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INTERNATIONAL EUROPEAN
UNIVERSITY



SCHOOL OF
MEDICINE

PROPEDEUTICS OF INTERNAL
MEDICINE

2023



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Discipline		PROPEDEUTICS OF INTERNAL MEDICINE		
Teacher(s)		Nechyporenko Vitaliy Ivanovych, Zahorodnyi Maksym Ivanovych, Zakordonets Liudmyla Vladyslavivna		
Profile of the teacher(s)		https://medicine.ieu.edu.ua/kafedra-vnutrishnoyi-medytsyny-z-kursom-akusherstva-ta-hinikolohiyi		
Consultations				
Face-to-face consultations		Second Tuesday of the month from 16.00 to 17.00		
Online consultations		First Monday of the month from 17.00 to 18.00		
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Discipline page		https://medicine.ieu.edu.ua/kafedra-vnutrishnoyi-medytsyny-z-kursom-akusherstva-ta-hinikolohiyi		
Form of final control		Test	differential credit	exam
		☐	☐	☒



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Brief summary of the discipline

The programme of study of the discipline "Propedeutics of Internal Medicine" is compiled in accordance with the educational qualification characteristics (EQC) and educational and professional programmes (EPP) for the training of specialists of the educational qualification level "Master" in the specialty 222 "Medicine", field of knowledge 22 "Health care". According to the curriculum, the study of the discipline "propedeutics of internal medicine" is carried out in V-VI semesters, when the student has acquired relevant knowledge of the main basic disciplines: medical biology, medical and biological physics, human anatomy, physiology, bioorganic and biological chemistry, microbiology, virology and immunology, with which the programme of propedeutics of internal medicine is integrated. In turn, the propaedeutics of internal medicine forms the basis for further study of clinical disciplines - internal medicine, medical psychology, infectious diseases, oncology, anaesthesiology and intensive care, which involves integration with these disciplines "vertically" and the development of skills to apply knowledge of the basic methods of examination of internal organs in the process of further education and professional activity. The volume of students' academic workload is described in ECTS credits - credits that are awarded to students upon successful completion of the relevant discipline (credit). The discipline "Propedeutics of Internal Medicine" is studied by students in the 3rd year of study for two semesters. In the fifth semester, the basic methods of examination of patients in the clinic of internal diseases are studied, and in the sixth semester - symptoms and syndromes in diseases of internal organs. Upon completion of the discipline, students take an exam.

The subject of study of the discipline "propedeutics of internal medicine" is a set of theoretical and practical issues aimed at mastering the basic methods of examination of a patient in the clinic of internal diseases.

Interdisciplinary links: normal anatomy; normal physiology; topographic anatomy; pathological anatomy; pathological physiology; medical psychology.

2

Purpose and objectives of the discipline

The purpose of teaching the discipline "propedeutics of internal medicine" is to form the basis of clinical thinking and acquire professional skills in examining the patient and assessing the main manifestations of diseases of internal organs in compliance with the principles of medical ethics and deontology.

1.2. The main objectives of the discipline "propedeutics of internal medicine" are:

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

3

Learning outcomes

PLO-1	Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integrating knowledge. To be responsible for professional development, the ability to further professional training with a high level of autonomy.
PLO-3	Specialised conceptual knowledge, including scientific achievements in the field of health care and the basis for research, critical thinking of medical problems and related interdisciplinary issues.
PLO-4	Identify and identify the leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data from the patient's history, examination of the patient, knowledge of the person, his/her organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).



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PLO-5	Collect complaints, anamnesis of life and disease, assess the patient's psychomotor and physical development, the state of organs and body systems, and evaluate information on the basis of laboratory and instrumental studies regarding the diagnosis (according to list 4), taking into account the patient's age.
PLO-6	Establish the final clinical diagnosis by making an informed decision and analysing the obtained subjective and objective data of clinical, additional examination, differential diagnosis, following the relevant ethical and legal standards, under the supervision of a supervising physician in the conditions of healthcare facility (according to list 2).
PLO-7	PLO 7. To prescribe and analyze additional (mandatory and optional) methods of examination (laboratory, functional and/or instrumental) (according to the list 4), patients with diseases of organs and body systems for differential diagnosis of diseases (according to the list 2).
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 health care facility, outside it and at the stages of medical evacuation, including in the field, based on a preliminary clinical diagnosis, observing the relevant ethical and legal standards, by making an informed decision according to existing algorithms and standard schemes, if necessary, expand the standard scheme, be able to justify personalised recommendations under the supervision of a supervising physician in a medical institution.
PLO- 10	Determine the necessary work, rest and nutrition regime based on the final clinical diagnosis, in compliance with relevant ethical and legal standards, by making an informed decision according to existing algorithms and standardised schemes.
PLO- 14	Determine the tactics and provide emergency medical care for urgent conditions (list 3) in a time-limited environment in accordance with existing clinical protocols and standards of care.
PLO- 17	Perform medical manipulations (according to List 5) in a healthcare facility, at home or at work based on a preliminary clinical diagnosis and/or patient's condition indicators by making an informed decision, in compliance with the relevant ethical and legal standards.
PLO- 21	Search for relevant information in professional literature and databases other sources, analyse, evaluate and apply this information.
PLO- 24	Organise the required level of individual safety (own and of persons under his/her care) in the event of typical hazardous situations in individual field of activity.
PLO- 25	Clearly and unambiguously communicate your own knowledge, conclusions and arguments on health care and related issues to professionals and non-specialists.
PLO- 27	Communicate fluently in the state language and in English, both orally and in writing, to discuss professional activities, research and projects.

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ECTS Credits

На вивчення навчальної дисципліни відводиться 6,0 кредитів ЄКТС 180 годин.



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Structure of the discipline

Topic	L.	Pr.	Ind.
1	2	3	4
<i>The main tasks of internal medicine. Rules of questioning and examination of the patient.</i>			
Topic 1: Scheme of medical history. Conducting a patient interview	2	2	2
Topic 2. General and detailed examination of the patient. Specificity of examination of critically ill patients with a limited life expectancy.		2	2
<i>Physical and laboratory-instrumental methods of studying the state of the respiratory system.</i>			
Topic 3: Common complaints and examination of patients with respiratory diseases. Palpation of the chest.	2	2	3
Topic 4. Percussion of the lungs.		2	3
Topic 5. Auscultation of the lungs. Bronchophonia.		2	3
Topic 6. Laboratory and instrumental methods of respiratory examination. Intermediate control of knowledge on examination of patients with pathology of the respiratory system.		2	2
<i>Physical methods of studying the cardiovascular system.</i>			
Topic 7. Questioning and examination of patients with diseases of the cardiovascular system. Palpation of the heart area.	2	2	2
Topic 8: Percussion determination of the limits of relative and absolute cardiac dullness.		2	2
Topic 9: Auscultation of the heart.	2	2	2
Topic 10. Examination of peripheral pulse and blood pressure measurement. Intermediate control of knowledge on the examination of patients with cardiovascular disease.		2	2
<i>Instrumental methods of studying the cardiovascular system.</i>			
Topic 11. Methods of ECG recording and interpretation. ECG signs of atrial and ventricular hypertrophy.	2	2	2
Topic 12: Electrocardiographic examination of patients with disorders of automaticity and excitability.		2	2
Topic 13. Electrocardiographic examination of patients with conduction disorders.		2	2
Intermediate control of knowledge of the basics of ECG diagnostic.			
<i>Basic methods of examination of the digestive system and kidneys.</i>			
Topic 14. Interview and examination of patients with diseases of the digestive system. Palpation of the abdomen.	2	2	2



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Structure of the discipline

Topic 15: Examination of the hepatobiliary system and pancreas. Intermediate control of knowledge on examination of patients with pathology of the digestive system.		2	3
			3
Passing practical skills		2	4
<i>Form of control</i>			
<i>test</i>			
<i>The main symptoms and syndromes of respiratory diseases.</i>			
Topic 16. Syndromes of fluid (hydrothorax) and air (pneumothorax) in the pleural cavity, emergency care. Syndrome of the presence of cavity in the lungs.	2	2	2
Topic 17. Syndromes of lung tissue compaction, bronchial obstruction and increased airiness of the lung tissue. Emergency care for a patient with an asthma attack.		2	3
Topic 18: Syndromes of compression atelectasis, obturative atelectasis and pulmonary insufficiency. Intermediate control of knowledge of syndromes in respiratory diseases.		2	2
<i>Main symptoms and syndromes in diseases of the cardiovascular system.</i>			
Topic 19: Symptoms and syndromes in angina pectoris and myocardial infarction.	2	2	2
Topic 20: Symptoms and syndromes in hypertension and symptomatic arterial hypertension. Hypertensive crises. Emergency care.	2	2	2
Topic 21: Mitral heart disease: symptoms and syndromes based on clinical and instrumental methods of examination. Diseases of the tricuspid valve.	2	2	2
Topic 22. Aortic heart disease: the main symptoms and syndromes based on clinical and instrumental methods of examination.		2	3
Topic 23. Heart failure syndrome. Syndromes of acute and chronic vascular insufficiency. Intermediate control of knowledge of syndromes in diseases of the cardiovascular system.		2	2
<i>Main symptoms and syndromes in diseases of the digestive and urinary systems</i>			
Topic 24. Symptoms and syndromes in diseases of the oesophagus, stomach, duodenum, small and large intestines.	2	2	2
Topic 25: Symptoms and syndromes in liver diseases. Symptoms and syndromes in diseases of the gallbladder and pancreas and pancreas.		2	4
Topic 26. Symptoms and syndromes of kidney disease. Intermediate control of knowledge of syndromes in diseases of the digestive and urinary systems.	2	2	2



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Structure of the discipline

Main symptoms and syndromes in diseases of the blood system and endocrine system. Pathology of connective tissue.			
Topic 27: Examination of patients with pathology of the endocrine system. Syndromes in diseases of the thyroid gland.	2	2	3
Topic 28. Symptoms and syndromes in diseases of other endocrine glands. Diabetes mellitus. Emergency care in case of diabetic and hypoglycaemic coma.	2	2	2
Topic 29: Examination of the hematopoietic system. Complete blood count.	2	2	2
Topic 30: Symptoms and syndromes in anaemia and haemoblastosis. Intermediate control of knowledge of syndromes in diseases of the endocrine and hematopoietic systems.		2	3
Тема 31. Методи обстеження пацієнтів з патологією сполучної тканини. Захист історії хвороби.	2	2	7
Total hours 180/6,0 ECTS Credits	32	64	84
The form of control: EXAM			

6

Individual tasks

Individual assignments are one of the forms of organising learning in higher education aimed at deepening, generalisation and consolidation of the knowledge that students acquire in the course of their studies, as well as the application of this knowledge in practice. Individual tasks are performed by students independently under the guidance of a teacher.

Individual tasks include: writing essays and creating multimedia presentations with reports at meetings of the department's scientific student circle, participation in the department's research -research work of the department, participation in writing abstracts and articles at student scientific conferences.

The list of tasks for individual student work: drawing up crosswords on the relevant sections of the discipline; participation in the work of the student scientific club and speeches at scientific forums; participation in the student olympiad in the discipline; selection of video and audio materials on the sections of the discipline; selection of materials and creation of a presentation on the relevant topic or section

7

Teaching methods

Teaching methods are used according to the sources of knowledge: verbal - narration, explanation, lecture, instruction; visual - demonstration, illustration; practical - practical work, problem solving. According to the nature of the logic of cognition, the following methods are used: analytical, synthetic, analytical-synthetic, inductive, deductive. According to the level of independent mental activity, the following methods are used: problematic, search, research.

1. Verbal methods: lecture, interactive lecture, conversation;
2. Visual methods: illustration, demonstration, demonstration at the patient's bedside.
3. Practical methods: practical work and solving clinical situational tasks to develop skills and abilities;
4. Independent work of students on comprehension and assimilation of new material
5. Use of control and educational computer programmes
6. Innovative teaching methods: Case-based learning (learning through the analysis of a clinical case, situation); brainstorming; educational discussion; educational debate; role play; team-based learning



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(Team-based learning; think-pair-share.

The types of classes according to the curriculum are: lectures; practical classes; independent work of students.

8

Control methods

Current control is carried out on the basis of control of theoretical knowledge, practical skills and skills and abilities.

The forms of current control are: oral questioning (frontal, individual, combined), interview; practical testing of the formed professional skills (conducted on the basis of the results of solving clinical cases, working with medical documentation, performing practical skills, working at the patient's bedside); test control ("open" and "closed" test tasks).

Current control is mandatory. When assessing the mastery of each topic in all disciplines of the curriculum, the student is given grades on a 4-point (traditional) scale for current learning activities, taking into account the approved assessment criteria for the discipline. All types of work provided by the curriculum are taken into account. The student must receive a grade for each topic. The teacher conducts a survey of each student in the group at each lesson and gives a grade in the student's attendance and progress record on a traditional scale ("5", "4", "3", "2").

When assessing a student's current learning activities, 20% of the grade is based on the student's independent work, which takes into account the knowledge of the topic of the independent lesson and the work in the notebook.

The final (summative) control is carried out

- in the form of a written test, which includes test tasks, theoretical questions
- control of practical skills (solving clinical cases, defence of medical history, assessment of the correctness of practical skills - a practice-oriented exam.

In accordance with the specifics of professional training, preference is given to test and practice-oriented control.

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Form of final control of progress

The final control of the discipline is carried out on the basis of control of theoretical knowledge, practical skills and practical skills and abilities.

A test is a form of final control, which consists in assessing the student's mastery of the educational material solely on the basis of the results of certain types of work in practical, seminar or laboratory classes. A semester test in a discipline is conducted after the completion of its study, before the start of the examination session.

An exam (differential test) is a form of final control of a student's mastery of theoretical and practical material in a discipline.

The scheme of calculation and distribution of points received by students.

The maximum number of points for a discipline is 200 points. The ratio between the results of the assessment of current learning activities and the final control of knowledge is 60% and 40%.

The first semester of the discipline ends with a test.

The maximum number of points that a student can gain for the current learning activity in the course of studying the discipline is 200 points, the minimum number of points - the minimum number of points - is 120 points.

The number of points is calculated on the basis of the grades received by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean, rounded to two decimal places.

The student receives a credit at the last class in the discipline based on the results of the current assessment. Only those students who have no academic debt and whose average grade for the current academic activity in the discipline is at least 3.00 are allowed to take the test.

The average grade for the current activity is converted into points on a 200-point scale, according to the conversion table (Table 1).



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Form of final control of progress

Conversion of the average grade for the current activity into a multi-point scale (for disciplines that end in a test)

4-point	200-point	4-point	200-point	4-point	200-point	4-point	200-point
5	200	4.47	179	3.94	158	3.42	137
4.97	199	4.44	178	3.92	157	3.39	136
4.94	198	4.42	177	3.89	156	3.37	135
4.92	197	4.39	176	3.87	155	3.34	134
4.89	196	4.37	175	3.84	154	3.32	133
4.87	195	4.34	174	3.82	153	3.29	132
4.84	194	4.32	173	3.79	152	3.27	131
4.82	193	4.29	172	3.77	151	3.24	130
4.79	192	4.27	171	3.74	150	3.22	129
4.77	191	4.24	170	3.72	149	3.19	128
4.74	190	4.22	169	3.69	148	3.17	127
4.72	189	4.19	168	3.67	147	3.14	126
4.69	188	4.17	167	3.64	146	3.12	125
4.67	187	4.14	166	3.62	145	3.09	124
4.64	186	4.12	165	3.59	144	3.07	123
4.62	185	4.09	164	3.57	143	3.04	122
4.59	184	4.07	163	3.54	142	3.02	121
4.57	183	4.04	162	3.52	141	3	120
4.54	182	4.02	161	3.49	140	< 3	70-119 (retake)
4.52	181	4.00	160	3.47	139		
4.49	180	3.97	159	3.44	138		

The learning outcome is also assessed on a two-point scale (pass/fail).

Scale for transferring points to the national system	
according to the national system	200-point
passed	from 120 to 200 point
no passed	less 119 point

Independent work of students, which is provided for by the topic of the class along with classroom work, is assessed during the current control of the topic at the relevant class.

The second semester (the last semester of studying the discipline) ends with a final examination.

Only those students who have no academic debt (all missed classes have been made up) and whose average grade for the current academic activity in the discipline is at least "3" are allowed to take the exam.

The maximum number of points that a student can gain for current academic activities to be admitted to the exam is 120 points and is determined as the sum of the arithmetic mean of all grades obtained in the semester.

The minimum number of points that a student must score for current academic activities to be admitted to the exam is 72 points. Recalculation of the average grade for current academic performance (on a 120-point scale) in Table 3.



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Form of final control of progress

4-point	200-point	4-point	200-point	4-point	200-point
5	120	4.29	103	3.58	86
4.96	119	4.25	102	3.54	85
4.92	118	4.21	101	3.50	84
4.87	117	4.17	100	3.46	83
4.83	116	4.12	99	3.42	82
4.79	115	4.08	98	3.37	81
4.75	114	4.04	97	3.33	80
4.71	113	4.00	96	3.29	79
4.67	112	3.96	95	3.25	78
4.62	111	3.92	94	3.21	77
4.58	110	3.87	93	3.17	76
4.54	109	3.83	92	3.12	75
4.50	108	3.79	91	3.08	74
4.46	107	3.75	90	3.04	73
4.42	106	3.71	89	3	72
4.37	105	3.67	88	less 3	Not enough
4.33	104	3.62	87		

The maximum number of points that a student can score in an exam is 80 (the minimum number is at least 50).

The grade in the discipline is determined comprehensively as the sum of the points for the current learning activity and the points for the exam.

Of the 120 points allocated for current learning activities, an additional 4 to 12 points are allocated to assess the individual independent work of higher education students, according to the work curriculum. Incentive points are added to the final grade in the discipline at the end of its study.

Points in the discipline for students who have successfully completed the programme are converted into the national scale and the ECTS system (Tables 4.5).

Points of the discipline	4-point
From 180 to 200	5
From 150 to 179	4
From 149 to the minimum number of points that a student must score	3
below the minimum number of points that a student must score	2

9 Form of final control of progress

Scale of assessment: national and ECTS			
Sum of points for all types of learning activities	ECTS assessment	Score on the national scale	
		for exam, differentiated test	for test
180-200	A	excellent	Passed
160-179	B	good	
150-159	C		
130-149	D	satisfactorily	
120-129	E		
50-119	FX	satisfactorily unsatisfactory with the possibility of retake	No passed with the possibility of retake
0-49	F	unsatisfactory with mandatory re-study of the discipline	No passed with mandatory re-study of the discipline

10 Methodological support

Methodological support is provided for all types of learning activities: lectures, practical classes, and independent work of higher education students.

Methodological support of the lecture course:

1. Lecture notes.
2. Methodological development of lectures.
3. Presentations of lectures.
4. Audio recordings with auscultation of the heart and lungs.
5. Videos and educational films with data of instrumental examination methods.
6. Demonstration materials for the analysis of thematic patients and clinical cases.

Methodological support of practical classes:

1. Methodological recommendations for practical classes for teachers.
2. Methodical instructions for independent work of higher education students in preparation for practical classes and in class.
3. Variants of test questions and tasks to check the initial level of knowledge on each topic of the module.
4. Variants of situational tasks to check the mastery of topics, content modules.
5. Standardised data of instrumental and laboratory examination methods.
6. Variants of tasks (theoretical and practical) for the final control.

Methodological support for conducting final examinations:

1. Test tasks of format A.
2. Practical tasks to test the mastery of practical skills.
3. Sets of medical terms to control the acquisition of Latin terminology



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10 Methodological support

1. Sets of results of general clinical laboratory examination of patients:

- Complete blood count
- Biochemical blood test
- General urine analysis
- Urinalysis by Zimnitsky and Nechyporenko methods
- Analysis of duodenal contents
- Results of intragastric pH-metry

2. Sets of results of instrumental examinations of patients:

- Radiographs
- Electrocardiograms
- Echocardiograms
- Phonocardiograms
- Ultrasound of the abdominal cavity and retroperitoneal space

The development of test control questions and the formation of structured tasks for written works used to diagnose theoretical learning outcomes should be based on the list of questions that a higher education student should master when studying modules 1 and 2 of the discipline «Propaedeutics of Internal Medicine».

11 List of theoretical questions to prepare for the final test

List of questions for mastering module 1:

"Basic methods of examination of patients in the clinic of internal medicine":

1. Basic methods of diagnosis of internal diseases.
2. Scheme of questioning the subject. The main structural parts of the anamnesis.
3. The sequence of general examination of the patient.
4. Body types and their main criteria.
5. Sequence of palpation of lymph nodes and characteristics of the data obtained.
6. Rules of examination of the head and neck.
7. The sequence of examination of the trunk and extremities.
8. Static chest examination, diagnostic value of the main symptoms.
9. Dynamic chest examination, diagnostic value of the main symptoms.
10. Examination of the atrial area, diagnostic significance of the main symptoms.
11. Sequence of abdominal examination, identification of the main symptoms.
12. Basic properties of the pulse, rules and sequence of their determination.
13. Rules for measuring blood pressure. Determination of systolic and diastolic pressure by the Korotkoff method, calculation of pulse and mean arterial pressure.
14. Palpation of the chest: the sequence of conduct, clinical significance of the main symptoms.
15. Palpation of the atrial area, determination of the clinical significance of the symptoms found.
16. Superficial palpation of the abdomen: algorithm for conducting and analysing the data obtained.
17. Theoretical foundations and principles of deep methodical sliding palpation of the abdomen by the Obraztsov-Strazhesk method.
18. Palpatory examination of the sigmoid, cecum, terminal ileum, their properties in the norm.
19. Rules of palpation of the ascending and descending colon, their properties are normal.
20. Methods of determining the lower border of the stomach.
21. Palpation of the transverse colon, basic properties.
22. Rules for palpation of the liver, diagnostic significance of the main symptoms.
23. Palpation of the spleen.
24. Ways to determine the presence of fluid in the abdominal cavity.
25. The sequence of comparative lung percussion. Basic percussion tones and the mechanism of their formation



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List of theoretical questions to prepare for the final test

26. Algorithm for topographic percussion of the lungs. Topographic parameters of the lungs in normal and pathological conditions.
27. Percussion examination of the heart - relative cardiac dullness: normal limits and their displacement with changes in the heart chambers.
28. Percussion examination of the heart - absolute cardiac dullness: normal limits and their displacement due to cardiac and extracardiac causes.
29. Percussion determination of the vascular bundle, its diagnostic value.
30. Percussion of the liver by the Obraztsov method: sequence of conduct, parameters in normal and pathological conditions.
31. Percussion of the liver by the Kurlov method: sequence of conduct, parameters in normal and pathological conditions.
32. Percutaneous determination of the spleen boundaries. Rules of conduct, causes of spleen enlargement.
33. Auscultation of the lungs - determination of the main respiratory noises, their qualitative and quantitative changes.
34. Lung auscultation - determination of additional respiratory sounds, their classification, algorithm for characterising the auscultatory picture of the lungs
35. Mechanisms of formation and types of wheezing, their diagnostic value.
36. The main causes of crepitation and pleural friction noise. Their diagnostic value and methods of differentiation.
37. Rules and sequence of bronchophonia examination, its diagnostic value.
38. Auscultation of the heart - heart sounds, the mechanism of their formation and changes in strength and timbre.
39. Splitting and bifurcation of heart sounds, the concept of accentuation of the second tone.
40. Additional heart sounds - quail rhythm and gallop rhythm.
41. Auscultation of heart sounds: classification and conditions of occurrence.
42. Auscultation of heart murmurs: sequence of characteristics, differences between organic and functional murmurs.
43. Diastolic functional murmurs (Flint, Coombs, Graham-Steele): conditions of occurrence and diagnostic value.
44. Rules of ECG analysis. Criteria for sinus rhythm, heart rate calculation and determination of the position of the electrical axis of the heart.
45. ECG signs of automaticity disorders.
46. ECG signs of excitability disorders. Differentiation of the main types of extrasystoles.
47. ECG signs of conduction disorders. Classification of conduction disorders.
48. ECG signs of fibrillation and atrial flutter. Mechanisms of their occurrence.
49. ECG signs of fibrillation and ventricular flutter.

List of questions for mastering module 2:

"Symptoms and syndromes in diseases of internal organs":

1. Pulmonary compaction syndrome: causes, clinical, laboratory and instrumental diagnostic methods.
2. Pulmonary airflow syndrome: causes, clinical, laboratory and instrumental diagnostic methods.
3. Fluid accumulation syndrome in the pleural cavity: causes, clinical, laboratory and instrumental diagnostic methods.
4. Air accumulation syndrome in the pleural cavity: causes, clinical, laboratory and instrumental diagnostic methods.
5. Bronchial obstruction syndrome: causes, clinical, laboratory and instrumental diagnostic methods.
6. Cardiac pain syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
7. Heart failure syndrome: etiology, pathogenesis, classification, clinical, laboratory and instrumental diagnostic methods.

8. Vascular insufficiency syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
9. Arterial hypertension syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
10. Dyspeptic syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
11. Dysphagic syndrome; etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
12. Types of biliary dyskinesia: main clinical manifestations, laboratory and instrumental diagnostic methods.
13. Portal hypertension syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
14. Jaundice syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
15. Syndrome of gastrointestinal bleeding: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
16. Nephrotic syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
17. Urinary syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
18. Acute renal failure syndrome: etiology, pathogenesis, clinical, laboratory and instrumental methods of diagnosis.
19. Chronic renal failure syndrome: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
20. Anaemic syndrome; etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
21. Hyperplastic syndrome in diseases of the hematopoietic organs: etiology, pathogenesis, clinical, laboratory and instrumental diagnostic methods.
21. Haemorrhagic syndromes: classification, pathogenesis, clinical and laboratory diagnostic methods.
22. Hyperthyroid syndrome: main causes, clinical manifestations, laboratory and instrumental diagnostic methods.
23. Hypothyroid syndrome: main causes, clinical manifestations, laboratory and instrumental diagnostic methods.
24. Bronchitis: classification, main clinical manifestations, diagnosis.
25. Bronchiectasis: classification, main clinical manifestations, diagnosis.
26. Bronchial asthma: classification, main clinical manifestations, diagnosis.
27. Pulmonary emphysema: symptoms, diagnosis.
28. Hospital and community-acquired pneumonia: classification, main clinical manifestations, diagnosis.
29. Dry and exudative pleurisy: symptoms, diagnosis.
30. Lung cancer: main clinical forms, symptoms, diagnosis.
31. Mitral heart disease: main clinical manifestations, diagnosis.
32. Aortic heart disease: main clinical manifestations, diagnosis.
33. Coronary heart disease: main clinical manifestations and diagnosis of angina pectoris.
34. Coronary heart disease: main clinical manifestations and diagnosis of acute myocardial infarction.
35. Hypertension: modern classification, clinical manifestations, diagnosis.
36. Symptomatic arterial hypertension: classification; data of physical, instrumental and laboratory examination, which allow to suspect secondary arterial hypertension.
37. Chronic gastritis: classification, main clinical manifestations, diagnosis.
38. Peptic ulcer of the stomach and 12 duodenum: classification, main clinical manifestations, diagnosis.
39. Chronic cholecystitis and cholangitis: classification, main clinical manifestations, diagnosis.
40. Gallstone disease: stages of development, symptoms, diagnosis.
41. Hepatitis: main clinical manifestations, diagnosis.
42. Coronary heart disease: main clinical manifestations and diagnosis of angina pectoris.
43. Coronary heart disease: main clinical manifestations and diagnosis of acute myocardial infarction.
44. Hypertension: modern classification, clinical manifestations, diagnosis.
45. Symptomatic arterial hypertension: classification; data of physical, instrumental and laboratory examination, which allow to suspect secondary arterial hypertension.
46. Chronic gastritis: classification, main clinical manifestations, diagnosis.



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Перелік теоретичних питань для підготовки до підсумкового контролю

47. Gallstone disease: stages of development, symptoms, diagnosis.
48. Hepatitis: main clinical manifestations, diagnosis.
49. Liver cirrhosis: main clinical manifestations, diagnosis.
50. Acute and chronic glomerulonephritis: main clinical manifestations, diagnosis.
51. Acute and chronic pyelonephritis: main clinical manifestations, diagnosis.
52. Anaemia: classification, main syndromes.
53. Iron deficiency anaemia: pathogenesis, clinical manifestations, laboratory criteria.
54. B12-folate deficiency anaemia: pathogenesis, clinical manifestations, laboratory criteria.
55. Haemolytic anaemia: classification, main syndromes, laboratory criteria.
56. Haemophilia: classification, main clinical manifestations, laboratory diagnostics.
57. Thrombocytopenic purpura: main clinical manifestations, laboratory diagnosis.
58. Haemorrhagic vasculitis (Schönlein-Genoch disease): main clinical manifestations, laboratory diagnosis.
59. Diabetes mellitus: classification, main symptoms and syndromes, laboratory diagnosis.

List of practical skills for the final module control

The list of practical skills to be mastered by the applicant for higher education in the study of module № 1: "Basic methods of examination of patients in the clinic of internal medicine":

1. Conduct a patient interview. Draw a conclusion about the anamnestic data obtained. Identify the main symptoms and syndromes.
2. Conduct a general examination of the exemplary patient. Identify the leading symptoms.
3. Examine the head and neck of a representative patient. Determine the clinical significance of the symptoms.
4. Examine the trunk and limbs of the exemplar patient. Determine the clinical significance of the symptoms.
5. Examine the chest of a patient with bronchopulmonary pathology, evaluate static and dynamic signs.
6. Examine the atrial area, determine the clinical significance of the symptoms.
7. Examine the abdomen, determine the clinical significance of the symptoms.
8. Conduct a palpation of the chest to determine the clinical significance of the symptoms.
9. Perform palpation of lymph nodes, evaluate the results.
10. Conduct a palpation of the pulse, determine the clinical significance of the symptoms.
11. Perform palpation of the atrial area, determine the clinical significance of the symptoms.
13. Perform a superficial palpation of the abdomen, determine the clinical significance of the symptoms.
12. Perform palpation of the sigmoid colon, determine the clinical significance of the symptoms.
15. Perform palpation of the cecum, determine the clinical significance of the symptoms.
13. Conduct a palpation examination of the ascending colon to determine the clinical significance of the symptoms.
14. Conduct a palpation examination of the descending colon, determine the clinical significance of the symptoms.
15. Conduct a palpation examination of the transverse colon, determine the clinical significance of the symptoms.
16. Perform a palpation examination of the liver, determine the clinical significance of the symptoms.
17. Perform a palpation of the spleen, determine the diagnostic significance of the symptoms.
18. Perform palpation and percussion of the kidneys, determine the diagnostic value of the symptoms.
19. Determine the lower border of the stomach, evaluate the data obtained.
20. Determine the presence of fluid in the abdominal cavity, give a clinical assessment.
21. Measure blood pressure in the upper extremities, evaluate the data.
22. Measure blood pressure on the lower extremities, evaluate the data.
23. Perform comparative lung percussion and determine the clinical significance of the symptoms.

24. Perform topographic lung percussion and determine the diagnostic significance of the symptoms.
25. Conduct a percussion examination of the heart, determine the limits of relative heart dullness, and give a clinical assessment.
26. Conduct a percussion examination of the heart, determine the limits of absolute heart soundness, give a clinical assessment.
27. Determine the boundaries of the liver by percussion, assess the diagnostic value of the symptoms.
28. To determine the boundaries of the spleen by percussion, to give a clinical assessment.
29. Conduct auscultation of the lungs, determine the quantitative and qualitative changes in breathing, give a clinical assessment.
30. Conduct auscultation of the lungs, determine additional breath sounds, give a clinical assessment.
31. Conduct a study of bronchophonia, give a clinical assessment. Perform auscultation of the arteries, determine the diagnostic value of the symptoms.
32. Perform auscultation of the heart, determine changes in its tones, give a clinical assessment.
33. Conduct auscultation of the heart, determine the diagnostic value of heart sounds.
34. Analyse the ECG of a patient with a violation of cardiac automaticity.
35. Analyse the ECG of a patient with cardiac excitability disorder. Conduct a differential diagnosis of extrasystoles.
36. Analyse the ECG of a patient with cardiac conduction disorder.
37. Analyse the ECG of a patient with a combined disorder of excitability and conduction of the heart.
38. Analyse the ECG of a patient with a heart defect.

List of practical skills to be mastered by a higher education student in the study of module 2: "Symptoms and syndromes in diseases of internal organs":

1. Conduct a physical examination of a patient with mitral heart disease. Identify the leading symptoms and syndromes.
2. Conduct a physical examination of a patient with aortic heart disease. Identify the leading symptoms and syndromes.
3. Conduct a physical examination of a patient with arterial hypertension. Identify the leading symptoms and syndromes.
4. Interview a patient with coronary heart disease (stable angina pectoris), detail the pain syndrome, determine the functional class of the patient.
5. Conduct a general examination and physical examination of a patient with acute myocardial infarction. Identify the main symptoms and syndromes.
6. Evaluate the ECG of a patient with acute myocardial infarction, determine the nature and location of the heart muscle lesion.
7. Conduct a physical examination of a patient with heart failure. Identify the main symptoms and syndromes, determine the functional class of the patient.
8. Conduct an interview and examination of a patient with obstructive pulmonary disease. Determine the main symptoms and syndromes, taking into account the data of spirometry, establish the stage of the disease.
9. Perform palpation, percussion of the chest and auscultation of the lungs in a patient with obstructive pulmonary disease. Identify the main symptoms and syndromes.
10. Conduct an interview and physical examination of a patient with pneumonia. Identify the main symptoms and syndromes.
11. Conduct an interview and physical examination of a patient with pleurisy. Determine the nature of pleurisy, the main symptoms and syndromes.
12. Interview, examine and palpate the abdomen of a patient with chronic gastritis. Identify the leading syndromes.
13. Analyse the results of intragastric pH-metry in a patient with chronic gastritis. Assess the acid-forming function of the stomach.
14. Conduct questioning, examination and palpation of the abdomen in a patient with peptic ulcer of the stomach/12 duodenum. Identify the main syndromes, recognise the possible location of the ulcer.



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List of theoretical questions to prepare for the final test

15. Interview, examine and palpate the abdomen of a patient with chronic cholecystitis. Check the main symptoms characteristic of gallbladder disease. Identify the main syndromes.
16. Conduct an interview, examination and palpation of the abdomen in a patient with chronic cholangitis. Identify the main syndromes.
17. Evaluate the data of multi-moment duodenal probing of a patient with biliary tract disease. Identify the main symptoms and localisation of the lesion.
18. Interview and examine a patient with hepatitis (or cirrhosis). Identify the main symptoms and syndromes.
19. Perform a physical examination of a patient with hepatitis (or cirrhosis). Identify the main syndromes based on the results of biochemical blood tests and urinalysis.
20. Perform a physical examination of a patient with kidney disease (pyelonephritis or glomerulonephritis). Identify the main syndromes.
21. Analyse the general clinical urine analysis of a patient with kidney disease, urine analysis by Zimnitsky and Nechyporenko methods. Identify the main symptoms and syndromes. Draw a conclusion about the nature of kidney damage.
22. Conduct a physical examination of a patient with anaemia. Determine the main symptoms and syndromes, taking into account the general blood test to determine the nature of anaemia.
23. Conduct a questionnaire and general examination of a patient with diabetes mellitus, examine the pulse on the vessels of the upper and lower extremities, measure blood pressure. Identify the main symptoms and syndromes.

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RECOMMENDED READING

Main :

1. Kovaleva O.M. Propedeutics of internal medicine: [textbook for students of higher medical educational institutions] / O. M. Kovaleva. 5th ed. - Vinnytsia: Nova Knyha, 2020. Part 1: Diagnostics / O. M. Kovaleva, T. V. Ascheulova. 2020. Ч. 2 : Syndrome and diseases / O. M. Kovaleva, S. O. Shapovalova, O. O. Nizhegorodtseva. 2020.
2. Propaedeutics of internal medicine: textbook / Y.I. Decik, O.G. Yavorsky, E.M. Neyko and others; edited by O.G. Yavorsky.- 6th edition.- K.: VSV "Medicine", 2020.- 552 p.

Auxiliary:

1. Shut S.V. Algorithm of electrocardiographic diagnostics of cardiovascular pathology in the practice of a family doctor / S.V. Shut, T.A. Tribat. 2nd edition, supplemented: LLC "Firm "Techservice", 2018.- 112 p.
2. Svintsitsky A.S. Diagnostic methods in the clinic of internal medicine - K.: VSV "Medicine", 2019. 1008 p.
3. Medicine according to Davidson: principles and practice: 23rd edition: in 3 volumes. Volume 2 / edited by Stuart G. Ralston, Ian D. Penman, Mark W.J. Strachan, Richard P. Hobson.-K.: WSSV Medicine, 2020.- 756 p.

Information resources

1. OSCE-1. Bogomolets National Medical University. Physical methods of examination of the respiratory system (official version), 2017. - <https://www.youtube.com/watch?v=o3V4Z6EVz94>
2. OSCE-1. Bogomolets National Medical University. Physical methods of cardiovascular system examination (official version), 2017. - <https://www.youtube.com/watch?v=kgFHCzxEvVU&t=68s>
3. OSCE-1. Bogomolets National Medical University. Physical methods of examination of the gastrointestinal tract (official version), 2017. - <https://www.youtube.com/watch?v=NAx7TTsWByc>
4. OSCE-1. Bogomolets National Medical University. Methods of ECG registration (official version), 2017. - <https://www.youtube.com/watch?v=16P0uuZK1CA&t=204s>
5. Yavorsky O.G. Audio disc "Lung auscultation: basic and side respiratory sounds. Auscultation of the heart: tones and noises" / Yavorsky O.G., audio and video materials, 2013.



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RECOMMENDED READING

1. DVD-film "Palpation, percussion, auscultation" (in Ukrainian and English) / Yavorsky O.G., audio and video materials, 2013.
2. DVD-film "Anamnesis. Review: photos of patients" / Yavorsky O.G., audio and video materials, 2013.
On the topics "General examination of the patient, examination of individual parts of the body"
3. <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>
4. <http://meded.ucsd.edu/clinicalmed/>
On the topics of the content module "Basic methods of examination of the respiratory system"
5. <http://meded.ucsd.edu/clinicalmed/>
6. <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>
On the topics of the content module "Basic methods of examination of the cardiovascular system"
7. <http://www.cardiologysite.com/>
8. <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>
9. <http://www.blaufuss.org/>
10. <http://meded.ucsd.edu/clinicalmed/>
On the topics of the content module "Basic methods of examination of the gastrointestinal tract and kidneys"
11. <http://www.meddean.luc.edu/lumen/meded/medicine/pulmonar/pd/contents.htm>
12. <http://gastroresource.com/GITextbook/En/Default.htm>
13. <http://meded.ucsd.edu/clinicalmed>
Official evidence-based practice-oriented medical information contained in the publications:
14. AMA (American Medical Association) <https://www.ama-assn.org/>
15. American Academy of Family Physicians <http://www.aafp.org/home.html>
16. American Academy of Pediatrics Policy (AAP Policy) Clinical Practice Guidelines <https://www.aap.org>
17. American College of Cardiology <http://www.acc.org/>
18. American College of Emergency Physicians <https://www.acep.org/>
19. American Heart Association <http://news.heart.org/>
20. BMJ Clinical Evidence <http://clinicalevidence.bmj.com>
21. Brain Trauma Foundation (BTF) <https://www.braintrauma.org/> <http://www.trauma.org/>
22. Eastern Association for the Surgery of Trauma <https://www.east.org/>
23. European Paediatric Association, the Union of National European Paediatric Societies and Associations (EPA/UNEPSA) <http://www.epa-unepsa.org/>
24. European Society of Cardiology <http://www.escardio.org/>
25. <http://www.mozdocs.kiev.ua>
26. Medscape from WebMD <http://www.medscape.com>
27. Medscape from WebMD <http://www.medscape.com>
28. National Comprehensive Cancer Network <https://www.nccn.org/>
29. National Guideline Clearinghouse <https://www.guideline.gov/>
30. National Institute for Health and Clinical Excellence (NICE) <https://www.nice.org.uk/>
31. Royal College of Physicians <https://www.rcplondon.ac.uk/>
32. The Association of the Scientific Medical Societies in Germany <http://www.awmf.org>
33. The Cochrane Collaboration The Cochrane Library
34. The European Society for Emergency Medicine <https://www.eusem.org/>
35. The Finnish Medical Society Duodecim <https://www.duodecim.fi/>
36. The French National Authority for Health <http://www.has-sante.fr/>
37. The National Association of Emergency Medical Technicians (NAEMT) <http://www.naemt.org/>
38. The National Association of State EMS <https://www.nasemso.org/>
39. The National Health and Medical Research Council (NHMRC) <https://www.nhmrc.gov.au>
40. Up To Date <http://www.uptodate.com> Western Trauma Association <https://westerntrauma.org/>



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Tips for successful studying on the course

If you want to be successful in this discipline, you need to:

1. Be active, persistent, inquisitive, consistent
2. Be tidy and polite
2. Systematically prepare for practical classes
3. Perform tasks for independent work and defend them in class.
3. To be present at the class in a medical gown
4. To solve tests and tasks independently, to work actively in class.
5. Prepare presentations and crosswords on the discipline. Participate in student scientific conferences and engage in research work in the department's scientific circles.

I wish you perseverance, dedication and motivation to learn. And then success will come to you! See you in class!

Don't forget your medical gowns!