method, to estimate obtained data.
19. To determine liver borders by percussion method, to estimate diagnostic value of symptoms.
20. To determine spleen borders by percussion method, to give clinical estimation.
21. To conduct lungs auscultation, to determine quantitative and qualitative respiration changes, to give clinical estimation.
22. To conduct lungs auscultation, to determine additional respiratory noises, to give clinical estimation.
23. To conduct bronchophony investigation, to give clinical estimation.
24. To conduct arteries auscultation, to determine diagnostic value of symptoms.
25. To conduct heart auscultation, to determine it's tones changes, to give clinical estimation.
26. To conduct heart auscultation, to determine diagnostic value of heart murmurs.
27. To analyze ECG of patient with violation of heart automatism.
28. To analyze ECG of patient with violation of heart excitability. To conduct differential diagnostics of extrasystoles.
29. To analyze ECG of patient with violation of heart conductivity.
30. To analyze ECG of patient with combined violation of heart excitability and conductivity.
31. To analyze PhCG of patient with defect of the heart.
32. To conduct physical examination of a patient with mitral defect of the heart. To define leading symptoms and syndromes.
33. To conduct physical examination of a patient with aortal defect of the heart. To define leading symptoms and syndromes.

34. To conduct physical examination of a patient with arterial hypertension. To define leading symptoms and syndromes.
35. To conduct questioning of a patient with ischemic heart disease (stable angina pectoris), to get into details of painful syndrome, to define patient's functional class.
36. To conduct general inspection and physical examination of a patient with acute myocardial infarction. To define leading symptoms and syndromes.
37. To estimate ECG of a patient with acute myocardial infarction, to define character and localization of heart muscle's affliction.
38. To conduct physical examination of a patient with chronic heart failure. To define leading symptoms and syndromes, to define patient's functional class.
39. To conduct questioning and inspection of a patient with obstructive disease of the lungs. To define leading symptoms and syndromes, to detect disease stage taking into account spirometry results.
40. To conduct palpation, percussion of the chest and auscultation of the lungs in patient with obstructive disease of the lungs. To define leading symptoms and syndromes.
41. To conduct questioning and physical examination of a patient with pneumonia. To define leading symptoms and syndromes.
42. To conduct questioning and physical examination of a patient with pleuritis. To define pleuritis' character, its leading symptoms and syndromes.

Module 2. "PRINCIPAL METHODS OF PATIENT'S EXAMINATION, SIGNS, SYMPTOMS AND SYNDROMES IN DISEASES OF THE GASTROINTESTINAL TRACT, KIDNEYS, MUSCULOSKELETAL SYSTEM"

1. To conduct abdomen examination, to define clinical value of symptoms.
2. To conduct lymphatic nodes palpatory investigation, to estimate the results.
3. To conduct thyroid gland palpatory investigation, to estimate obtained data.
4. To conduct pulse palpatory investigation, to define clinical value of symptoms.
5. To conduct precordial area palpatory investigation, to define clinical value of symptoms.
6. To conduct abdomen superficial palpation, to define clinical value of symptoms.
7. To conduct palpatory investigation of the sigmoid colon, to define clinical value of symptoms.
8. To conduct palpatory investigation of the caecal colon, to define clinical value of symptoms.
9. To conduct palpatory investigation of the ascending part of the colon, to define clinical value of symptoms.
10. To conduct palpatory investigation of the descending part of the colon, to define clinical value of symptoms.
11. To conduct palpatory investigation of the transverse part of the colon, to define clinical value of symptoms.
12. To conduct palpatory investigation of the liver, to define clinical value of symptoms.
13. To conduct palpatory investigation of the spleen, to define clinical value of symptoms.
14. To conduct palpatory and percussion investigation of the kidneys, to define clinical value of symptoms.
15. To determine the stomach lower border, to estimate obtained data.
16. To detect presence of fluid in the abdominal cavity, to give clinical estimation.
17. To conduct questioning of a patient with gastrointestinal system pathology. To define basic symptoms.
18. To conduct questioning, inspection and palpation of abdomen in patient with chronic gastritis. To define leading syndromes.
19. To analyze results of gastric content investigation in patient with chronic gastritis. To define state of gastric secretion and to evaluate its acid-producing function.
20. To conduct questioning, inspection and palpation of abdomen in patient with ulcerative disease. To define leading syndromes, to recognize possible localization of an ulcer.

21. To conduct questioning, inspection and palpation of abdomen in patient with chronic cholecystitis. To check principal symptoms characteristic for gall-bladder affliction. To define leading syndromes.
22. To conduct questioning, inspection and palpation of abdomen in patient with chronic cholangitis. To define principal syndromes.
23. To estimate results of a multi-moment intubation of the duodenum in patient with biliferous tracts disease. To define principal syndromes and localization of affliction.
24. To conduct questioning and inspection of a patient with hepatitis (or liver cirrhosis). To define leading symptoms and syndromes.
25. To conduct physical examination of a patient with hepatitis (or liver cirrhosis). To define leading syndromes taking into account results of blood biochemical analysis and urine analysis.
26. To conduct physical examination of a patient with disease of the kidneys (glomerulonephritis or pyelonephritis). To define principal syndromes.
27. To analyse general clinical urine analysis in patient with renal diseases, urine analysis after Zymnytskyi and Nechyporenko. To define leading symptoms and syndromes. To make a conclusion about character of affliction of the kidneys.
28. To conduct physical examination of a patient with anaemia. To define leading symptoms and syndromes, to define anaemia character taking into account general blood analysis.
29. To analyse general blood analysis in patient with leucosis. To define leading laboratory symptoms and type of chronic leucosis.
30. To conduct questioning and general inspection of a patient with diabetes mellitus, to investigate pulse over vessels of upper and lower extremities, and arterial pressure. To define leading symptoms and syndromes.

16. Evaluation of educational subject of the student.

Control forms and evaluation system are performed according to requests of subject program and instruction about system of students' educational activity evaluation in credit-module system of educational process organisation ratified by MHP of Ukraine.

Rate for module is defined as summary of rates for current educational activity (in balls) and rate for final module control (in balls), put during evaluation of theoretical knowledge and practical skills according to lists maintained by subject program.

Maximal balls quantity appropriated to students in each module adoption (accounted credit) – 200, including 120 balls (60%) for current educational activity, by results of module final control – 80 balls (40%).

Current control is performed according to precise aims at each practical tutorial, adoption of contents modules (intermediate control) – at the last tutorial of each contents module. Next means of preparation level diagnostics of students are recommended: computer tests, control of practical skills conduction of patient investigation methods with next results interpretation, analysis of results of instrumental and laboratory investigations.

Evaluation of current educational activity:

The value of each topic inside the limits of one module has to be equal and is determined by the topics quantity in a module.

The mark for "Propedeutics of internal diseases" subject is a rating-based and is determined by taking into account of current student's educational activity and rates for adoption by him of modules maintained by a program. Current evaluation of students by corresponding topics is conducted by traditional 4-ball system with further converting into multi-ball scale.

"Excellent" rate is put in case student is familiar with full-size contents of the tutorials and lecture material, illustrates responses with various examples; gives exclusively precise and clear responses without any directing questions; lays out material without mistakes and inaccuracy; freely finds solutions for tasks and fulfils practical tutorials of different complicity grade.

"Good" rate is put in case student is familiar with contents of the tutorials and understands it well, responses to questions gives correctly, systematically and in proper sequence, but they are not

precisely detailed, throughout student answers additional questions without mistakes; student solves all tasks and conducts practical tasks, feeling difficulties only in the most complicated cases.

“**Satisfactory**” rate is put to student on the basis of his knowledge of all contents of the subject and in case of satisfactory level of its understanding. Student is able to solve modified (simplified) tasks, with assistance of directing questions; he solves tasks and performs practical skills feeling difficulties in simple cases; is not able to give independent systematic answer, but answers properly direct questions.

“**Unsatisfactory**” rate is put in case student’s knowledge and expertness don’t meet criteria of “**unsatisfactory**” rate.

Evaluation of independent work:

Evaluation of student’s independent work suggested in the topic in parallel to auditory work, is conducted during current control of the topic on the corresponding auditory tutorial. Evaluation of the topics put to independent work only and not included to topics of auditory educational classes is performed during final module control.

Conversion of a rate by multi-ball scale is conducted with taking into account of practical tutorials quantity in each of modules: 22 tutorials in module 1, 14 tutorials in module 2.

Criteria of rating of students while module 1 studying.

Maximal balls of students rating while module 1 studying

The mark according 200 grade scale	The mark according four-grade scale
180-200	«5»
150-179	«4»
149-120	«3»
119 and less	«2»

Students studying on the same course will ranged according ECTS scale:

	Statistical parameter
«A»	The best 10% students
«B»	Next 25% students
«C»	Next 30% students
«D»	Next 25% students
«E»	Last 10% students

Distribution of points for current activities

Module number / number of study hours / number of ECTS credits	Amount of content modules, their numbers	Amount of practical classes	Conversion in traditional marks					Points for completing of individual works	Minimal amount of points*
			Traditional marks						
			"5"	"4"	"3"	"2"			
Module 1 120/4	-	24	5	4	3	0	5	77	
Module 2 60/2	-	11	11	9	7	0	10	82	

17. Recommended literature

1. Pashchuk T.O., Vasyuk V.L., Prisyazhnyuk V.P. Propaedeutic of Internal Medicine in Multi Choice Questions. – 2013. – 174 p.
2. Pashchuk T.O., Glubochenko O.V., Malkovych N.M. Propedeutics of internal medicine in questions and answers.- м. Вижниця: Видавництво «Черемош», 2017. – 432 p.
3. Lynn S. Bickley. Bates' Guide to Physical Examination and History-Taking - 12th Edition. – 2015. – 994 p.
4. Ковальова О.М., Ащеулова Т.В. Пропедевтика внутрішньої медицини (англійською мовою). – Вінниця: НОВА КНИГА, 2006. – Частина I. – 424 с., Частина II. – 324 с.
5. Pishak O.V., Glubochenko O.V., Malkovych N.M. Propedeutics of internal medicine in questions and answers.- м. Вижниця: Видавництво «Черемош», 2011. – 448 p.

18. Informative resources

1. <http://moodle.bsmu.edu.ua>
2. Department's site - http://prop_therapy@bsmu.edu.ua/
3. MoH of Ukraine's site- <http://www.moz.gov.ua>

19. COMPILERS OF THE GUIDE FOR STUDENT (SILABUS)

1. Vasyuk Valentyna, Doctor of Medicine, Associate Professor
2. Senyuk Bogdana, PhD, Associate Professor