

APPROVED ИТС ИФИБ

Protocol No. 3.1

dated 30.08.2024

ACADEMIC COURSE OUTLINE

THERAPEUTIC PRACTICE

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

Educational program title (specialization) General Medicine

Semester	Labour input, credits	Total course academic, hours	Practical sessions, hrs.	In the form of practical studies, hrs.	Independent studies, hrs.	Course progress, Exam/Pass-fail exam/Term
8	6	216	144		72	
Total	6	216	144	0	72	Ex

ABSTRACT

The practice program is based on the requirements for the results of mastering the specialist program. The graduate (general practitioner) must be ready to solve the problems of diagnosis, treatment, and prevention of diseases.

During the course of practice, knowledge is consolidated, skills in the diagnosis, treatment and prevention of internal organ diseases are improved and acquired.

1. ACADEMIC COURSE GOALS AND OBJECTIVES

THE GOAL

improving skills and developing abilities, acquiring practical experience in the diagnosis, treatment, and prevention of diseases in patients in the therapeutic profile;

OBJECTIVES

- study of the organizational and operational features of therapeutic departments in medical organizations providing outpatient and inpatient medical care; study of the specifics of managing therapeutic patients in outpatient and inpatient settings;

- improving the skills and abilities of questioning and physical examination of a medical patient, the skills of formulating a preliminary diagnosis and justifying it;

- development of skills in typical diagnostic manipulations, including the use of medical devices.

- acquisition of skills in drawing up a plan for examining a therapeutic patient, skills in referring the patient for additional instrumental and laboratory tests, consultations with medical specialists, interpreting examination results and formulating a clinical diagnosis and its justification;

- improving the skills of recording the results of examination and survey in medical documentation, including using medical information systems;

- improving the skills of comparing morphological and clinical manifestations of diseases, the skills of recognizing conditions and establishing the presence or absence of diseases, assessing the severity of morphofunctional disorders and pathological processes in humans and identifying possible causes of the disease;

- acquisition of skills in developing a treatment plan for a disease in a therapeutic patient, taking into account the diagnosis, age, characteristics of the course of the disease, and concomitant pathology;

- acquisition of skills to assess the effectiveness and safety of prescribed treatment;

- development of skills and abilities in conducting disease prevention activities, promoting a healthy lifestyle and providing sanitary and hygienic education to the population;

- improving skills and abilities in interacting with colleagues and patients in compliance with ethics and deontology.

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

Practice is a logical continuation of the development of competencies formed by such disciplines and practices as Propaedeutics of Internal Diseases, General Surgery, Radiation Diagnostics, Faculty Therapy and Surgery, Neurology, Dermatovenereology, Practice for the diagnosis

of diseases. The skills and abilities acquired through internship are necessary for successful mastery of subsequent clinical disciplines and practices, and for solving professional problems.

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>OPIK-1 [1] – Capable of implementing moral and legal norms, ethical and deontological principles in professional activities.</p>	<p>3-OPIK-1 [1] – Know: - main regulatory legal acts governing physician's activities; - concepts of medical confidentiality, informed voluntary consent for medical intervention, clinical guidelines, procedures and standards of medical care; - fundamental rights and obligations of physicians and patients; - principles of medical ethics (morality) and deontology. Y-OPIK-1 [1] – Be able to: - find and apply current regulatory legal acts in professional activities; - protect the rights of physicians and patients. B-OPIK-1 [1] – Possess skills in: - interaction with colleagues and patients in compliance with ethics and deontology; - obtaining informed voluntary consent from patients or their legal representatives for medical interventions.</p>
<p>OPIK-2 [1] – Capable of conducting and monitoring the effectiveness of measures for prevention, healthy lifestyle promotion, and sanitary-hygienic education of the population</p>	<p>3-OPIK-2 [1] – Know: - regulatory foundations for conducting preventive medical examinations and health check-ups; - rules for implementing sanitary and anti-epidemic measures; - forms and methods of health education work; - sanitary rules and regulations; - national immunization schedule; - main hazardous and harmful occupational factors. Y-OPIK-2 [1] – Be able to: - determine medical indications for imposing restrictive measures (quarantine) and conduct anti-epidemic measures in case of an infection outbreak; - conduct preventive medical examinations and health check-ups in accordance with current regulatory legal acts and other documents; - monitor the effectiveness of measures for disease prevention, health promotion, and sanitary-hygienic education of the population; - develop and implement health promotion programs aimed at eliminating harmful effects of environmental factors on human health; - establish cause-effect relationships between changes in health status and exposure to environmental factors. B-OPIK-2 [1] – Possess skills in: - organizing and conducting preventive medical examinations and health check-ups for the adult population to prevent the occurrence and/or spread of diseases and identify risk factors; - preparation (formation) and sending to the territorial office of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing an emergency notification upon detection of an infectious or occupational disease; - educating patients and their relatives on methods of self-monitoring key physiological indicators.</p>

<p>OPIK-4 [1] – Capable of using medical devices stipulated by the medical care procedures, as well as conducting patient examination for diagnosis establishment.</p>	<p>3-OPIK-4 [1] – Know: - modern diagnostic instrumental examination methods for patients, including functional, radiological, ultrasound, radionuclide diagnostics, and endoscopy; - diagnostic capabilities of instrumental examination methods; - medical devices stipulated by the procedure for providing medical care to the adult population in the "Therapy" specialty, and the equipment standard for a therapeutic room; - main medical devices stipulated by the procedures for providing medical care to the adult population in major surgical specialties, obstetrics, and gynecology; - indications for referring patients for instrumental examinations and functional diagnostics; - techniques for physical examination of patients using medical devices stipulated by procedures and considering medical care standards</p> <p>Y-OPIK-4 [1] – Be able to: - use medical devices stipulated by the medical care procedure; - determine the required volume and content of instrumental and functional diagnostics to establish a diagnosis; - interpret results of the most common functional and instrumental diagnostic methods</p> <p>B-OPIK-4 [1] – Possess skills in: - using basic medical devices (stethoscope, blood pressure monitor, sphygmomanometer, pulse oximeter, height-weight scale, measuring tape, neurological hammer, scalpel, forceps, and other devices); - operating electrocardiographs and devices for measuring external respiratory function; - interpreting results of the most common functional and instrumental diagnostic methods</p>
<p>OPIK-5 [1] – Capable of assessing morphofunctional and physiological states, as well as pathological processes in the human body to solve professional tasks.</p>	<p>3-OPIK-5 [1] – Know: - basic medical, pharmaceutical, and morphofunctional terminology, including Latin terms; - structure and functions of the human body, age-related, gender-specific, and individual characteristics of the structure and development of a healthy organism; - physical and chemical nature of processes occurring in a living organism; - patterns of vital activity of the organism, mechanisms of self-regulation and regulation; - features of regulation of the functioning of human body systems in pathological conditions; - patterns of occurrence, development, and outcome of typical pathological processes, the concept of sanogenesis; - etiology and pathogenesis of the most common diseases; - the concept of nosology, principles of disease classification; - principles of microorganism classification, their morphology, physiology, and impact on human health; - structure and functions of the human immune system.</p> <p>Y-OPIK-5 [1] – Be able to: - analyze mechanisms of disease development and manifestation; - recognize morphological and functional changes in cells, tissues, organs, and systems of the human body; - use basic physical-chemical and other natural science concepts and methods in solving professional tasks; - determine the cause of death and formulate a pathological diagnosis.</p> <p>B-OPIK-5 [1] – Possess skills in: - conducting microscopy and</p>

	analyzing microscopic specimens; - correlating morphological and clinical manifestations of diseases; - assessing morphofunctional, physiological states, and pathological processes in humans; - clinical-anatomical analysis of autopsy results.
ОПК-6 [1] – Capable of organizing general nursing, providing primary medical care, ensuring the organization of work and making professional decisions in emergencies at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	3-ОПК-6 [1] – Know: - a set of measures for general nursing with diseases of various organs and systems; Signs of clinical and biological death; - indications for patient hospitalization for the most common diseases with typical progression. Y-ОПК-6 [1] – Be able to: - organize care for patient when providing medical care in an outpatient setting; - determine the need for patient hospitalization; - ensure the organization of work in emergency situations, epidemics, and in mass casualty zones. B-ОПК-6 [1] – Possess skills in: - general care of a patient (general nursing); - providing first aid; - making medical decisions in emergencies at the prehospital stage, including in emergency situations, epidemics, and in mass casualty zones.
ОПК-7 [1] – Capable of prescribing treatment and monitoring its effectiveness and safety.	3-ОПК-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. Y-ОПК-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. B-ОПК-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.

Professional competencies in compliance with the goals and professional knowledge areas:

Professional activity goal	Professional activity knowledge area	Professional competency code and title;	Code and title of competency-based rubrics
----------------------------	--------------------------------------	---	--

		Based on the professional standard, experience analysis	
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>У-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, justify the necessity and scope of laboratory and instrumental examination; - identify main pathological conditions, symptoms and syndromes, nosological forms in the patient according to the current ICD.;</p> <p>В-ПК-3.2[1] - Possess</p>

			skills in: - 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
Providing primary medical care in outpatient settings and day hospital settings.	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>ПІК-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-ПІК-3.3[1] - Know: - 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 clinical guidelines and considering relevant medical care standards; - features of managing and treating elderly patients in outpatient settings. ;</p> <p>У-ПІК-3.3[1] - Be able to: - perform differential diagnosis of internal diseases; - monitor the</p>

			<p>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.;</p> <p>B-IIK-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			
Preparation and application of documentation within the healthcare system, maintenance of medical records in healthcare organizations.	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>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.;</p> <p>Y-IIK-3.5[1] - Be able to: - apply knowledge of</p>

			<p>organization and management in healthcare, in medical organizations and their structural units; - organize the work of subordinate junior and nursing staff.;</p> <p>B-ПК-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>8 Semester</i>						
1	Therapeutic practice	1-4	0/144/0		50	Rep-4	3-ОПК-1, У-ОПК-1, В-ОПК-1, 3-ОПК-2, У-ОПК-2, В-ОПК-2, 3-ОПК-4, У-ОПК-4, В-ОПК-4, 3-ОПК-5, У-ОПК-5, В-ОПК-5, 3-ОПК-6, У-ОПК-6, В-ОПК-6, 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-3.5, У-ПК-3.5, В-ПК-3.5
	<i>Totals for 8 Semester</i>		0/144/0		50		
	Assessment events for 8 Semester				50	Ex	3-ОПК-1, У-ОПК-1, В-ОПК-1, 3-ОПК-2, У-ОПК-2, В-ОПК-2, 3-ОПК-4, У-ОПК-4, В-ОПК-4, 3-ОПК-5, У-ОПК-5, В-ОПК-5, 3-ОПК-6, У-ОПК-6, В-ОПК-6,

							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-3.5, 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
Rep	Report

SYLLABUS

Weeks	Topics / Content	Lect., hrs.	Pr./sem., hrs.	Lab., hrs.
	<i>8 Semester</i>	0	144	0
1-4	Therapeutic practice	0	144	0
1 - 4	Therapeutic practice 1. Introduction to the structure and work organization of the therapeutic departments within a medical organization. Safety briefing: occupational health and safety, fire safety, internal work regulations, and sanitary procedures. Organization of the work of the medical organization's departments. 2. Main (clinical) stage. Key aspects of therapeutic practice. Working as an assistant to a general practitioner. The main stage of the internship takes place both in an outpatient clinic and in a hospital, with rotations according to a set schedule. Working in the emergency room. Studying the structure, work organization, sanitary and epidemiological regulations, and the procedure for hospitalizing therapeutic patients. Interacting with patients. Informed voluntary consent for medical intervention. Specifics of interviewing and physically examining patients in the general medical field. Assessing the patient's condition and the need for medical care. Recognizing emergency conditions. Formulating a preliminary diagnosis. Developing a patient examination plan and ordering additional tests. Evaluating the data obtained from additional	All		
		0	144	0
		Online		
		0	0	0

	tests and refining the diagnosis. Prescribing treatment. Mastering the principles of treatment of the most common internal diseases, prescribing medications and physiotherapy procedures. Explaining medication and regimen recommendations to the patient. Temporary disability assessment. Review of medical documentation. Preventive work: Participation in medical examinations, preventive checkups, and counseling patients on healthy lifestyle issues. Medical Records Management: Completing medical records, extracts, prescriptions, sick note, examination reports, and issuing referrals for consultations and examinations, including using medical information systems. 3. Preparing internship reports. Report defense. Preparing for the final report: analyzing completed work, preparing an internship diary, collecting necessary documents. Report defense.			
--	---	--	--	--

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

6. EDUCATIONAL TECHNOLOGIES

Internship is carried out in a traditional form in conditions that ensure the participation of students in medical activities and the performance of certain types of work related to their future profession.

During the internship process, simulation technologies such as simulators can be used to develop skills.

Students demonstrate acquired skills during the defense of their internship report under simulated conditions.

Educational technologies for practice in the therapeutic field include teaching methods aimed at developing practical skills and abilities in students necessary for work in the therapeutic departments of hospitals and clinics.

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-1	3-ОПК-1	Ex, Rep-4
	У-ОПК-1	Ex, Rep-4
	В-ОПК-1	Ex, Rep-4
ОПК-2	3-ОПК-2	Ex, Rep-4
	У-ОПК-2	Ex, Rep-4
	В-ОПК-2	Ex, Rep-4
ОПК-4	3-ОПК-4	Ex, Rep-4
	У-ОПК-4	Ex, Rep-4
	В-ОПК-4	Ex, Rep-4
ОПК-5	3-ОПК-5	Ex, Rep-4
	У-ОПК-5	Ex, Rep-4
	В-ОПК-5	Ex, Rep-4
ОПК-6	3-ОПК-6	Ex, Rep-4
	У-ОПК-6	Ex, Rep-4
	В-ОПК-6	Ex, Rep-4
ОПК-7	3-ОПК-7	Ex, Rep-4
	У-ОПК-7	Ex, Rep-4
	В-ОПК-7	Ex, Rep-4
ПК-3.2	3-ПК-3.2	Ex, Rep-4
	У-ПК-3.2	Ex, Rep-4
	В-ПК-3.2	Ex, Rep-4
ПК-3.3	3-ПК-3.3	Ex, Rep-4
	У-ПК-3.3	Ex, Rep-4
	В-ПК-3.3	Ex, Rep-4
ПК-3.5	3-ПК-3.5	Ex, Rep-4
	У-ПК-3.5	Ex, Rep-4
	В-ПК-3.5	Ex, Rep-4

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 Н99 Internal Diseases. Volume I : , Martynov A.I. [и др.], Москва: ГЭОТАР-Медиа, 2022
2. ЭИ Н99 Internal Diseases. Volume II : , Martynov A.I. [и др.], Москва: ГЭОТАР-Медиа, 2022
3. ЭИ В 60 Внутренние болезни. В 2 томах. Том 1. : , , Москва: ГЭОТАР-Медиа, 2023
4. ЭИ В 60 Внутренние болезни. В 2 томах. Том 2. : , , Москва: ГЭОТАР-Медиа, 2023
5. ЭИ Г 22 Гастроэнтерология. Национальное руководство : краткое издание, , Москва: ГЭОТАР-Медиа, 2018
6. ЭИ Л 37 Иммунология и клиническая иммунология. Аутоиммунные заболевания : учебное пособие для вузов, Елисютина О. Г., Аплевич О. В., Левкова Е. А., Санкт-Петербург: Лань, 2024
7. ЭИ Я79 Практическая электрокардиография. Справочное пособие для анализа ЭКГ : справочник, Ярцев С.С., Москва: ГЭОТАР-Медиа, 2021
8. ЭИ Ч-96 Пульмонология : национальное руководство, краткое издание, , Москва: ГЭОТАР-Медиа, 2018

FURTHER READING:

1. ЭИ В85 A Guide to Gastrointestinal Motility Disorders : , Tack, Jan. , Smout, Andre. , Bredenoord, Albert J. , Cham: Springer International Publishing, 2016
2. ЭИ D53 Diagnosis and Treatment of Gastroesophageal Reflux Disease : , , Cham: Springer International Publishing, 2016
3. ЭИ P97 Pulmonary Arterial Hypertension and Interstitial Lung Diseases : A Clinical Guide, , Totowa, NJ: Humana Press,, 2009
4. ЭИ М22 Аритмии сердца. Тахикардии и брадикардии : Серия "Библиотека врача-специалиста", Заглиева С.С., Заглиев С.Г., Маммаев С.Н., Москва: ГЭОТАР-Медиа, 2019
5. ЭИ А93 Аутоиммунные заболевания: диагностика и лечение : практическое руководство, Цыган В.Н. [и др.], Москва: ГЭОТАР-Медиа, 2020
6. ЭИ Л 86 Болезни пищевода и желудка : -, Лурия Р. А., Москва: Юрайт, 2024
7. ЭИ Г22 Гастроэзофагеальная рефлюксная болезнь : учебное пособие, Парцвания-Виноградова Е.В. [и др.], Москва: ГЭОТАР-Медиа, 2019
8. ЭИ Ч-96 Клиническая диагностика : учебник, Чучалин А.Г., Бобков Е.В., Москва: ГЭОТАР-Медиа, 2019
9. ЭИ К 46 Клиническая лабораторная диагностика : , Кишкун А.А., Москва: ГЭОТАР-Медиа, 2021
10. ЭИ К 26 Клиническая лабораторная диагностика заболеваний печени и желчевыводящих путей : практическое руководство, Карпищенко А.И., Москва: ГЭОТАР-Медиа, 2020
11. ЭИ Н 59 Лечение пациентов терапевтического профиля : учебник, Фролькис Л.С., Игнатюк Л.Ю., Нечаев В.М., Москва: ГЭОТАР-Медиа, 2020
12. ЭИ У74 Нефрология : учебное пособие, Гуранова Н.Н., Усанова А.А., Москва: ГЭОТАР-Медиа, 2019
13. ЭИ У 74 Ревматология : учебное пособие, , Москва: ГЭОТАР-Медиа, 2018
14. ЭИ Ч-96 Респираторная медицина. Т. 1. : практическое руководство, Чучалин А.Г., Москва: ГЭОТАР-Медиа, 2017
15. 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
16. ЭИ С 87 Спирометрия : практическое руководство, Стручков П.В., Дроздов Д.В., Лукина О.Ф., Москва: ГЭОТАР-Медиа, 2019

SOFTWARE:

No special softwares is required

LMS AND ONLINE RESOURCES

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

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

9. LOGISTICAL SUPPORT

1. Тренажер интубации с контроллером (64-301)
2. Кушетка смотровая КМС-01 (64-301)
3. Тренажер аускультации сердца и легких Р1060 ФОМА (64-301)
4. Манекен-симулятор для отработки навыков пальпации живота (с контроллером) Z980А (64-301)
5. Электрокардиограф ЭК12Т-01-Р-Д/141 (64-301)
6. Спирограф СМП21-01РД (64-301)
7. Манекен сердечно-легочной реанимации Р4201СРР ВОЛОДЯ. Модификация 1 (64-301)
8. Учебный автоматический наружный дефибрилятор МУ0353 (64-301)
9. Медицинское оборудование для практической подготовки обучающихся, предусмотренное договором (Клиническая база)
10. Иное оснащение, предусмотренное порядками оказания медицинской помощи по соответствующему профилю (Клиническая база)
11. Аппарат холтеровского мониторирования ЭКГ (64-301)
12. Аппарат суточного мониторирования АД (СМАД) (64-301)

10. EDUCATIONAL AND METHODOLOGICAL RECOMMENDATIONS FOR STUDENTS

Practice is an integral part of the learning process.

During the internship, the student is required to:

- Fully complete the assignments outlined in the internship program;
- comply with the internal work schedule at the enterprise, institution, or organization;
- study and strictly adhere to occupational health and safety regulations, sanitary norms
- be responsible for the work performed and its results;
- Upon completion of the internship, submit a written report to the Head of practical training on the completion of all assignments and pass (defend) the internship exam.

The student has the right to:

- propose the specialized organization where the student is currently working for the internship (if the professional activity they are pursuing meets the internship requirements).

- obtain advice on all internship-related questions from the management of the specialized organization (medical organization), the internship supervisor, the Head of practical training at the university;

- address any controversial issues to the Head of practical training, department head, or educational program director.

The first stage of practice (introduction)

The Head of practical training will notify students in advance of the actual meeting place on the first day of practical training.

It is mandatory to complete safety training. This should be reflected in the diary.

The Head of practical training assigns students to departments in conjunction with the person responsible for practical training at the medical organization. The practical assignment is clarified and agreed upon, taking into account the specific activities of the specific department within the medical organization.

During the internship, each student completes a daily the ДНЕВНИК-ОТЧЕТ / REPORT document using the prescribed format. The supervisor's notes in the appropriate columns of the diary/report will confirm that the student actually attended the internship that day, mastered certain skills, became familiar with the work of certain departments, etc.

A supervisor is the employee directly supervising the internship. This may be different employees on different days. The Head of practical training and the person responsible for practical training at the medical organization, may also act as supervisor for specific sections.

The second stage of practice is the main one.

Direct implementation by the student of activities to acquire skills and master practical abilities provided for by the internship program.

Practical work:

Work in the offices of doctors of therapeutic and surgical profiles as a physician assistant.

Ongoing Assessment

The ongoing assessment is conducted through the following methods: monitoring students' completion of relevant sections in the ДНЕВНИК-ОТЧЕТ / REPORT document (including daily report notes and report sections), verifying compliance with safety regulations, internal work procedures, and sanitary standards, conducting interviews, and evaluating students' demonstration of acquired skills. The Head of practical training may personally monitor the student's progress at any time during practice hours.

Students must be prepared to answer the instructor's questions and demonstrate their practical skills. The maximum score for this section is 50. A student is admitted to the exam (intermediate assessment) only if they have achieved more than 30 points in the ongoing assessment. The grading scale for ongoing assessment is as follows: Excellent: 45-50 points, Good: 36-44 points, Satisfactory: 30-35 points

Assessment Criteria (Ongoing Assessment)

№ Criterion Max. score

1.1 Compliance with safety regulations, sanitary norms and internal work schedule.

Full compliance – 10 points, Partial compliance – 5 points, Non-compliance – 0 points* 10

1.2 Regularity of maintaining the ДНЕВНИК-ОТЧЕТ / REPORT document (including daily report notes and report sections).

Regular (daily) – 10 points, Irregular – 5 points, Not maintained – 0 points 10

1.3. Interview (answers to questions, demonstration of practical skills)* 30

Σ Total score 50

*The student answers 1 question and selectively demonstrates 2 practical skills. Each successful response is graded with a maximum of 10 points. If minor deficiencies are noted in an otherwise correct answer or satisfactory skill demonstration, the maximum score for each item may be reduced to 5 points. The maximum total score for Criterion 1.3 is 30 points.

The third stage of practice is the final one.

On the penultimate day of practice, the student must complete the diary (obtain all necessary signatures) and write a report in the appropriate section of the ДНЕВНИК-ОТЧЕТ / REPORT document.

The report is based on information about the specific production work performed by the student during the internship (practical activity in a medical organization).

Completing a clinical internship report begins with a description of the internship site and the work schedule at the hospital or clinic. The clinical internship report should detail everything the student did, participated in, and observed, day by day, providing a clear understanding of the student's level of independence in completing a given task.

Create a diary with an analysis of your work. Prepare a presentation of a complex clinical case (diagnosis, treatment, results). Complete a final assessment in the form of an interview on the competencies mastered.

The Head of practical training completes the appropriate section of the ДНЕВНИК-ОТЧЕТ / REPORT document (Professional Characteristics of Students), provides a detailed analysis of the student's completed work, and provides their opinion. The conclusion indicates the level of theoretical and practical training of the student, the quality of the work performed, work discipline, and shortcomings, if any; at the end of the characterization, an assessment is given for the practical experience/

The internship report is defended before a committee appointed by the program director. During the internship assessment, the student presents the ДНЕВНИК-ОТЧЕТ / REPORT document and answers questions from committee members.

Based on the results of the report defense, the internship committee prepares a "Commission's Conclusion on the Results of the Internship Defense" and records it in the corresponding section of the ДНЕВНИК-ОТЧЕТ / REPORT document; the final grade is entered into the grade sheet.

Intermediate Assessment

Admission to the intermediate assessment is contingent upon the completion of the practice objectives and achieving a grade of "Satisfactory" (more than 30 points) in the ongoing assessment.

The examination is conducted in the form of a practice report defense. Attestation commission formed by the head of the educational program. During the assessment, the student presents the ДНЕВНИК-ОТЧЕТ / REPORT document and answers questions from the commission members.

Upon completion of the report defense, the practice commission prepares a "Commission Conclusion on the Practice Defense Results", records it in the corresponding section of the ДНЕВНИК-ОТЧЕТ / REPORT document and the final grade is entered into the practice transcript.

Practice Report Assessment Criteria

№ Criterion Max. score

2.1 Completion and compliance of the ДНЕВНИК-ОТЧЕТ / REPORT document with methodological guidelines requirements. Logical structure of the report and material presentation. Accuracy of the summary report on work performed (strict correspondence with daily data). 5

2.2 Completeness, relevance and detail of material presentation in daily reports (logbook entries). Correctness of formulations and use of medical terminology. Scientific accuracy of presentation. Comprehensive coverage of practical aspects in the report. 5

2.3 Positive nature of professional reference. 5

2.4 Degree of utilization and processing of relevant information sources: legislation, educational literature, specialized periodic sources, including internet resources. 5

2.5 Quality of responses to commission questions, recommendations and comments during defense**: 30

Test questions 5

Oral questions 10

Correct demonstration of acquired practical skills 15

Σ Total score 50

**The student completes 5 selective test tasks, receiving 1 point for each correct answer. They answer 2 questions from committee members, earning 5 points for each correct response. The student demonstrates 3 selective practical skills, with each successful demonstration scored up to 5 points. If committee members have comments despite generally correct answers or satisfactory skill demonstrations, the score for each response may be reduced. The maximum score for criterion 2.5 is 30 points.

The assessment of the level of developed skills, practical experience, and student competencies during the exam conducted based on practice results is determined according to the university's approved grading scale.

11. EDUCATIONAL AND METHODOLOGICAL RECOMMENDATIONS FOR TEACHERS

The first stage of practice (introduction)

The Head of practical training will notify students in advance of the actual meeting place on the first day of practical training.

Introduction. Safety instructions. Determination of methods for conducting internship, goals and objectives of internship, reporting forms.

Distribution of students to departments together with the person responsible for practical training from the medical organization.

Clarification and coordination of the practical assignment, taking into account the specific activities of a particular department of a medical organization.

During the internship, each student completes a daily the ДНЕВНИК-ОТЧЕТ / REPORT document using the prescribed format.

The form is provided to students in advance in the form of a *.doc file for completion on paper, or students are provided with access to an information system that allows them to maintain the ДНЕВНИК-ОТЧЕТ / REPORT document in electronic form.

The supervisor's notes in the appropriate columns of the diary/report will confirm that the student actually attended the internship that day, mastered certain skills, became familiar with the work of certain departments, etc.

A supervisor is the employee directly supervising the internship. This may be different employees on different days. The Head of practical training and the person responsible for practical training at the medical organization, may also act as supervisor for specific sections.

The ongoing assessment is conducted through the following methods: monitoring students' completion of relevant sections in the ДНЕВНИК-ОТЧЕТ / REPORT document (including daily report notes and report sections), verifying compliance with safety regulations, internal work procedures, and sanitary standards, conducting interviews, and evaluating students' demonstration of acquired skills. The Head of practical training may personally monitor the student's progress at any time during practice hours.

The second stage of practice is the main one.

Direct implementation by the student of activities to acquire skills and master practical abilities provided for by the internship program.

During the main stage of practical training, rotation of students across departments should be provided so that each student acquires the necessary skills and abilities.

Interactive business simulations on emergency situations are also available.

The form of ongoing monitoring for the main stage of practice is an interview and demonstration of acquired skills, monitoring of students' completion of the relevant sections in the ДНЕВНИК-ОТЧЕТ / REPORT document (diary entries, writing of the section of the practice report).

The teacher supervises the students' work in the departments, operating room, manipulation room, work with the patient together with the department staff, interpretation of data from additional research methods, and filling out medical documentation. Development of professional competencies: maintaining medical records, providing emergency care, and carrying out preventive measures

The third stage of practice is the final one.

On the penultimate day of practice, the student must complete the diary (obtain all necessary signatures) and write a report in the appropriate section of the ДНЕВНИК-ОТЧЕТ / REPORT document.

The report is based on information about the specific production work performed by the student during the internship (practical activity in a medical organization).

Completing a clinical internship report begins with a description of the internship site and the work schedule at the hospital or clinic. The clinical internship report should detail everything the student did, participated in, and observed, day by day, providing a clear understanding of the student's level of independence in completing a given task.

The Head of practical training completes the appropriate section of the ДНЕВНИК-ОТЧЕТ / REPORT document (Professional Characteristics of Students), provides a detailed analysis of the student's completed work, and provides their opinion. The conclusion indicates the level of theoretical and practical training of the student, the quality of the work performed, work discipline, and shortcomings, if any; at the end of the characterization, an assessment is given for the practical experience/

The internship report is defended before a committee appointed by the program director. During the internship assessment, the student presents the ДНЕВНИК-ОТЧЕТ / REPORT document and answers questions from committee members.

Based on the results of the report defense, the internship committee prepares a "Commission's Conclusion on the Results of the Internship Defense" and records it in the corresponding section of the ДНЕВНИК-ОТЧЕТ / REPORT document; the final grade is entered into the grade sheet.

Students' internship helps them develop communication skills with patients, taking into account ethics, deontology, and psychological characteristics.

Independent work helps develop skills in working with patients, working with literature, analytical thinking, documentation skills, accuracy, and discipline.

Working with academic literature is considered a form of academic work and is completed within the hours allotted for its study. Each student is provided with access to the university's electronic library collections.

The recommendations are aimed at systematically developing professional competencies through a combination of theoretical knowledge, practical skills, and compliance with regulatory requirements..

Author(s):

Koreeva Ekaterina Aleksandrovna / Кореева Екатерина
Александровна /

Samyshina Elena Aleksandrovna / Самышина Елена
Александровна /