

INSTITUTE OF ENGINEERING PHYSICS FOR BIOMEDICINE

APPROVED ИТС ИФИБ

Protocol No. 3.1

dated 30.08.2024

ACADEMIC COURSE OUTLINE

ПОЛИКЛИНИЧЕСКАЯ ТЕРАПИЯ / AMBULATORY THERAPY

Educational program track (speciality) [1] 31.05.01 General Medicine

Semester	Labour input, credits	Total course academic, hours	Lectures, hrs.	Practical sessions, hrs.	Laboratory sessions, hrs.	In the form of practical studies, hrs.	Independent studies, hrs.	Independent studies monitoring, hrs.	Course progress, Exam/Pass-fail exam/Term
11	3	108	12	40	0		56	0	PFE
Total	3	108	12	40	0	40	56	0	

ABSTRACT

The curriculum is based on the requirements for completion of the specialist degree program. Specifically, graduates (general practitioners) must be prepared to perform work functions providing primary medical and sanitary care to adults in an outpatient setting, including at home.

1. ACADEMIC COURSE GOALS AND OBJECTIVES

The goal of this course is to develop systematic theoretical and applied knowledge about the nature, methods, tools, and principles of patient examination, as well as skills and abilities in diagnosing, treating, and preventing diseases in a polyclinic and day hospital setting, and managing patients with internal diseases on an outpatient basis.

Objectives:

- To develop knowledge of the basic principles of organizing medical care for the population in a polyclinic setting, the organizational features and workload of a district physician and general practitioner (family doctor), and the modern diagnostic capabilities of outpatient services;
- To improve skills in diagnosing and treating the most common diseases and patient conditions in a polyclinic setting, as well as dynamic monitoring and evaluation of the effectiveness of treatment;
- To develop the ability and readiness to carry out a full range of therapeutic, rehabilitative, and preventive measures in patients with the most common internal diseases in a polyclinic setting;
- To improve clinical judgment skills in diagnosing the most common therapeutic diseases encountered in a polyclinic setting and assessing their progression;
- develop understanding of modern outpatient treatment methods, primary and secondary prevention, medical examinations and spa treatment, medical rehabilitation, preventive medical examinations, and clinical screenings;
- develop competencies in preventive and health education;
- develop readiness to apply acquired knowledge and skills to ensure continuity in the work of clinic and hospital physicians regarding the timeliness and appropriateness of patient admissions to day hospitals, hospital inpatient units, diagnostic centers, and specialized medical organizations.
- improve skills in maintaining medical records and interacting with colleagues and patients, taking into account ethics and deontology;
- develop clinical thinking: develop the ability to analyze clinical cases, make a diagnosis, determine treatment tactics, and predict disease outcomes.

2. PLACE OF THE ACADEMIC COURSE IN THE MAIN HIGHER EDUCATION CURRICULUM

This course is offered as part of the core curriculum. It builds on the knowledge, skills, and abilities acquired in previous clinical courses and immediately precedes the "Outpatient Care" practical training.

The knowledge, skills, and abilities acquired in this course are essential for successful professional development.

3. DEVELOPED COMPETENCIES AND INTENDED LEARNING OUTCOMES

Universal and/or general professional competencies:

Competency code and title	Code and title of competency-based rubrics
<p>OIIK-7 [1] – Capable of prescribing treatment and monitoring its effectiveness and safety.</p>	<p>3-OIIK-7 [1] – Know: - pharmacological groups of medicinal drugs and their intended purposes; - mechanisms of action of pharmacological and non-pharmacological treatments, indications and contraindications for their use, side effects, and complications caused by their application; - methods for monitoring the effectiveness and safety of various treatment approaches.</p> <p>Y-OIIK-7 [1] – Be able to: - make rational choices for pharmacological and non-pharmacological treatments based on clinical guidelines and in accordance with medical care standards; - develop a treatment plan for a disease or condition considering the diagnosis, age, disease course characteristics, and comorbidities, based on clinical guidelines and medical care standards; - prescribe medications, medical devices, and therapeutic nutrition considering the diagnosis, age, disease course characteristics, and comorbidities, based on clinical guidelines and medical care standards; - justify prescribed pharmacological and non-pharmacological treatments; - evaluate the effectiveness and safety of medications, medical devices, therapeutic nutrition, and other treatment methods.</p> <p>B-OIIK-7 [1] – Possess skills in: - administering medications through various routes of administration; - developing treatment plans for diseases or conditions considering diagnosis, age, disease course characteristics, and comorbidities; - assessing the effectiveness and safety of prescribed treatments.</p>
<p>OIIK-8 [1] – Capable of implementing and monitoring the effectiveness of medical rehabilitation of patients, including during the implementation of individual rehabilitation and habilitation programs for persons with disabilities, and to assess patients' capacity for work.</p>	<p>3-OIIK-8 [1] – Know: - signs of temporary disability and persistent disorders of body functions leading to limitations in life activities; - procedures for conducting temporary disability examinations; - procedures for referring patients for medical and social expertise; - the concept of "Individual Rehabilitation and Habilitation Program for Persons with Disabilities"; - medical indications and contraindications for prescribing spa treatment; - medical indications and contraindications for conducting medical rehabilitation measures, considering the diagnosis, clinical guidelines, procedures, and standards of medical care.</p> <p>Y-OIIK-8 [1] – Be able to: - determine the need for applying natural therapeutic factors, pharmacological and non-pharmacological therapies, and other methods for patients requiring medical rehabilitation and spa treatment; - monitor the effectiveness of medical rehabilitation for patients, including during the implementation of individual rehabilitation and habilitation programs for persons with disabilities; - assess patients' capacity for work; - perform medical rehabilitation measures for patients in accordance with current medical care procedures, clinical guidelines, and medical care standards.</p> <p>B-OIIK-8 [1] – Possess skills in: - identifying signs of temporary disability and persistent disorders of body functions leading to limitations in life activities; - referring patients in</p>

	need of medical rehabilitation to specialist physicians for the implementation of individual rehabilitation program measures, including spa treatment; - completing sick note, referrals for medical and social expertise, and sanatorium treatment cards.
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Professional competencies in compliance with the goals and professional knowledge areas:

Professional activity goal	Professional activity knowledge area	Professional competency code and title; Based on the professional standard, experience analysis	Code and title of competency-based rubrics
medical			
Diagnostics of diseases and pathological conditions of the patients.	Individuals (patients); the population; the set of means and technologies aimed at creating conditions for preserving and strengthening the health of the adult population	<p>ПК-3.2 [1] - Capable of conducting patient examinations to establish a diagnosis</p> <p><i>The base:</i> Professional standard: 02.009</p>	<p>3-ПК-3.2[1] - Know: - clinical diagnosis establishment algorithm; - patient history-taking and physical examination methodology; - laboratory and instrumental research methods for health assessment to establish a diagnosis; - semiotics of diseases of different organs and systems; - structure, principles of the current International Statistical Classification of Diseases and Related Health Problems (hereinafter - ICD).;</p> <p>Y-ПК-3.2[1] - Be able to: - conduct patient history-taking and physical examination; - interpret history, physical examination data, laboratory and instrumental results to recognize a condition or establish the presence/absence of a disease, establish a diagnosis; - distinguish and recognize in each specific case tissue damage, the reaction to it, and the form of adaptability; - develop a patient examination plan,</p>

			<p>justify the necessity and scope of laboratory and instrumental examination;</p> <ul style="list-style-type: none"> - identify main pathological conditions, symptoms and syndromes, nosological forms in the patient according to the current ICD.; <p>B-ПК-3.2[1] - Possess skills in:</p> <ul style="list-style-type: none"> - patient history-taking and physical examination; - Formulating a preliminary diagnosis; - developing a patient examination plan; - Interpreting laboratory and instrumental results; - establishing a diagnosis considering the current ICD
<p>Providing primary medical care in outpatient settings and day hospital settings.</p>	<p>Individuals (patients); the population; the set of means and technologies aimed at creating conditions for preserving and strengthening the health of the adult population</p>	<p>ПК-3.3 [1] - Able to provide primary medical care in an outpatient setting</p> <p><i>The base:</i> Professional standard: 02.009</p>	<p>3-ПК-3.3[1] - Know:</p> <ul style="list-style-type: none"> - general issues of organizing medical care for the population and organizing medical care for the adult population in outpatient settings, including at home; - features of medical care using telemedicine technologies; - Clinical picture, differential diagnosis, features of the course of the disease, complications and outcomes of internal diseases; - diagnostic criteria for the most common diseases of internal organs and systems; - indications for referring patients for specialist consultations according to clinical guidelines and considering relevant medical care standards; - indications for referring patients for specialized medical care in inpatient settings and day hospitals according to

			<p>clinical guidelines and considering relevant medical care standards; - features of managing and treating elderly patients in outpatient settings. ; Y-ΠK-3.3[1] - Be able to: - perform differential diagnosis of internal diseases; - monitor the course of physiological pregnancy; - justify the need for referring patients to specialist consultations; - recognize the main and concomitant diseases; - assess disease or condition severity - the degree of organ and/or system damage or functional impairment due to the disease/condition or its complications; - determine management, examination and treatment tactics for patients with specific diseases (nosological units) depending on disease severity and condition, according to clinical guidelines and considering relevant medical care standards.; B-ΠK-3.3[1] - Possess skills in: - conducting differential diagnosis with other diseases/conditions, including emergencies; - interpreting data obtained from patient consultations with specialists; - prescribing additional tests to clarify the diagnosis; - formulating a clinical diagnosis; - prescribing treatment according to clinical guidelines and considering relevant medical care standards.</p>
organizational and managerial			
Collection of medical data, medical and	Individuals (patients); the population; the set	ΠK-3.4 [1] - Able to analyze population	3-ΠK-3.4[1] - Know: - factors shaping human

<p>statistical analysis of information on the population health indicators for various age and sex groups.</p>	<p>of means and technologies aimed at creating conditions for preserving and strengthening the health of the adult population</p>	<p>health indicators</p> <p><i>The base:</i> Professional standard: 02.022</p>	<p>health; - main medical-statistical indicators characterizing population health, methods for their calculation; - methodologies for collecting medical-statistical information.; Y-IIK-3.4[1] - Be able to: - analyze statistical indicators of morbidity with temporary disability, disability, mortality.; B-IIK-3.4[1] - Possess skills in: - analyzing official statistical reporting, including federal and industry statistical observation forms.</p>
<p>Preparation and application of documentation within the healthcare system, maintenance of medical records in healthcare organizations.</p>	<p>Individuals (patients); the population; the set of means and technologies aimed at creating conditions for preserving and strengthening the health of the adult population</p>	<p>IIK-3.5 [1] - Able to maintain medical documentation and organize the work of subordinate nursing staff</p> <p><i>The base:</i> Professional standard: 02.009</p>	<p>3-IIK-3.5[1] - Know: - rules for completing medical documentation including in medical information systems; - basic principles of organization and management in healthcare, in medical organizations and their structural units.; Y-IIK-3.5[1] - Be able to: - apply knowledge of organization and management in healthcare, in medical organizations and their structural units; - organize the work of subordinate junior and nursing staff.; B-IIK-3.5[1] - Possess skills in: - completing patient medical records and other medical documentation including electronically in medical information systems; - monitoring performance of duties by district nurses and other subordinate healthcare workers.</p>

4. PEDAGOGIC POTENTIAL OF THE COURSE

Pedagogic tracks/objectives	Pedagogic goals (code)
Vocational and labor education	Establishing conditions for: formation of a deep understanding of the profession's social role, a positive and active commitment to the values of the chosen specialty, and a responsible attitude towards professional activity and work (B14)
Vocational and labor education	Establishing conditions for: formation of psychological readiness for professional activity in the chosen profession (B15)
Professional education	Establishing conditions for: formation of responsibility for professional choice, professional development and professional decisions (B18)
Professional education	Establishing conditions for: formation of motivation to improve the quality of medical care to the population and the desire to follow the rules and norms of interaction between the doctor, colleagues and the patient, contributing to the creation of the most favorable environment for the patient's recovery (B34)

5. ACADEMIC COURSE STRUCTURE AND CONTENT

Academic course sections, their scope, terms of study and assessment:

No.	Academic course section name	Weeks	Lectures/ Practical (seminars)/ Laboratory sessions, hrs.	Compulsory current assessment (form*, week)	Maximum grade per section**	Section assessment (form*, week)	Competency-based rubrics
	<i>11 Semester</i>						
1	The First Section	1-8	6/20/0	T-8 (25)	25	T-8	3-ОПК-7, У-ОПК-7, В-ОПК-7, 3-ОПК-8, У-ОПК-8, В-ОПК-8, 3-ПК-3.2, У-ПК-3.2, В-ПК-3.2, 3-ПК-3.3, У-ПК-3.3, В-ПК-3.3, 3-ПК-3.4, У-ПК-3.4, В-ПК-3.4, 3-ПК-3.5, У-ПК-3.5, В-ПК-3.5

2	The Second Section	9-16	6/20/0	T-15 (25)	25	T-15	3-ОПК-7, У-ОПК-7, В-ОПК-7, 3-ОПК-8, У-ОПК-8, В-ОПК-8, 3-ПК-3.2, У-ПК-3.2, В-ПК-3.2, 3-ПК-3.3, У-ПК-3.3, В-ПК-3.3, 3-ПК-3.4, У-ПК-3.4, В-ПК-3.4, 3-ПК-3.5, У-ПК-3.5, В-ПК-3.5
	<i>Totals for 11 Semester</i>		12/40/0		50		
	Assessment events for 11 Semester				50	PFE, PFE	3-ОПК-7, У-ОПК-7, В-ОПК-7, 3-ПК-3.2, У-ПК-3.2, В-ПК-3.2, 3-ПК-3.3, У-ПК-3.3, В-ПК-3.3, 3-ПК-3.4, У-ПК-3.4, В-ПК-3.4, 3-ПК-3.5, У-ПК-3.5, В-ПК-3.5

* – abbreviated name of assessment

** – 100 maximum points per semester including a pass/fail exam and (or) an exam

Abbreviated current assessment forms and section assessment

Abbreviation	Full name
T	Testing
PFE	Pass/fail examination

SYLLABUS

Weeks	Topics / Content	Lect., hrs.	Pr./sem., hrs.	Lab., hrs.
	<i>11 Semester</i>	12	40	0
1-8	The First Section	6	20	0
1 - 4	Principles and Features of Outpatient Therapy.	All		

	Respiratory Diseases Organization of Outpatient Care. Medical Ethics and Deontology. Medical and Social Expertise (MSE), temporary disability assessment. Prevention of Chronic Non-Communicable Diseases, Key Aspects of Medical Examination. Respiratory Disease Syndromes. Sore throat, cough syndrome, fever and subfebrile temperature. Upper and lower respiratory tract diseases. Respiratory diseases (ARI, influenza, etc.). Tonsillitis. Acute bronchitis, pneumonia, pleurisy. Broncho-obstructive syndrome, COPD, bronchial asthma. Clinical Presentation. Diagnosis. Differential Diagnosis. Treatment and Prevention. Indications for Hospitalization.	4	10	0
		Online		
		0	0	0
5 - 8	Cardiovascular Diseases. Gastrointestinal Diseases Cardiovascular Diseases. Gastrointestinal Diseases Cardiovascular syndromes: arterial hypertension, pain syndrome, edema syndrome. Hypertension. Ischemic heart disease. Angina pectoris. Prehospital management of acute coronary syndrome (ACS). Heart rhythm and conduction disturbances. Chronic heart failure. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization. Differential diagnosis of abdominal pain. GERD. Chronic gastritis. Peptic ulcer of the stomach and duodenum. Irritable bowel syndrome. Liver and biliary tract diseases. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization	All		
		2	10	0
		Online		
		0	0	0
9-16	The Second Section	6	20	0
9 - 12	Kidney disease. Joint diseases, collagenoses Differential diagnosis of acute and chronic pyelonephritis, glomerulonephritis, cystitis, urolithiasis. Urinary syndrome. Chronic kidney disease. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization. Management of patients on hemodialysis. Differential diagnosis of diseases presenting with arthralgia and joint syndrome. Osteoporosis. Systemic inflammatory diseases of connective tissue..	All		
		2	10	0
		Online		
		0	0	0
13 - 16	Blood diseases in outpatient practice. Endocrine diseases. Outpatient management. Blood diseases in outpatient practice. Endocrine diseases. Outpatient management. Differential diagnosis of anemic syndrome. Examination and management of patients with anemic syndrome associated with iron deficiency anemia and B12 deficiency anemia. Hemogram evaluation. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization. Diabetes mellitus and thyroid disease in the practice of a general practitioner. Management of polymorbid patients, elderly patients, and pregnant women with somatic pathology. Paraneoplastic syndrome. Management of patients with oncological diseases.	All		
		4	10	0
		Online		
		0	0	0

Abbreviated names of online options:

Abbreviation	Full name
EC	E-course
FtM	Full-text material
FtL	Full-text lectures
VM	Video materials
AM	Audio materials
Prs	Presentations
T	Tests
ERM	E-reference materials
IS	Interactive site

PRACTICAL SESSIONS TOPICS

Weeks	Topics / Content
	<i>11 Semester</i>
1 - 4	<p>Principles and Features of Outpatient Therapy. Respiratory Diseases</p> <p>1. Organization of Outpatient Care. Medical Ethics and Deontology. Medical and Social Expertise (MSE), temporary disability assessment.</p> <p>2. Prevention of Chronic Non-Communicable Diseases, Key Aspects of Medical Examination. Respiratory Disease Syndromes. Sore Throat, Cough, Fever, and Subfebrile Temperature.</p> <p>3. Upper Respiratory Tract Diseases. Respiratory Diseases (ARI, Influenza, etc.). Tonsillitis. Clinical Presentation. Diagnosis. Differential Diagnosis. Treatment and Prevention.</p> <p>4. Lower Respiratory Tract Diseases. Acute Bronchitis, Pneumonia, Pleurisy. Broncho-Obstructive Syndrome, COPD, Bronchial Asthma. Clinical Presentation. Diagnosis. Differential Diagnosis. Treatment and prevention. Indications for hospitalization.</p>
5 - 8	<p>Cardiovascular diseases. Gastrointestinal diseases.</p> <p>5. Cardiovascular syndromes: arterial hypertension, pain syndrome, edema syndrome. Hypertension. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization.</p> <p>6. Coronary heart disease. Angina pectoris. Prehospital management when ACS is detected. Rhythm and conduction disturbances. Chronic heart failure. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization.</p> <p>7. Differential diagnosis of abdominal pain. GERD. Chronic gastritis. Gastric and duodenal ulcers.</p> <p>8. Irritable bowel syndrome. Liver and biliary tract diseases. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization.</p>
9 - 12	<p>Kidney diseases. Joint diseases, collagenoses</p> <p>9. Differential diagnosis of acute and chronic pyelonephritis, glomerulonephritis, cystitis, urolithiasis. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization.</p> <p>10. Urinary syndrome. Chronic kidney disease. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization. Specific features of managing patients on hemodialysis.</p> <p>11. Differential diagnosis of diseases presenting with arthralgia and joint syndrome. Osteoporosis. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention.</p> <p>12. Systemic inflammatory diseases of connective tissue. Clinical presentation. Diagnosis.</p>

	Differential diagnosis. Treatment and prevention.
13 - 16	<p>Kidney diseases. Joint diseases, collagenoses Kidney diseases. Joint diseases, collagenoses</p> <p>9. Differential diagnosis of acute and chronic pyelonephritis, glomerulonephritis, cystitis, urolithiasis. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization.</p> <p>10. Urinary syndrome. Chronic kidney disease. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Indications for hospitalization. Specific features of managing patients on hemodialysis.</p> <p>11. Differential diagnosis of diseases presenting with arthralgia and joint syndrome. Osteoporosis. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention.</p> <p>12. Systemic inflammatory diseases of connective tissue. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention.</p>

6. EDUCATIONAL TECHNOLOGIES

The following educational technologies, methods, and techniques for developing competencies are used in teaching this course:

- master class (on basic patient examination methods);
- small group method;
- clinical case analysis;
- practical skills development;
- patient supervision and writing of case history fragments;
- Elements included in the student's independent work:
- preparation for clinical practical classes and midterm assessment;
- patient supervision and writing of case history fragments;
- work with additional literature and online resources.
- Clinical practical classes are held in medical organizations (clinical sites).

7. ASSESSMENT TOOLKIT

The assessment toolkit ensures verification of the intended learning outcomes achievement (competency-based rubrics) using current, midterm and interim assessment of the course.

The link between developed competencies and their assessment is presented in the following table:

Competency	Achievement rubrics	Assessment activity (Syl 1)
ОПК-7	3-ОПК-7	PFE, T-8, T-15, T-8, T-15
	У-ОПК-7	PFE, T-8, T-15, T-8, T-15
	В-ОПК-7	PFE, T-8, T-15, T-8, T-15
ОПК-8	3-ОПК-8	T-8, T-15, T-8, T-15
	У-ОПК-8	T-8, T-15, T-8, T-15
	В-ОПК-8	T-8, T-15, T-8, T-15
ПК-3.2	3-ПК-3.2	PFE, T-8, T-15, T-8, T-15
	У-ПК-3.2	PFE, T-8, T-15, T-8, T-15
	В-ПК-3.2	PFE, T-8, T-15, T-8, T-15
ПК-3.3	3-ПК-3.3	PFE, T-8, T-15, T-8, T-15
	У-ПК-3.3	PFE, T-8, T-15, T-8, T-15

	B-ПК-3.3	PFE, T-8, T-15, T-8, T-15
ПК-3.4	3-ПК-3.4	PFE, T-8, T-15, T-8, T-15
	У-ПК-3.4	PFE, T-8, T-15, T-8, T-15
	B-ПК-3.4	PFE, T-8, T-15, T-8, T-15
ПК-3.5	3-ПК-3.5	PFE, T-8, T-15, T-8, T-15
	У-ПК-3.5	PFE, T-8, T-15, T-8, T-15
	B-ПК-3.5	PFE, T-8, T-15, T-8, T-15

Educational achievement rubrics scales

The scale of each assessment activity varies from 0 to the maximum established point, inclusive. The final assessment of the course is performed on a 100-point scale and represents the sum of the points earned by the student in the section assessments, framework of current and interim assessment.

Sections and interim assessments are considered passed when the student achieves a minimum score equal to 60% of the maximum. The final grade is assigned only upon passing all sections and the interim assessment.

The final grade is assigned in accordance with the following scale:

Total score	Rating on a 4-point scale	Pass/fail examination	ECTS assessment
90-100	5 – « <i>excellent</i> »	« <i>pass</i> »	A
85-89	4 – « <i>good</i> »		B
75-84			C
70-74			D
65-69	3 – « <i>satisfactory</i> »		E
60-64		F	
below 60	2 – « <i>fail</i> »	« <i>fail</i> »	

An “excellent” grade indicates a deep and solid mastery of the program material by a student who presents their answers consistently, clearly, and logically, is able to closely link theory with practice, and uses materials from monographic literature in their answers.

A “good” grade corresponds to a student’s solid knowledge of the material, who presents their answers competently and to the point, without any significant inaccuracies.

A “satisfactory” grade corresponds to the basic level of mastery of the material by the student, in which the main material has been mastered, but its details have not been assimilated, the answers contain inaccuracies, insufficiently correct wording and logical inconsistencies.

A grade “pass” corresponds to at least a basic level of mastery of the program material, in which the student possesses the necessary knowledge, skills, and abilities, and is able to apply theoretical principles to solve typical practical problems.

A grade “fail” is given to a student who lacks a significant understanding of the curriculum material, makes significant errors in their answers, or fails all required assignments. These students are generally unable to continue their studies without additional classes.

8. ACADEMIC COURSE EDUCATIONAL, METHODOLOGICAL AND INFORMATIONAL SUPPORT

CORE READING:

1. ЭИ О-92 Outpatient Therapy : учебник, , Москва: ГЭОТАР-Медиа, 2023
2. ЭИ П50 Поликлиническая терапия : учебник, , Москва: ГЭОТАР-Медиа, 2024

FURTHER READING:

1. ЭИ А65 Анемический синдром в практике врача поликлиники : монография, Ларина В.Н., Москва: ГЭОТАР-Медиа, 2024
2. ЭИ Ч-96 Клиническая диагностика : учебник, Чучалин А.Г., Бобков Е.В., Москва: ГЭОТАР-Медиа, 2019
3. ЭИ Р85 Неотложная амбулаторно-поликлиническая кардиология : краткое руководство : практическое руководство, Руксин В.В., Москва: ГЭОТАР-Медиа, 2022
4. ЭИ Х12 Новые нормы труда в поликлиниках : монография, Берсенева Е.А., Хабриев Р.У., Шипова В.М., Москва: ГЭОТАР-Медиа, 2020
5. ЭИ О-58 Онконастороженность в работе врача поликлиники : монография, , Москва: ГЭОТАР-Медиа, 2023
6. ЭИ О-82 Отечный синдром в практике врача поликлиники : монография, , Москва: ГЭОТАР-Медиа, 2024
7. ЭИ Л 25 Поликлиническая терапия: хроническое легочное сердце : учебное пособие для вузов, Михайлусова М. П. [и др.], Москва: Юрайт, 2024
8. ЭИ П88 Пульмонология : национальное руководство, краткое издание, , Москва: ГЭОТАР-Медиа, 2020
9. ЭИ Л 25 Сердечная недостаточность: актуальные вопросы диагностики, лечения и профилактики с позиций доказательной медицины : учебник для вузов, Таратухин Е. О. [и др.], Москва: Юрайт, 2024
10. ЭИ С 87 Спирометрия : практическое руководство, Стручков П.В., Дроздов Д.В., Лукина О.Ф., Москва: ГЭОТАР-Медиа, 2018
11. ЭИ В 43 Экспертиза временной нетрудоспособности и медико-социальная экспертиза в амбулаторной практике : , Викторова И.А., Гришечкина И.А., Москва: ГЭОТАР-Медиа, 2021

SOFTWARE:

1. Microsoft Office 2016+ ()
2. Windows Media Player ()

LMS AND ONLINE RESOURCES

1. База данных elibrary.ru - научной электронной библиотеки. (<http://elibrary.ru/defaultx.asp/>)
2. Электронная библиотека медицинского вуза. (<http://www.studmedlib.ru/>)
3. www.book.ru ()

<https://online.mephi.ru/>

<http://library.mephi.ru/>

9. LOGISTICAL SUPPORT

1. Электрокардиограф ЭК12Т-01-Р-Д/141 (64-301)
2. Спирограф СМП21-01РД (64-301)
3. Мышь, клавиатура (Клиническая база)
4. Проектор SMART P109 (Клиническая база)
5. Кушетка медицинская (Клиническая база)
6. Монитор (Клиническая база)
7. Медицинское оборудование для практической подготовки обучающихся, предусмотренное договором (Клиническая база)
8. Иное оснащение, предусмотренное порядками оказания медицинской помощи по соответствующему профилю (Клиническая база)
9. Аппарат холтеровского мониторирования ЭКГ (64-301)
10. Аппарат суточного мониторирования АД (СМАД) (64-301)
11. Персональный компьютер (База клиническая)

10. EDUCATIONAL AND METHODOLOGICAL RECOMMENDATIONS FOR STUDENTS

Recommendations for preparing for classes.

The plan for practical classes, their topics, recommended readings, and the purpose and objectives of the course are communicated by the instructor during introductory classes or in the curriculum for the given course. Practical classes help students gain a deeper understanding of the course material and acquire skills in creatively working with scientific literature.

Before beginning to study the topic, it is necessary to familiarize yourself with the main points of the practical class plan and the list of recommended readings.

When preparing for a practical class, you should first refer to the lecture notes, sections of textbooks, and teaching aids to gain a general understanding of the topic's place and significance in the course being studied. Then, work with additional literature and take notes on the recommended

sources. While studying the recommended material, it is important to understand the structure of the topic being studied, identify the main points, follow their logic, and thereby gain a deeper understanding of the problem being studied. It is essential to keep notes of the material being studied. This, along with visual memory, also includes motor memory and allows for the accumulation of a personalized resource for quickly reviewing what has been read and mobilizing accumulated knowledge.

The main forms of note-taking include: outlines (simple and detailed), excerpts, and abstracts. During preparation, it is important to compare sources, consider the material being studied, develop an action plan, and carefully consider your oral presentation.

Clinical Practical Classes

A crucial stage of the practical class is students' independent work on mastering practical skills: in simulated conditions, at the patient's bedside, in the functional diagnostics room, etc. Depending on the specific topic of the class, the student independently (or under the supervision of the instructor) interviews the patient, conducts a clinical examination, is present during instrumental diagnostics, and studies the results of additional tests, summarizes the data, presents excerpts from the patient's case history, and reports the results to the instructor. Achievements are assessed individually for each student, based on the degree of development of practical skills and their theoretical foundations. Clinical case studies of specific patients are conducted for the entire group or through student participation in clinical case studies and periodic scientific and practical conferences at the medical institutions where practical training is provided. During the case studies, the instructor evaluates each student's active participation and clinical reasoning skills.

Solving situational tasks proposed by the instructor develops clinical reasoning and challenges the student to apply knowledge gained in various specialty subjects.

Recommendations for preparing for the test.

Test – 10-15 – 20-25 points. Each question – 1 (2) point.

TOPICS: indicated in each specific section.

Answer requirements: a clear, detailed answer (2 points/question) or a choice of the correct answer to a test task (1 point/question).

Recommendations for preparing for the test/exam

Answer requirements and grading criteria:

An "excellent" grade of 45-50 points on the test/exam is awarded for: a correct, complete, and logically constructed answer; the ability to use specialized terminology; the ability to illustrate theoretical principles with practical material.

A "good" grade of 35-44 points on the exam is awarded for: a correct, complete, and logically constructed answer with minor errors or inaccuracies; the ability to use specialized terminology, but incomplete conclusions or generalizations are made.

A "satisfactory" grade of 30-34 points on the exam is awarded for: a schematic, incomplete answer; an inability to use specialized terminology or lack of knowledge of them; with one serious error;

An "unsatisfactory" grade of <30 points on the exam is awarded for: answering all questions on the test with serious errors; Inability to use specialized terminology; inability to provide examples of the practical application of scientific knowledge.

Admission to the exam in a discipline is granted based on a score of over 30 points.

For the Semester, a student can score between 30 and 50 points.

The minimum score for an answer on the exam is 30, the maximum is 50.

11. EDUCATIONAL AND METHODOLOGICAL RECOMMENDATIONS FOR TEACHERS

A key stage of the practical lesson is students' independent work on mastering practical skills: in simulated conditions, at the patient's bedside, in the functional diagnostics room, etc. Depending on the specific lesson topic, the student independently (or under the instructor's supervision) interviews the patient, conducts a clinical examination, observes instrumental diagnostics, and studies the results of additional tests, summarizes the data, presents it as fragments of the patient's medical history, and reports the results to the instructor. Each student's progress is assessed individually, based on the degree of development of practical skills and their theoretical foundations.

Clinical case studies are conducted for the entire group or through students' participation in clinical case studies and periodic scientific and practical conferences at the medical organizations where the practical training takes place. During these case studies, the instructor evaluates each student's active participation and clinical reasoning skills.

Situational problems proposed by the instructor are solved, which develop clinical reasoning and force the student to apply knowledge acquired in various specialty subjects. Grading and criteria for tests, extended quizzes, homework, and the final test:

1) - Tests are graded according to the following scale: 1 point for every 1 correct answer. A student who has not started the work receives -1 point.

2) - Extended quizzes are graded according to the following scale: complete answer -2 points, incomplete answer -1 point, no answer -0 points, and a student who has not started the work receives -2 points.

3) - Homework must be completed by all students to be eligible for the final assessment. Late submissions will result in a -1 point deduction from the final score.

4) - Presentation report grading criteria. Recalculation from a 100-point to a 10 (5)-point system.

5) - Essay grading criteria. Maximum 10 points. Possibly upgraded to a 5-point system.

10 points are awarded if all abstract writing requirements are met: the problem is identified and its relevance justified, a brief analysis of the issue is provided and a logical position is presented, conclusions are formulated, the article is fully analyzed, the length is maintained, and formatting requirements are met.

9 points are awarded if the following abstract writing requirements are met: the problem is identified and its relevance justified, a brief analysis of the issue is provided and a logical position is presented, conclusions are formulated, the article is fully analyzed, but the length and formatting requirements are not met.

8 points – the basic abstract requirements are met, but some shortcomings are present. Specifically, there are inaccuracies in the presentation of the material; there is a lack of logical consistency in the judgments; the abstract is not within the specified length; and there are omissions in the formatting. 7 points – the basic abstract requirements are met, but the following shortcomings are present: there are inaccuracies in the presentation of the material; there is no logical consistency in the judgments; conclusions are not formulated, the abstract is not within the scope of the abstract; there are omissions in the formatting.

6 points – there are significant deviations from the abstracting requirements; the topic is only partially covered; there are factual errors in the abstract content, conclusions and a personal point of view on the problem are missing.

5 points – there are significant deviations from the abstract requirements: the topic is only partially covered; there are factual errors in the presentation of materials and methods, conclusions and a personal point of view on the problem are missing, the format is not maintained.

4 points – there are significant deviations from the abstract requirements: the relevance of the topic is not disclosed; Factual errors were made in the presentation of materials and methods, conclusions and personal perspective on the problem are missing, and the format is not followed.

3 points – there is no analysis of the relevance of the research topic, approaches, and methods used, although the formal length of the abstract is met.

2 points – the abstract topic is not covered, revealing a significant misunderstanding of the problem. However, the abstract length and formal requirements are met.

1 point – the abstract topic is not covered, revealing a significant misunderstanding of the problem.

0 points – the student did not submit an abstract.

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