FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
"AMUR STATE MEDICAL ACADEMY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

AGREED
Vice-Rector for Academic Affairs,

_____ N.V. Loskutova
April17, 2025

Decision of the CCMC

April 17, 2025

Protocol No. 7

APPROVED
by decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation
April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HEAmur SMA of the Ministry of Health of the Russian Federation

_____ I.V. Zhukovets

April 22, 2025

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 50AB2242604E64520B52614FA420034A
Владелец: Жуковец Ирина Валентиновна
Действителен: с 15.04.2025 до 09.07.2026

EDUCATIONAL PROGRAM

practice «General medical practice»

Specialty: 31.05.01 General Medicine
Course: 6
Semester: 12
Total hours: 432 hrs.
Total credits: 12 credit units
Форма контроля: credit, 12 semester

Blagoveshchensk, 2025

The educational program of the discipline is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by the order of the Ministry of Education and Science of Russia dated 08.12.2020 No. 988 (registered with the Ministry of Justice of Russia on 08.26.2020 No. 59493), BPEP HE (2021).

Authors:

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Chief Freelance Pulmonologist of the Ministry of Health of the Amur Region O.V. Demura

APPROVED at the meeting of the Department of Faculty and Outpatient Therapy

Protocol No. 6 dated April 3, 2025

Head of the Department of Faculty and Outpatient Therapy, Holder of an Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Docent, _____V.I. Pavlenko

Conclusion of the Expert Commission on the review of the Educational Programs:
Protocol No. 1 dated April 16, 2025

Expert of the expert commission, Holder of an Advanced Doctorate (Doctor of Science) in Medical Sciences, Docent_____ E.E. Molchanova
APPROVED at the meeting of the CMC No. 3:
Protocol No. 6 dated April17, 2025 Chairman of the CMC No. 3
Holder of an Advanced Doctorate (Doctor of Science) in Medical Sciences,
Full Professor _____V.V. Voitsekhovsky

AGREED: Dean of the Faculty of Medicine, Ph.D. of Medical Sciences, Associate Professor_____ N.G. Brush
April 21, 2025

CONTENT

1. Explanatory note

1.1. Characteristics of the practice

An important stage in preparing students for practical medical work is on-the-job training. The purpose of the training is to develop practical skills and abilities, consolidate and deepen the theoretical knowledge acquired during their studies, introduce students to the fundamentals of healthcare organization and the anti-epidemic activities of medical organizations, conduct public health education, adapt students to the real-life conditions of their future work, and ensure students adhere to work discipline and internal regulations at primary healthcare organizations.

The area of professional activity and spheres of professional activity in which graduates who have mastered the specialist program can carry out professional activities: healthcare (in the field of providing primary health care to the population in medical organizations: clinics, outpatient clinics, inpatient and outpatient institutions of the municipal health care system and medical and preventive institutions providing primary health care to the population);

The types of professional activities for which graduates of specialist degree programs are prepared include medical, research, and organizational and managerial. Graduates who have completed the specialist degree program are prepared to address the following professional challenges in accordance with the type(s) of professional activity targeted by the specialist degree program:

- medical activities: prevention of the occurrence of diseases among the population by carrying out preventive and anti-epidemic measures; participation in the provision of emergency medical care in conditions requiring urgent medical intervention; the formation of motivation in the population, patients and their family members aimed at maintaining and strengthening their health and the health of others; teaching patients basic hygienic health measures that contribute to the prevention of diseases and strengthening health;
- research activities: analysis of scientific literature and official statistical reviews, participation in statistical analysis and public presentation of the results obtained;

- organizational and managerial activities: creation of favorable conditions for the stay of patients and the work of medical personnel in medical organizations; maintenance of medical records in medical organizations; compliance with basic information security requirements.

The objects of professional activity of graduates of the specialist program are:

- individuals (patients) aged 15 to 18 years and over 18 years of age (hereinafter referred to as adolescents and adults);
- population;
- a set of tools and technologies aimed at creating conditions for protecting the health of citizens.

Industrial practice "General Medical Practice" for sixth -year students is conducted in the 11th semester and consists of 9 modules:

1. Communication skills (distance learning).
2. Infectious diseases in the practice of a primary care physician.
3. Current issues in cardiology.
4. Acute cardiovascular pathology in general medical practice.
5. Oncological diseases, cancer prevention , palliative care.
6. Detection of tuberculosis in the general health care network.
7. Socially significant endocrine diseases.
8. Cardiopulmonary resuscitation.
9. Fundamentals of practical training for professional activities of a district physician.

MODULE 1 "COMMUNICATIVE SKILLS"

1.2. Purpose and objectives of the practice.

The goal of the internship is to improve the skills necessary for effective communication between a doctor and a patient in various situations (in inpatient and outpatient medical care).

Practice objectives :

- to form concepts about communication skills, the communication process and the communicative competence of a doctor;
- to provide an understanding of the importance of skills for effective and conflict-free communication with patients;
- to gain an understanding of the psychological requirements for a doctor’s personality; the correct construction and conduct of a medical interview with a patient;
- to develop skills for effective and conflict-free communication in outpatient settings;
- identify barriers and propose solutions to problems that hinder effective communication between doctor and patient.

1.3. The place of practice in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education (FSES VO) for the specialty 31.05.01 General Medicine (2020), the "Communication Skills" module of the "General Medical Practice" industrial practice course is part of the core component, Block 2. The total workload is 18 hours and is conducted in the 11th semester of the sixth-year student. Assessment is by credit and grade in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, individual problem-based assignment for industrial practice, calendar schedule for completing the practice .

1.6. Requirements for students.

To master the practice, knowledge, skills and abilities formed by previous disciplines/practices are necessary:
Psychology and Pedagogy
Knowledge **:** subject, objectives, methods of psychology and pedagogy, main stages of development of modern psychological and pedagogical thought, personality psychology (basic theories of personality, temperament, emotions, motivation, will, human abilities), fundamentals of developmental psychology, health psychology and social psychology.
Skills: use psychological knowledge in one's professional activities , in the process of developing medical and psychological treatment tactics, in the process of building relationships with patients and colleagues, in research , preventive and educational work; use knowledge of the fundamental principles, modern achievements , problems and trends in the development of the relevant scientific field in the educational process .
Skills: take into account the psychological characteristics of the patient during the treatment process, conduct negotiations and interpersonal conversations, conduct scientific research and organize collective scientific research work, master the methods and techniques of oral and written presentation of subject material, methods of developing independent work skills.
Philosophy
Knowledge: methods and techniques of philosophical analysis of problems, basic philosophical categories and laws, basic problems associated with the study of philosophical anthropology, basic ideas about the nature, essence and structure of personality, methods for assessing the role of science (medicine) in the development of the personality of a person (doctor), basic axiological categories.
Skills **:** independently analyze and evaluate the ideological and ethical views of others; trace the influence of fundamental philosophical laws of dialectics and ideas on the development of science (medicine); independently analyze modern philosophical and scientific concepts of human nature; develop an independent attitude toward the categories of human existence; understand the connection between philosophical teachings on cognition and the methods of medical science; formulate and convincingly defend one's own position on various philosophical issues.
Skills: expressing an independent point of view on various philosophical issues, analyzing and thinking logically, conducting discussions, round tables, philosophical argumentation, and public speaking; methods of analyzing various philosophical problems and ideological schools; written argumentation of one's own point of view; skills in perceiving and analyzing texts with philosophical content, methods of philosophical analysis of the problems and contradictions of society and man.
History of medicine

Knowledge: patterns and trends in the development of the global historical process, Russia's influence on the development of medicine, the influence of the environment on human health, the formation and development of medical science, outstanding figures in medicine and pharmacy, outstanding medical discoveries, the influence of humanistic ideas on medicine.
***Skills* :** . to competently and independently analyze and evaluate the social situation in Russia and abroad and carry out their activities taking into account the results of this analysis, carry out activities taking into account the moral and legal norms accepted in society, comply with the rules of medical ethics, laws and regulations on working with confidential information , maintain medical confidentiality , study scientific and medical information, domestic and foreign experience on the topic of research.
Skills:and express their own point of view, possess public speaking skills, moral and ethical argumentation, conduct discussions and round tables.
Bioethics
Knowledge: basic ethical terms and concepts, fundamental ethical theories, norms and principles of professional ethics, key national and international ethical documents; basic cognitive and axiological choices, their role in addressing fundamental issues of medical ethics and deontology; rights and moral obligations of healthcare professionals; legal and moral rights of patients; content of contemporary moral and ethical debates on healthcare development issues.
***Skills* :** formulate and argue one's own position on various issues of bioethics, use the provisions and categories of ethics and bioethics to evaluate and analyze various trends, facts and phenomena in the healthcare system.
Skills: skills of expressing an independent point of view, analysis and logical thinking, public speaking , moral and ethical argumentation , conducting discussions and round tables, principles of medical deontology and medical ethics , applying knowledge, abilities and skills acquired during the course of mastering the discipline in professional activities .

1.7. Interdisciplinary connections of the module with subsequent disciplines/practices

Knowledge and skills acquired during the course of studying the module and necessary for studying subsequent disciplines and practices:

No.	Name of subsequent disciplines	Communication Skills Module
1.	Clinical pharmacology	+
2.	Forensic medicine	+
3.	Outpatient therapy	+
4.	Hospital therapy	+

1.8 Requirements for the results of mastering the practice

Mastering the ―Communication Skills‖ module is aimed at developing/improving the following competencies: universal (**UC**): 1, 3, 4, 5, 9; general professional (GPC) – 1, 6.

Item No.	UC code and name	Upon completion of the module "Otolaryngology in the Practice of a Pediatrician", the student should:			UC achievement indicator
		know	be able to	own	
Universal competencies					
1	**UC** -1. Able to carry out a critical analysis of problematic situations based on a systems approach and develop an action strategy	Principles for implementing a critical analysis of problem situations based on a systems approach, principles for developing an action strategy	Conduct a critical analysis of problematic situations based on a systems approach and develop an action strategy	Skills in critical analysis of problem situations based on a systems approach, skills in developing an action strategy	**AI UC-1.1.** Analyzes a problematic situation as a system, identifying its components and the connections between them. AI UC-1.2. Identifies gaps in information needed to solve problem situations and designs processes to eliminate them. **AI UC-1.3** . Applies systems analysis to resolve problematic situations in the professional field. **AI UC-1.4.** Uses logical and methodological tools to critically evaluate contemporary philosophical and social concepts in their subject area. **AI UC - 1.5.** Critically evaluates the reliability of information sources and works with conflicting information from different sources.

2	**UC -3.** Able to organize and manage the work of a team, developing a team strategy to achieve the set goal	Principles of organizing and managing a team, developing a strategy to achieve a set goal	Organize and manage the team's work, develop a strategy to achieve the set goal	Skills in organizing and managing a team, developing a strategy to achieve a set goal	**AI UC-3.1.** Establishes and develops professional relationships in accordance with the needs of joint activities, including information exchange and the development of a unified strategy; works in a tolerant manner within a team, accepting social, ethnic, religious, and cultural differences. **AI UC 3.2.** Plans and adjusts team work based on the interests, behavioral characteristics, and opinions of team members, assigns tasks, and delegates authority to team members. **AI UC-3.3.** Selects constructive ways to resolve conflicts and contradictions in business communication. **AI UC-3.4.** Organizes discussions on a given topic and debates the team's work results, engaging opponents of the developed ideas.
3	**UC -4.** Able to use modern communication technologies, including in foreign language(s), for academic and professional interaction	Principles of application of modern communication technologies, including in foreign language(s), for academic and professional	Use modern communication technologies, including in foreign language(s), for academic and professional interaction	Skills in using modern communication technologies, including in foreign language(s), for academic and professional interaction	**AI UC -4.1.** Uses communicative and linguistic tools to build effective partnerships with patients and colleagues; selects a communication style. **AI UC-4.2.** Uses modern communication resources to search, process, and transmit information necessary for the effective performance of professional tasks and the achievement of professionally significant

		interaction			goals. **AI UC-4.4.** Presents the results of academic and professional activities at various public events, including international ones, choosing the most appropriate format. **AI UC-4.5.** Defends their positions and ideas in a reasoned and constructive manner in academic and professional discussions in the official language of the Russian Federation and a foreign language.
4	**UC -5.** Able to analyze and take into account cultural diversity in the process of intercultural interaction	Principles of analysis and consideration of cultural diversity in the process of intercultural interaction	Analyze and consider cultural diversity in the process of intercultural interaction	Skills in analyzing and taking into account cultural diversity in the process of intercultural interaction	**AI UC-5.2.** Builds social and professional interactions that take into account the characteristics of the main forms of scientific and religious consciousness, business and general culture of representatives of other ethnic groups and faiths, and various social groups. **AI UC-5.3.** Ensures the creation of a non-discriminatory interaction environment when performing professional tasks.
5	**UC -9.** Able to use basic defectological knowledge in social and professional spheres	Principles of using basic defectological knowledge in social and professional spheres	Apply basic defectological knowledge in social and professional spheres	Skills in using basic defectological knowledge in social and professional spheres	**AI UC-9.1.** Understands the principles of non-discriminatory interaction in communication across various spheres of life, taking into account the socio-psychological characteristics of individuals with disabilities.

					AI UC-9.2. Defines adequate methods for organizing joint professional activities with the participation of persons with disabilities.
General professional competencies					
6	**GPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	Principles of using information, bibliographic resources, information and communication technologies, taking into account the basic requirements of information security, medical and biological terminology.	Use information, bibliographic resources, and information and communication technologies taking into account the basic requirements of information security	Skills in solving standard professional tasks using information, bibliographic resources, medical and biological terminology, information and communication technologies and taking into account the basic requirements of information security	**AI GPC -1.1.** Conducts professional activities in accordance with ethical standards and moral principles. **AI GPC-1.2.** Organizes professional activities, guided by healthcare legislation, knowledge of medical ethics, and deontology. **AI GPC-1.3.** Skills in expressing an independent point of view, analytical and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and roundtables, and understanding the principles of medical deontology and medical ethics.
7	**GPC-6.** Capable of organizing patient care, providing primary health care, ensuring the organization of work and making professional decisions in emergency situations at the pre-hospital stage, in	Principles of organizing patient care, the basics of providing primary health care, ensuring the organization of work and making professional	Organize patient care, provide primary health care, ensure the organization of work and the adoption of professional decisions in emergency situations	Skills in organizing patient care, providing primary health care, ensuring the organization of work and making professional decisions in	**AI GPC-6.1.** Organizes patient care and provides primary health care and emergency care to patients. **AI GPC-6.2.** Uses medical equipment for protection, prevention, provision of medical care, and treatment of injuries caused by toxic substances of various

	emergency situations, epidemics and in areas of mass destruction	decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	origins, radioactive substances, and biological agents. **AI GPC-6.3.** Makes professional decisions in emergency situations and provides first aid at the pre-hospital stage, during emergencies, epidemics, and in areas of mass casualties. **AI GPC-6.4.** Organizes the work of medical personnel and implements anti-epidemic measures to protect the population during emergencies, epidemics, and in areas of mass casualties.

1.9 Stages of competencies development and description of assessment scales

2. Structure and content of practice

2.1 Scope of practice

Scope of practice	
Total labor intensity of practice in hours, total	432
Hours of work required for the Communication Skills Module	18
Total workload in credit units, total	12
Type of intermediate assessment	credit with grade

2.2. Type of practice – industrial.

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge.

Ongoing monitoring of students' implementation of the internship program is carried out daily by internship supervisors in the form of monitoring the completion of individual internship assignments, keeping internship diaries, and developing practical skills and abilities.

Interim assessment (credit) is carried out through an interview on theoretical issues, testing, verification of the acquisition of practical skills and abilities, and evaluation of reporting forms.

The instructor individually evaluates each student's progress toward the goals and objectives of the internship. The assessment is based on test results, mastery of practical skills, abilities, and theoretical knowledge, the correctness of the student's diary, and the student's self- discipline.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Assessment scales for intermediate knowledge control

The success of students in mastering industrial practice: practical skills and abilities is characterized by a qualitative assessment and is assessed on a 5-point system: ―5‖ - excellent, ―4‖ - good, ―3‖ - satisfactory, ―2‖ - unsatisfactory.

Criteria for assessing the theoretical part

"5" **-** for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" **-** the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

―3‖ – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

―5‖ - when testing, up to 10% of incorrect answers are allowed.

―4‖ - allows up to 20% of incorrect answers during testing.

―3‖ - allows up to 30% of incorrect answers during testing.

―2‖ **-** during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

―5‖ – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

―4‖ – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

―3‖ – the student has only some practical skills and abilities.

―2‖ - the student has only some practical skills and abilities and performs them with gross errors.

3. Material, technical and educational support for the module

3.1. Main literature:

1. Borozdina, G. V. Psychology of communication: textbook and practical training for secondary vocational education / G. V. Borozdina, N. A. Kormnova ; edited by G. V. Borozdina. - Moscow: Yurait Publishing House , 2017. - 463 p. - Access mode: https://www.biblio-online.ru/viewer/17E15D39-446E-4D42-9C60-E5345C07660A#page/1
2. Konovalenko, M. Yu. Psychology of communication: textbook for secondary vocational education / M. Yu. Konovalenko, V. A. Konovalenko. - M.: Yurait Publishing House , 2017. - 468 p.https://www.biblio-online.ru/viewer/CEDDEA43-487E-4BDB-B4AA-D1F6CE06FF8D#page/1
3. Ostrovskaya I.V., Psychology of communication [Electronic resource]: textbook / Ostrovskaya I.V. - M .: GEOTAR-Media, 2018. - 192 p. - ISBN 978-5-9704-4736-9 - Access mode: http://www.studmedlib.ru/book/ISBN9785970447369.html

3.2 Further reading

1. Efimova N.S. Psychology of Communication. Workshop on Psychology: Textbook / Efimova Natalia Sergeevna. - Moscow; Moscow: Publishing House "FORUM": OOO "Scientific Publishing Center INFRA-M", 2014. - 192 p. - for vocational school students and students of secondary specialized educational institutions. - ISBN 978-5-8199-0249- http://znanium.com/go.php?id = 410246
2. Zharov M.N. Psychology of Communication [Text]: textbook for students of secondary vocational education institutions / M.N. Zharova. - M .: Publishing Center "Academy", 2014. - 256 p. - (Professional education). - ISBN 978-5-7695-6755-1 - Access mode: **academia-moscow.ru** › off-line /_ books / fragment
3. Kudryavaya N.V., Psychology and pedagogy [Electronic resource] / N.V. Kudryavaya [and others] - M.: GEOTAR-Media, 2015. - 400 p. - ISBN 978-5-9704-3374-4 - Access mode: http://www.studmedlib.ru/book/ISBN9785970433744.html

3.3 Educational and methodological support for the module, prepared by the department staff

1. Gerasimova T.V., Skabelkina T.N. Psychology and pedagogy: textbook: Blagoveshchensk, 2018. – 170 p.

Educational, methodological and multimedia materials used in the educational process.
List of multimedia materials on electronic media:

1. Electronic encyclopedia "General Etiquette".

List of videos, photos and video materials used in training:

1. Karelin A. The Great Encyclopedia of Psychological Tests

3.4. Equipment used for the practice

No.	Name	Quantity

p/p		
1.	A classroom for conducting seminars (Philosophy Room)	**1**
2	Board	1
3	Teacher's desk	1
4	Study table	14
5	Chairs	26
6	Multimedia complex	1

3.5. Professional databases, information and reference systems, electronic educational resources.

Name resource	Resource Description	Access	Resource address
Electronic library systems			
"Student Consultant" Electronic Library of the Medical University.	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/
"Doctor's Consultant" Electronic Medical Library.	The materials in the library were developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information was prepared taking into account the position of the scientific and practical medical community (global, European, and Russian) in the relevant specialty. All materials have undergone mandatory independent peer review.	library, individual access	http://www.rosmedlib.ru /cgi-bin/mb4x
PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	http:// www. ncbi.nlm.nih . gov/ pubmed /
OxfordMedicine Online .	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic	library, free access	http://www.oxfordmedicine.com

	versions of which are constantly updated.		
Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of Molecular Genetics, Russian Academy of Sciences .)	library, free access	http://humbio.ru/
Medical online library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems			
Russian Medical Association	A professional internet resource. Purpose: to facilitate the effective professional activities of medical personnel. Contains the charter, personnel, Structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases			
Worldwide healthcare organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications, and much more.	library, free access	https://edu.gov.ru/
Federal Portal "Russian Education"	A single point of access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: //www .edu.ru/ http://window.edu.ru/catalog/?p rubr=2.2.81.1

Bibliographic databases			
BD Russian Medicine	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
eLIBRARY.RU	A Russian information portal in science, technology, medicine, and education, containing abstracts and full texts of over 13 million scientific articles and publications. The eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals.	library, free access	http://elibrary.ru/defaultx.asp
Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
Medline.ru	Biomedical portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process.

I. Commercial software products		
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system : MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II. Freely distributed software		

1.	Google Chrome	Freely distributed Distribution conditions: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunications network "Internet"

- Amur State Medical Academy Library. Access mode:
https://amursma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/
- Electronic Library System "Student Consultant". Access mode:
http://www.studmedlib.ru/cgi-bin/mb4x
- Electronic library of medical literature. Access mode:
https://www.books-up.ru/ru/entrance/97977feab00ecfbf9e15ca660ec129c0/

4. Assessment Fund

4.1. Examples of midterm assessment test assignments in the Moodle system

Access mode: https://educ-amursma.ru/course/view.php?id=705

1 IN THE COMMUNICATION PROCESS, FEEDBACK DEPENDS ON…

A) how they perceive their communication partner
B) advice, wishes, conclusions
B) external conditions
D) the purposes of communication

2. THE GREATEST INFORMATIVENESS IS INHERENT IN…

A) verbal information
B) gestures
B) non-verbal information

D) cognitive information

3. THE COMMUNICATIVE SIDE OF COMMUNICATION INVOLVES…

A) exchange of information and establishment of relationships
B) the interaction process
B) process of activity
D) evaluation process

4.2. List of practical skills that a student should possess after completing the internship:

- skills in taking into account the psychological characteristics of the patient during the treatment process;
- skills in conducting business negotiations and interpersonal conversations;
- skills in teaching patients the rules and methods of leading a healthy lifestyle;
- skills in scientific research and organization of collective scientific research work;
- skills and techniques of oral and written presentation of subject material.

4.3. List of questions for the interim assessment

1. The concept of communication and its main functions.
2. People's ideas about the place and role of communication: a historical cross-section.
3. Types and forms of communication.
4. The role and place of verbal and non-verbal means of communication in the communication process.
5. Define the concepts of "culture of behavior" and "etiquette." Consider whether a person who observes all the rules of etiquette can be called highly moral.
6. Intonation and its role in communication.
7. The structure of oral speech. The concepts of "paralinguistics" and "extralinguistics".
8. The concept of a "language norm". Contemporary problems of colloquial speech.
9. Reasons for communication failures.
10. Comparative and contrastive characteristics of the concepts ―dispute‖ - ―discussion‖ - ―polemic‖ - ―debate‖.
11. International character of gestures.
12. Features of the Russian tradition of gesticulation.
13. Features and significance of facial expressions, pantomime and proxemics in the communication process.
14. Aesthetics and its main categories.
15. The problem of the nature of human aesthetic feelings. State your position.
16. Medical aesthetics: subject of study and features.
17. Types of aesthetic activities in medicine.
18. Classical elements reflecting the generation of speech.
19. Basic requirements for the topic of a public speech.
20. The main parts of a public speech.
21. Possible forms of entry.
22. Types of speech. Characteristics of the main part of speech.
23. Target settings and forms of speech conclusion.
24. Main types of arguments.
25. Thesis in proof. Components of proof.

26. Basic techniques for preparing for a public speech.
27. Distinctive features of the scientific style of speech.
28. Genres of oral and written scientific speech.
29. Terminology of the modern language.
30. Language and speech. Basic functions of language and speech.

MODULE 2 "INFECTIOUS DISEASES IN MEDICAL PRACTICE"
PRIMARY HEALTHCARE"

1.2. Purpose and objectives of the practice

The purpose of the internship is to improve and systematize theoretical knowledge, develop practical skills in students in organizing and providing outpatient medical care, and prevent the emergence and spread of infectious diseases in the practice of a primary care physician.

The objectives of the internship are to develop a set of work actions and skills within the framework of mastering work functions: examining patients to establish a diagnosis, prescribing treatment and monitoring its effectiveness and safety, conducting preventive measures, including health education work, among patients and their relatives, organizing the activities of medical personnel and maintaining medical records in the provision of outpatient care to patients with infectious diseases in primary health care.

1.3. The place of internship in the structure of the OPOEP of HE

In accordance with the Federal State Educational Standard of Higher Education (2020), the "Infectious Diseases in Primary Care Physician Practice" module of the "General Medicine Practice" industrial practice course is part of the core component, Block 2. The total workload is 36 hours and is completed in the 11th semester of the 6th-year student. Assessment is by credit and grade in the 11th semester .

1.4. Forms of practice control

The traditional form of control is used – intermediate control, which includes testing, control of theoretical knowledge and practical skills.

1.5. Internship reporting forms

Industrial practice diary, individual assignment for industrial practice, calendar schedule for completing the practice **.**

1.6. Requirements for students

To master the practice, knowledge, skills and abilities formed by previous disciplines/practices are necessary:
Biology
Knowledge **:** basic concepts and problems of the biosphere and ecology, the phenomenon of parasitism and bioecological diseases.
Skills: identify helminth eggs and/or helminths themselves on preparations, slides, photographs,

etc.
Skills: identification of eggs and helminths themselves in preparations and native material.
Biochemistry
Knowledge **:** electrolyte balance of the human body, the main metabolic pathways for the transformation of carbohydrates, lipids, and amino acids, the basics of pigment metabolism in normal conditions and with various types of jaundice , the role of cell membranes and their transport systems in metabolism.
Skills **:** determine biochemical parameters in blood serum (glucose, urea, bilirubin, uric acid, lactic and pyruvic acids, etc.).
Skills : determination of necessary biochemical parameters in various human biological fluids.
Microbiology, virology
Knowledge: classification, morphology, and physiology of microorganisms and their impact on human health. Microbiological diagnostic methods, and the use of basic antibacterial, antiviral, and biological agents.
Skills: conduct microbiological and immunological diagnostics.
Skills: microscopy and interpretation of histological specimens and electron micrographs .
Immunology
Knowledge **:** structure and functions of the human immune system, its age-related characteristics; methods of immunodiagnostics and principles of their assessment; types and indications for the use of immunotropic therapy.
Skills **:** justify the need for a clinical and immunological examination of the patient with subsequent prescription of immunocorrective therapy; interpret the results of an assessment of the immune status and the results of basic diagnostic allergy tests.
Skills: algorithm for establishing a preliminary immunological diagnosis; skills in diagnostic and therapeutic measures to provide emergency care in life-threatening conditions.
Pharmacology
Knowledge **:** classification and main characteristics of drug groups, pharmacodynamics and pharmacokinetics, indications, contraindications, side effects, general principles of prescription writing.
Skills: analyze the action of drugs based on their pharmacological properties and the possibility of their use for therapeutic treatment; write prescriptions for drugs, apply basic antibacterial, antiviral, and biological drugs; assess possible manifestations of drug overdose and methods for their elimination; substantiate the principles of pathogenetic therapy for the most common diseases.
Skills:the use of drugs in the treatment, rehabilitation and prevention of various diseases.
Normal physiology
Knowledge: physiology of the cardiovascular, respiratory, nervous systems, gastrointestinal tract, etc., water-electrolyte balance, thermoregulation.
Skills: determine physiological norms of internal organs and systems.
Skills: assessment of the physiological state of internal organs and systems.
Pathological anatomy, clinical pathological anatomy
Knowledge **:** anatomical and physiological, age-sex and individual characteristics of the structure and development of a sick organism.
Skills **:** visually assess and record changes in the organs and tissues of a corpse, substantiate the nature of the pathological process and its clinical manifestations; provide an opinion on the cause of death and formulate a pathological diagnosis; complete a medical death certificate.
Skills : comparison of morphological and clinical manifestations of the disease; methods of clinical and anatomical analysis of autopsy, examination of biopsy and surgical material.
Pathophysiology, clinical pathophysiology
Knowledge **:** morphogenesis, structural and functional bases of diseases and pathological

processes; causes and basic mechanisms of typical pathological processes.
Skills: interpret the results of the most common methods of functional diagnostics (electrocardiography, spirography, etc.); analyze issues of general pathology in light of the modern understanding of the theoretical concept of the doctrine of diseases.
Skills: assessment of the condition of internal organs in various pathologies.
Hygiene. Hygienic aspects of nutrition, hygiene in healthcare facilities, and hygiene issues in medical and social assistance to the working population.
Knowledge: hygienic aspects of work, nutrition, rest of structural divisions of medical organizations, hygienic problems of medical and social assistance to the adult population.
Skills: plan, analyze, and assess the health of the population and the impact of environmental and industrial factors on it; implement preventive, hygienic, and anti-epidemic measures; conduct environmental assessments and environmental forecasting of human activities; assess social factors influencing the physical and psychological health of the patient.
Skills: organizing events to prevent the impact of factors affecting the state of physical and psychological health, skills in assessing risk factors affecting the physical and psychological state of the patient.
Propaedeutics of internal diseases
Knowledge: methods of physical examination of an adult (inspection, palpation, percussion, auscultation, pulse characteristics) according to age norms.
Skills: assess the patient's status during the initial examination and follow-up examinations, interpret the results of additional research methods.
Skills : Physical examination of an adult.
Neurology, medical genetics
Knowledge: topics of local disorders of various parts of the nervous system.
Skills **:** assess the patient's neurological status with subsequent determination of treatment tactics.
Skills: performing diagnostic procedures and algorithm for appropriate therapy.
Faculty therapy
Knowledge of **:** etiology, pathogenesis, pathomorphology, classification, clinical picture, laboratory diagnostics, differential diagnostics, treatment, medical examination, prevention of the most common diseases; methods of conducting laboratory and instrumental examination methods; features of the organization and scope of work of a district physician.
Skills: assess the patient's objective status, conduct an accurate clinical and epidemiological diagnosis of the disease to determine diagnostic tactics and timely treatment. Determine indications for hospitalization.
Skills: be able to identify the leading clinical symptoms and syndromes, select optimal methods of clinical and instrumental examination for therapeutic diseases, and select appropriate drug and non-drug treatment for therapeutic diseases.
Surgery (general, faculty)
Knowledge: asepsis and antisepsis, surgical symptoms and syndromes in infectious diseases (bleeding, perforation, peritonitis, etc.).
Skills: perform primary surgical treatment of a wound and provide emergency care in developing emergency conditions.
Skills : performing primary surgical treatment of a wound and an algorithm for providing emergency care in a specific emergency condition.

1.7 Interdisciplinary links with subsequent disciplines/practices

Knowledge and skills acquired during industrial internships are necessary for studying subsequent disciplines and practices:

No.	Name of subsequent disciplines	**Module** " Infectious diseases in the practice of a primary care physician "
1.	Clinical pharmacology	+
2.	Forensic medicine	+
3.	Outpatient therapy	+
4.	Hospitaltherapy	+

1.8. Requirements for the results of the internship

The study of the discipline "Infectious diseases" is aimed at the formation of the following competencies: universal (UC), general professional (GPC) and professional competencies (PC): UC -1, 3; GPC–1, 2, 6; PC- 1, 2, 3, 4, 5, 6, 9, 12.

No. p/p	**Code and name of the UK**	**As a result of mastering the practical course "Infectious diseases in the practice of a primary care physician," the student should:**			**Indicator achievements of the Criminal Code**
		Know	**Be able to**	**To own**	
Universal competencies					
1.	**UC -1.** Able to carry out a critical analysis of problematic situations based on a systems approach and develop an action strategy	Features of the development of the infectious process at the present stage, the main problems and concepts in infectology, the relationship with other medical-biological and medical disciplines	To characterize the stages of development of infectious disease science and its role in the present day, as well as the contribution of Russian scientists to its development .infectiousthe patient has an illness	The ability to analyze the significance of infectious diseases today. Knowledge of the interactions between macro- and microorganisms and the factors contributing to the development of infectious diseases.	**AI UC-1.1.** Analyzes a problematic situation as a system, identifying its components and the connections between them. **AI UC-1.3.** Applies systems analysis to resolve problematic situations in the professional field. **AI UC-1.4.** Uses logical and methodological tools to critically evaluate contemporary philosophical and social concepts in their subject area. **AI UC-1.5.** Critically evaluates the reliability of information sources and works with conflicting information from different sources.

2	**UC -3.** Able to organize and manage the work of a team, developing a team strategy to achieve the set goal	Organizational, ethical and deontological aspects of relationships in the work collective of a healthcare institution, principles of planning and distribution of responsibilities between employees. The ultimate goals of teamwork	Work in a tolerant team, accepting social, ethnic, religious, and cultural differences. Apply acquired knowledge to achieve goals; conduct discussions on a given topic and debate the team's work, engaging opponents of the ideas developed.	The ability to enter into discussions on the given topic and discuss the results your work with opponents on the chosen topic	**AI UC-3.1.** Establishes and develops professional relationships in accordance with the needs of joint activities, including information exchange and the development of a unified strategy; works in a tolerant manner within a team, accepting social, ethnic, religious, and cultural differences. **AI UC 3.2.** Plans and adjusts team work based on the interests, behavioral characteristics, and opinions of team members, assigns tasks, and delegates authority to team members. **AI UC-3.4.** Organizes discussions on a given topic and discusses the results of the team's work with the involvement of opponents to the developed ideas.
3	**GPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	Moral and legal norms, ethical and deontological principles in professional activities	Observe moral and legal norms, ethical and deontological principles when communicating with colleagues and patients	The ability to carry out professional activities in accordance with ethical standards and moral principles	**AI GPC -1.1.** Conducts professional activities in accordance with ethical standards and moral principles.
4	**GPC-2.** Capable of conducting and monitoring the	Methods of preventive medicine aimed at improving health	To apply in practice methods aimed at preventing the occurrence of diseases	The principles of preventive medicine to prevent the development of diseases and eliminate	**AI GPC-2.1.** Uses preventive medicine methods aimed at improving public health.

	effectiveness of measures to prevent, promote a healthy lifestyle, and educate the population about health and hygiene			risk factors for their development	
5	**GPC-6.** Capable of organizing patient care, providing primary health care, ensuring the organization of work and making professional decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	Methods of providing primary health care and emergency care to patients	Provide primary, medical, and emergency care to patients. Ensure the organization of work and professional decision-making in emergency situations at the pre-hospital stage, during epidemics, and in areas of mass casualty.	Methods of providing emergency care to patients	**AI GPC-6.1.** Organizes patient care, provides primary health care and emergency care to patients.

6	**PC-1.** Able to provide medical care in urgent and emergency situations	Clinical signs of conditions requiring emergency and urgent medical care.	Provide medical care in urgent and emergency situations	Methods of provision medical care in urgent and emergency forms	**AI PC - 1.1.** Identifies clinical signs of conditions requiring emergency medical care. **AI PC -1.2.** Provides emergency medical care to patients with sudden acute illnesses, conditions, and exacerbations of chronic diseases without obvious signs of a threat to the patient's life. **AI PC -1.3.** Identifies conditions requiring emergency medical care. **AI PC - 1.4.** Provides emergency medical care to patients with life-threatening conditions. **AIPC -1.5.** Detects signs of sudden cessation of blood circulation and breathing. **AI PC - 1.6.** Performs basic cardiopulmonary resuscitation in combination with electrical impulse therapy (defibrillation) in the event of clinical death of a patient (in case of sudden cessation of blood circulation and/or breathing
7	**PC-2.** Capable of collecting and analyzing complaints, life history and medical history of the patient in order	Methods for establishing contact with the patient, collecting complaints, and taking a disease history. Key clinical manifestations (symptoms, syndromes) of the infectious diseases	Establish contact with the patient. Collect complaints from the patient. Analyze risk factors, the dynamics of symptom development and the course of the disease.	Methodology for collecting complaints. The ability to analyze anamnestic data obtained during patient interviews. Methods of formulating a clinical diagnosis and being able to justify it	**AI PC -2 .1.** Establishes contact with the patient. **AI PC -2 .2.**Collects complaints, specifies them, highlighting the main and secondary ones. **AI PC -2.3 .** Collects and analyzes information about the onset of the disease, the presence

	to establish a diagnosis	studied. Nosological forms of diseases in accordance with the ICD (within the topics discussed)	Collect epidemiological and life history		of risk factors, the dynamics of symptom development, and the course of the disease. **AI PC -2.5 .** Collects and evaluates professional and epidemiological anamnesis. information about the medical history of life, including data on past illnesses, injuries and surgical interventions, hereditary,
8	**PC-3.** Able to conduct a physical examination of a patient and analyze the results of additional examination methods in order to establish a diagnosis	Methodology of physical examination of patients with infectious diseases. Principles of laboratory and instrumental diagnostics of infectious pathology	Conduct a physical examination of the patient taking into account ethical and deontological principles. physical examination data , laboratory and instrumental examination data	Ability to analyze physical , clinical and instrumental data obtained during examination of the patient	**AI PC-3.1.**Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets its results. **AI PC-3.2.**Justifies the necessity, scope, sequence of diagnostic measures (laboratory, instrumental) and referral of the patient to a doctor for consultations **AI PC-3.3.** Analyzes the patient examination results and, if necessary, justifies and plans the scope of additional research. **AI PC -3.4.** Interprets and analyzes the results of collecting information about the patient's disease, data obtained during laboratory and instrumental examinations and during consultations with specialist doctors,

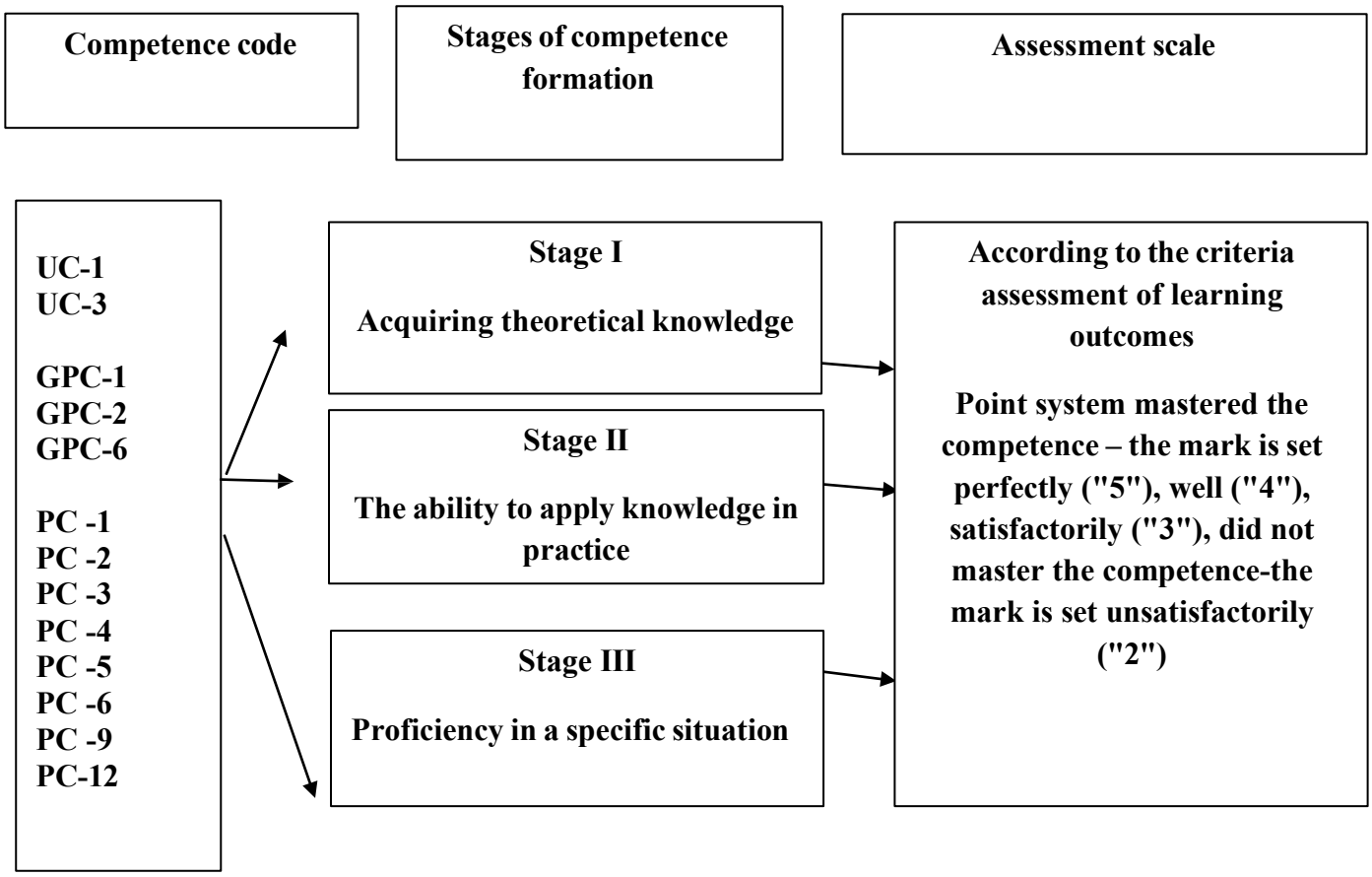
					and, if necessary, justifies and plans the scope of additional research. **AI PC-3.5.**Provides early diagnosis of internal organ diseases. Diagnosis is based on the current International Statistical Classification of Diseases and Related Health Problems (ICD). **AI PC-3.6.**Conducts differential diagnostics of internal organ diseases from other diseases
9	**PC-4.** Capable of determining indications for hospitalization, indications for emergency, including specialized emergency, medical care	Rules for transporting an infectious patient to a hospital, rules for isolation during hospitalization of patients, Features of organizing work with patients with HIV infection. Features of the organization and scope of work of an outpatient physician when working with infectious diseases patients. Medical indications for provisionEmergency medical care, including specialized emergency medical care, indications for specialized medical care in inpatient or day	Provide medical care to patients with infectious diseases in outpatient and inpatient settings	Methods of providing medical care to patients with infectious diseases in accordance with clinical guidelines (treatment protocols)	**AI PC -4.1.**Determines medical indications for the provision of emergency, including specialized emergency, medical care **AI PC -4.2.**Refer the patient for specialized medical care in an inpatient setting or in a day hospital setting if there are medical indications in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC-4.3.**Uses medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, care taking into account the standards of medical care

		hospital settings. Procedures for providing medical care in accordance with clinical guidelines (treatment protocols).			
10	**PC-5.** Able to prescribe treatment to patients	Clinical picture, complications of various infectious diseases. Procedures for providing medical care to patients with infectious diseases in accordance with clinical guidelines (treatment protocols)	Draw up a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with current procedures for the provision of medical care, clinical recommendations (treatment protocols)	Ability to prescribe treatment based on the clinical situation	**AI PC -5. 1.** Draws up a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC -5. 2.** Prescribes medications, medical devices, and therapeutic nutrition taking into account the diagnosis, age, and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical guidelines, and standards of medical care.
1	**PC-6.** Capable of monitoring the	Essential medications, medical devices, nutritional supplements	To evaluate the effectiveness and safety of prescribed complex	Methodology for conducting controlthe effectiveness and safety of	**AI PC-6.1.** Evaluates the efficacy and safety of drugs, medical devices, nutritional supplements, and other

1	effectiveness and safety of the therapy being administered	and other treatments used for patients with infectious diseases	therapy for patients with infectious diseases	the therapy	treatment methods. **AI PC -6.2.** Takes into account the pharmacodynamics and pharmacokinetics of the main groups of drugs, prevents the development of adverse drug reactions, and corrects them if they occur.
12	**PC-9.** C a p o n Tocarrying out preventive medical examinations , dispensaryand implementation of dispa nsernogo observationsfor patientswith s h e r. m i s e s a s s	Current regulatory legal acts and other documents necessary for organizing a plan for dispensary observation of patients with chronic infectious diseases	Conduct outpatient monitoring of patients with infectious diseases, including chronic ones	Methodology for conducting dispensary observation of patients with infectious diseases	**AI PC 9.1.** Organizes and conducts medical examinations taking into account age, health status, and profession in accordance with current regulatory legal acts and other documents.
13	**PC -10.** Capable of conducting and monitoring the effectiveness of preventive measures and promoting a healthy lifestyle	Current regulatory legal acts and other documents required for	Conduct sanitary and anti-epidemic measures	Conducting sanitary and anti-epidemic measures	**AI PC 10.3.** Conducts sanitary and anti-epidemic measures in the event of an outbreak of infection.

14	**PC-12.** Ready to maintain medical records, including in electronic form	Medical documentation, including the structure of the medical history. The concept of personal data of patients and medical confidentiality	Fill out medical documentation, including in electronic form	Methodology for filling out a medical history	**AI PC -12.1 .**Completes medical documentation, including electronically **AI PC -12.2 .**Works with personal data of patients and information constituting a medical secret **AI12.3.** Prepares documents when referring patients for hospitalization, consultation, spa treatment, and medical and social examination.

1.9. Stages of competence development and descriptions of assessment scales



2. Structure and content of practice

2.1. Scope of practice

Scope of practice	Total hours
Total labor intensity of practice in hours, total	432
Labor intensity in hours of the Module "Infectious diseases in the practice of a primary care physician"	36
Total workload in credit units, total	12
Type of intermediate assessment	Credit with grade

2.2. Type of practice: industrial.

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

The internship involves working with patients and documentation in primary healthcare. During the internship, the student must

know:

- features in the methodology of collecting and evaluating the patient's life history, anamnesisdiseases, allergy history , vaccination, epidemiological historypatient with infectiousdiseases
- peculiaritiesmethodsinspectionpatientWithinfectiousdisease
- modernmethodsmedicinalAndnon-drugtherapyinfectiousdiseasesVoutpatientconditionsVin accordanceWithcurrentclinicalrecommendations(protocolstreatment),ordersrenderingmedicalhelpAnd taking into accountstandardsmedicalhelp
- specificAndnonspecificpreventioninfectiousdiseasesVoutpatientconditions
- rulesconductingsanitary and anti-epidemic(preventive)eventsVcaseoccurrence of the outbreakinfections
- rulesdesignVmedicalorganizations,providingmedicaloutpatienthelp,medicaldocumentation,Vvolumen umberVelectronicview

be able to:

- installcontactWithpatient
- collection of life history, medical history, allergy history , vaccinations,epidemiological anamnesis
- inspectionpatientAndassessmentsclinicalpaintingsatinfectiousdiseases
- to justifynecessityAndvolumelaboratoryAnd(or)instrumentalexaminations, andAlsointerpret the receivedresults
- to justifynecessitydirectionsonhospitalization
- to make upplantreatment(diet therapy,medicinalAndnon-drugtherapy) of infections, taking into account the patient's age and concomitant diseases, diagnosisand the clinical picture of the disease and in accordance with current clinicalrecommendations (treatment protocols), procedures for providing medical care and withtaking into accountstandards of medicalhelp
- choose a plan of preventive and anti-epidemic measures in the familystruggleWithdrifts anddistributioninfections
- fill outmedicaldocumentation,VvolumenumberVelectronicview

2.3. Criteria for assessing students' knowledge.

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

3- the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2"- the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

—5‖ - when testing, up to 10% of incorrect answers are allowed.

—4‖ - allows up to 20% of incorrect answers during testing.

—3‖ - allows up to 30% of incorrect answers during testing.

—2‖ - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

—5‖ – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

—4‖ – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

—3‖ – the student has only some practical skills and abilities.

—2‖ - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.

"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.

"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.

"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.

"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Logistics and educational support for the internship

3.1. Primary Literature

1.	Yushchuk, N. D. Infectious diseases: textbook / edited by Yushchuk N. D., Vengerov Yu. Ya. - Moscow: GEOTAR-Media, 2020. - 704 p. - ISBN 978-5-9704-5347-6. - Text: electronic (date accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970453476.html

3.2. Further reading

2.	Luchchev , V. I. Atlas of infectious diseases / Ed. V. I. Luchchev , S. N. Zharov, V. V. Nikiforov - Moscow: GEOTAR-Media, 2014. - 224 p. - ISBN 978-5-9704-2877-1. - Text: electronic (date accessed: 12.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/ru/book/ISBN9785970428771.html
3.	Infectious diseases: national guidelines / Yushchuk N. D. - Moscow: GEOTAR-Media, 2021. - 1104 p. (Series "National Guidelines") - ISBN 978-5-9704-6122-8. - Text: electronic (date accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970461228.html
4.	.Yushchuk , N. D. Infectious diseases. Guide to practical classes: teaching aid / edited by N. D. Yushchuk, E. V. Volchkova, Yu. V. Martynov. - Moscow: GEOTAR-Media, 2021. - 720 p.: ill. - 720 p. - ISBN 978-5-9704-6096-2. - Text: electronic (accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970460962.html
5.	Epifanov, V. A. Medical and social rehabilitation after infectious diseases / V. A. Epifanov, N. D. Yuschuk, A. V. Epifanov [et al.]. - Moscow: GEOTAR-Media, 2020. - 560 p. - ISBN 978-5-9704-5915-7. - Text: electronic (date of receipt: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970459157.html
6.	Yushchuk, N. D. Infectious diseases: syndromic diagnostics: study guide / edited by N. D. Yushchuk, E. A. Klimova. - Moscow: GEOTAR-Media, 2020. - 176 p. - 176 p. - ISBN 978-5-9704-5603-3. - Text: electronic (date accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970456033.html

3.3. Educational and methodological support for practice prepared by the department staff

1. "Helminthiases of the Far East (rare observations)". For biologists, parasitologists, infectious disease specialists, therapists, epidemiologists, students of medical and biological faculties / edited by Chertov A.D., Figurnov V.A., Podolko R.N., Bliznets O.I. - Blagoveshchensk: Publisher: OOO "Poli-M" 2012. - 125 p.
2. "Preventive and anti-epidemic measures for helminthiases." Methodological development / edited by Marunich N.A., Mateishen R.S. - Blagoveshchensk, 2015. - 119 p.
3. "Bacterial Meningitis and Meningoencephalitis." A textbook for students studying in the main professional educational programs of higher education – specialist programs in the following specialties: General Medicine, Pediatrics, edited by P.K. Soldatkin. – Blagoveshchensk: 2016. - 85 pages.
4. "Salmonellosis". Textbook / edited by Gavrilov A.V., Marunich N.A., Figurnov V.A. - Blagoveshchensk, 2016. - 43 p.
5. Typhoid fever. Paratyphoid fever A, B and C. Study guide / edited by Gavrilov A.V., Mateishen R.S., Soldatkin P.K. – Blagoveshchensk, 2016. – 58 p.
6. "Hemorrhagic fever with renal syndrome in the Amur region (Features of epidemiology, clinical presentation, diagnostics, treatment)." Study guide / edited by Figurnov V.A., Gavrilova A.V., Marunich N.A. - Blagoveshchensk, 2016. - 109 p.
7. Visualized situational tasks in the discipline "Infectious diseases". Study guide / edited by Gavrilov A.V., Arsenova T.V. – Blagoveshchensk, 2016. – 97 p.
8. "Characteristics of the clinical course of acute intestinal infections in adults and children." Study guide / edited by P.K. Soldatkin. – Blagoveshchensk, 2016. – 65 p.
9. "Epidemiological characteristics, clinical presentation, treatment, preventive and anti-epidemic measures for anthroponoses with the fecal-oral transmission mechanism." Methodological recommendations / edited by Marunich N.A., Mateishen R.S. - Blagoveshchensk, 2016. - 128 p.
10. "Organization and implementation of anti-epidemic measures in emergency situations among the population." Study guide. / edited by Mateishen R.S., Gavrilov A.V., Marunich N.A. - Blagoveshchensk, 2017. - 71 p.
11. "Hemorrhagic fever with renal syndrome in the Amur region (epidemiological, clinical, diagnostic, and treatment features)." Study guide / edited by Gavrilov A.V., Figurnov V.A., Marunich N.A. - Blagoveshchensk, 2017. - 109 p.
12. "Viral Hepatitis." A textbook edited by A.V. Gavrilov, N.A. Marunich, R.S. Mateishen , A.V. Zotova. - Blagoveshchensk: 2018. - 79 p.
13. "Dysentery." A textbook edited by A.V. Gavrilov, R.S. Mateishen , P.K. Soldatkin. - Blagoveshchensk: 2018. - 26 p.
14. "Tick-borne encephalitis." A textbook edited by A.V. Gavrilov, N.A. Marunich, and R.S. Mateishen . - Blagoveshchensk: 2018. - 36 p.
15. "Malaria". Textbook edited by A.V. Gavrilova, N.A. Marunich, R.S. Mateishena , A.V. Zotova - Blagoveshchensk: 2018. - 34 p.
16. Tables and figures for general and special sections (by groups of infections).
17. Archival case histories of rare infections.
18. A set of diagnostic, therapeutic and prophylactic drugs for various infectious diseases.

Multimedia materials on electronic media (CD, DVD) **scientific library**

1.N.D. Yushchuk, Yu.Ya. Vengerov ―Infectious diseases‖, ―GEOTAR-Media‖, 2011, 691 p.

2. V.I. Pokrovsky ―Infectious diseases and epidemiology‖ 3rd ed., corrected and supplemented, M., 2013, 1088 p.

3. V.I. Luchsheva , S.N. Zharova, V.V. Nikiforova ―Atlas of Infectious Diseases‖, "GEOTAR-Media", 2014, 224 p.
4. N.D. Yushchuk ―Infectious diseases‖ National guidelines, 2010, 1045 p.
5.Standards of medical care (information system). – M.: GEOTAR-Media, 2008.

At the department (CDs)
1. Plague
2. HIV infection
3. Anthrax
4. Cholera
5. Sepsis
6. Dysbacteriosis
7. Leptospirosis
8. Botulism
9. Erysipelas
10. Meningococcal infection
11. Malaria
12. Tetanus
13. Viral hepatitis A, B, C
14. Salmonellosis
15. Chlamydia
16. Rickettsiosis: epidemic typhus. Tick-borne rickettsiosis
17. Diphtheria
18. Adenovirus infection
19. Rabies
20. Helminthiasis
21. Hemorrhagic fevers
22. Typhoid fever and paratyphoid fever
23. Acute dysentery

Videos and photographs used in teaching students (prepared by department staff)
Videos:
1. Gastric lavage technique
2. First aid for acute laryngitis

Photo materials
1. Photo album "Hemorrhagic fever with renal syndrome in the Amur region (Features of epidemiology, clinical presentation, diagnosis, and treatment)"
2. Photo album "Helminthiases of the Amur Region"
3. Visualized situational tasks on the subject "Infectious diseases"
4. Photo album ―Some symptoms, pathomorphological findings and results of histomorphological studies in severe hemorrhagic fever with renal syndrome (HFRS)‖
5. Photo album "Symptoms and pathological findings in severe hemorrhagic fever with renal syndrome"

List of albums, stands, tables, tablets, handouts used in training (prepared by department staff) overhead films .
1. Meningococcal infection.
2. Cholera.
3. Shigillosis .
4. Salmonellosis.
5. Viral hepatitis

6. Rickettsioses
7. Rabies.
8. HIV infection.
9. Herpesvirus infections.
10. Diphtheria.
11. Pseudotuberculosis.
12. Plague.
13. Anthrax.
14. Infectious mononucleosis.
15. Dengue fever.
16. HFRS.
17. Helminthiasis.

Tables:
1. Salmonellosis
2. Shigillosis
3. Typhoid fever
4. Cholera
5. Early and differential diagnosis of acute intestinal infections
6. Plague
7. Tularemia
8. Anthrax
9. Early and differential diagnosis of particularly dangerous infections
10. Diphtheria
11. Sore throats
12. Meningococcal infection
13. Early and differential diagnosis of diseases affecting the oropharynx
14. ARVI
15. Flu
16. Adenovirus infection
17. HIV infection
18. Opportunistic infections
19. Rickettsioses
20. Typhus
21. Early and differential diagnosis of diseases with exanthemas
22. Toxoplasmosis
23. Tetanus
24. Rabies
25. Enteral hepatitis
26. Parenteral hepatitis
27. Early and differential diagnosis of jaundice
28. Herpesvirus infections
29. Hemorrhagic fevers

List of albums, stands, tables, tablets, handouts used in training
1. Tables and figures for the general and special sections (by groups of infections).
2. Archival medical records, extracts from medical records.
3. Photo album of the most common infections
4. Regulatory documents on the discipline.
5. A set of diagnostic, therapeutic and prophylactic drugs for various infectious diseases.
6. Computer presentations for lectures and classes.

Stands:
1. HIV infection
2. Viral hepatitis
3.HFRS
4. DIC syndrome
5. "National calendar of preventive vaccinations"
6. "Disinfection"
7. "Basics of Disinsection" "Repellents"
8. "Biological weapons and means of protection"
9. "HIV infection prevention"
10. "Features of the development of the epidemiological situation for HFRS in the Amur Region"
11. "Natural focal infections in the Amur region"
12. "The epidemiological significance of rodents in the Amur region"
13. "Modern problems of especially dangerous infections in the world"

Handouts: Ultrasound of the abdominal organs,Clinical, serological, biochemical, PCR blood tests, urine tests, tasks, tests, archival medical histories, albums on the topics studied, standards for the provision of specialized care on the topics discussed.

3.4. Equipment used for the educational process

Item No.	List of equipment used in student training	Quantity in pieces
1	Lecture hall	1
2	Auditorium for practical classes	6
3	Computer class	1
4	Computers	5
5	Multimedia complex (laptop, projector, screen).	1
6	Chalkboards	3

3.5. Professional databases, information referencesystems, electronic educational resources

No. p. p	Nameresource	Descriptionresource	Access	Addressresource
Electronic librarysystems				
1.	"Student Consultant" Electronic Library of the Medical University	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	Library, individual access	http:// www. studmedlib.ru/
2.	"Doctor's Consultant" Electronic Medical Library.	Materials,postedVlibrarydeveloped by leadingRussianspecialistsonbasis of modernscientificknowledge(evidence-basedmedicine). InformationpreparedWithtaking into accountpositionsscientific and practicalmedicalsociety(world, EuropeanAndRussian)Byrelevant specialty.Allmaterialspassedmandatoryindependentreviewing	library , individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3.	PubMed	Free search system in the largest medicalbibliographic database MedLine . DocumentsmedicalAndbiological articlesfromspecialized literature,AAlsogiveslinksonfull-textarticles.	library ,freeaccess	https://pubmed.ncbi.nlm.nih.gov/
4.	Oxford MedicineOnline	Oxford Press Collection of Publicationsmedical topics, uniting over 350 publications inshared resource with cross-sharing capabilitysearch. Publications include TheOxfordHandbookofClinicalMedicineAndTheOxfordTextbookofMedicine , electronicversionswhichconstantlyare being updated.	library , freeaccess	http://www.oxfordmedicine.com

5.	Knowledge base onbiology human	Reference information on physiology , cellularbiology,genetics,biochemistry,immunology,pathologies. (ResourceInstitutemoleculargeneticsRAS .)	library ,freeaccess	http://humbio.ru/
6.	MedicalHe - linelibrary	Freereference books,encyclopedias,books,monographs, abstracts ,English-languageliterature , tests .	library , freeaccess	http://med-lib.ru/
Informationalsystems				
7.	Russianmedic alassociation	A professional internet resource. Goal: assistanceimplementation of effective professionalactivities of medical personnel. Contains the charter,personalities,structure,rulesintroductions,intelligenc eO Russianmedicalunion	library ,freeaccess	http://www.rmass.ru/
8.	Web - medicine	The site presents a directory of professional medicalresources, including links to the most authoritativethematic sites, magazines, societies, as well as usefuldocuments and programs. The site is intended for doctors,students,employeesmedicaluniversitiesAnd scientificinstitutions.	library , freeaccess	http://webmed.irkutsk.ru/
Basesdata				
9.	Worldwideorg anizationhealt hcare	The site contains news and statistical data on countriesmembers of the World Health Organization,WHO newsletters, reports, publications andmuchother.	library , freeaccess	http :// www . who . int / ru /
10.	Ministriesscience andhighereducatio n RussianFeder ations	Website of the Ministry of Science and Higher EducationThe Russian Federation contains news,newsletters, reports,publications andmuchother	library ,freeaccess	https :// www . minobrnauki . gov . ru /

11.	Ministryenlightenmentrussian Federations	Website of the Ministry of Education of the Russian Federationcontainsnews, newsletters, reports,publications andmuchother	library ,freeaccess	https://edu.gov.ru/
12.	Federalportal « Russianeducation "	Single window access toeducationalresources. This portal provides access to textbooks onto everyoneindustriesmedicineand healthcare	library ,freeaccess	http:// www. edu.ru/ http://window.edu.ru/catalog/?prubr = 2.2.81.1
		Bibliographicbasesdata		
13.	BD" Russianmedicine »	Created in the Central Scientific and Methodological Library, it covers the entire collection, starting in 1988.years. The database contains bibliographic descriptions of articles fromdomesticmagazinesand collections, dissertationsand their abstracts,AAlsodomesticAndforeignbooks,collections of works of institutes, conference materials andetc.Thematically, the database covers all areas medicine and related fields of biology, biophysics,biochemistry,psychologyAndetc.	library , freeaccess	http :// www . scsml . rssi . ru /
14.	eLIBRARY.RU	RussianinformationalportalVareassciences,technology, medicine and education, containing abstractsand full texts of more than 13 million scientific articles and publications.Electronic versions are available on the eLIBRARY.RU platform .more2000Russianscientific and technicalmagazines,Vvolume numbermore1000magazinesVopenaccess	library ,free access	http :// elibrary . ru / defaultx . asp

15.	PortalElectron iclibrary dissertations	Currently, the Electronic Library of Dissertations of the Russian State Librarycontains more than 919,000 full text dissertations andabstracts	library ,freeaccess	http://diss.rsl.ru/?menu=disscata log/
16.	Medline.ru	Medical and biological portal for specialists.Biomedicalmagazine.Latestupdate7February 2021	library ,freeaccess	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process

II.	**Commercial software products**	
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system: MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution Terms: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunications network "Internet"

Websites of the Russian Ministry of Health:
Primary health care standards
https :// www . rosminzdrav . en / ministry /61/22/ page -979/ page -983/1- standards - primary - medical - sanitary - aid
Skilled Nursing Standards

https://www.rosminzdrav.ru/ministry/61/22/page-979/page-983/2-standardty-specialized-medical-aid
procedures for providing medical care to the population of the Russian Federation
https://www.rosminzdrav.ru/ministry/61/4/stranitsa-857/poryadki-okazaniya-meditsinskoy-pomoschi-naseleniyu-rossiyskoy-federatsii
Catalog of medical websites on infectious diseases
http://medagent.ru/list/view.php?id=7&page=1
Library – books and textbooks on medicine http://www.booksmed.com
Literature on infectious diseases http://www.webmedinfo.ru
Publishing group "GEOTAR-Media", medical literature www . geotar.ru
Medical scientific and practical portal www.lvrach.ru
Federal Electronic Medical Library - Clinical Guidelines http : // www . femb.ru

4. Assessment Fund

4.1. Examples of test tasks for intermediate knowledge assessment

Conducted on a single information and educational portal in the Moodle system . The total number of tests is 200 (http://194.186.41.210/course/index.php?categoryid=29).

1. SKILLY MONOM
1) typhoid fever
2) dysentery
3) chickenpox
4) measles

2. LIMITED HYPEREMIA OF THE HANDS AND FEET IS CHARACTERISTIC FOR
1) pseudo-tuberculosis
2) measles
3) infectious mononucleosis
4) faces

3. SIGMOIDITIS SYNDROME IS MOST COMMONLY OCCURRING IN
1) shigellosis
2) amebiasis
3) salmonellosis
4) cholera

Standards of correct answers:

the correct answer is 1

4.2. List of practical skills that a student should possess after completing the internship

1. Conduct a physical examination of a patient with an infectious disease. Give assessment of the results obtained.
2. Draw up a program for additional examination of a specific patient

3. Create a treatment program for a specific patient
5. Provide emergency care for anaphylactic shock
6. Assess the degree of respiratory failure in a patient with
infectious diseases of the respiratory tract.
8. Collect biological material (swab from the throat and nose, blood, feces, etc.) for conducting specific laboratory tests
1. To substantiate the scheme of modern etiotropic, pathogenetic and symptomatic therapy in a patient with an infectious disease
10. Prescribe antiviral therapy to a patient with chronic hepatitis C.
11. Provide an interpretation of blood tests in patients with infectious diseases.
12. First aid for anaphylactic shock.
13. Methodology of bacteriological research for acute intestinal infections.
14. Lumbar puncture, interpretation of results.
15. Methodology of bacteriological examination of blood.
16. Methodology of serological blood testing.
17. Methodology for studying material for diphtheria.
18. Emergency prophylaxis of tetanus.
19. Methodology for malaria testing
20. Methodology for studying a ―thick blood drop‖

4.3. List of questions for the test

1. Collection of epidemiological history from an infectious patient.
2. Clinical examination of an infectious patient.
3. Drawing up an algorithm for laboratory and instrumental examination
infectious patient.
4. Technique for collecting various biological materials for bacteriological
research.
5. Technique for collecting blood and other biological media for sterility testing.
6. Technique for conducting skin allergy tests and taking smears.
7. Technique of lumbar puncture, interpretation of cerebrospinal fluid data.
8. Indications, preparation, technique and evaluation criteria during the procedure
rectoscopy.
9. Preparation of smear and thick blood film for malaria testing. Calculation
level of parasitemia .
10. Evaluation of the results of laboratory research methods (serological methods.
ELISA, immune blotting, PCR).
11. Assessment of hematological changes characteristic of various infectious diseases.
12. Assessment of acid-base balance indicators.
13. Interpretation of indicators characterizing the blood coagulation system in
development of DIC syndrome in infectology.
14. Methods and techniques for rapid diagnostics of various infectious diseases
diseases.
15. Features of collecting biological material for new coronavirus infection
16. Features of the treatment of erysipelas in outpatient practice
17. Assessment of immune status indicators in HIV infection.
18. Conducting etiotropic and pathogenetic treatment of an infectious patient:

determination of indications, doses, volumes, and course duration.

19. Method of administration of therapeutic serums and immunoglobulins.
20. Conducting and evaluating the results of the Bezredko test .
21. Technique of gastric lavage.
22. Conducting emergency chemoprophylaxis in contacts with various infectious diseases.
23. Actions of a doctor when a patient who has received animal bites seeks medical attention.
24. Putting on and taking off the anti-plague suit.
25. Actions of a physician upon identifying a patient with a suspected disease

The International Health Regulations apply (plague, cholera, yellow fever, new coronavirus infection Covid -19).

26.3 filling out the necessary documentation in the outpatient clinic and drawing up a plan for examining an infectious patient

27. Modern methods of drug therapyAndnon-drugtherapyinfectiousdiseasesVoutpatientconditionsVin accordanceWithcurrentclinicalrecommendations(protocolstreatment),orderspunishmentsmedical helpAndtaking into accountstandardsmedicalhelp
28. SpecificAndnonspecificpreventioninfectiousdiseasesVoutpatientconditions
29. Rulesconductingsanitary and anti-epidemic(preventive)eventsVcaseoccurrence of the outbreakinfections

MODULE 3 "CURRENT ISSUES IN CARDIOLOGY"

1.2. Goals and objectives of the practice.

The purpose of the internship is to familiarize students with the work of medical organizations and the specifics of the work of medical personnel in cardiology departments, the basic principles of medical ethics and deontology, to consolidate practical skills in treatment, diagnosis of patients and provision of emergency care, to acquire skills in health education and educational research work,
formation of knowledge and modern possibilities for diagnosis and treatment of cardiovascular diseases.

Practice objectives :

1. To promote the development of professional skills in examining a patient with acute cardiovascular pathology, substantiating his clinical diagnosis and providing emergency medical care taking into account the identified clinical syndromes
2. To consolidate knowledge of the physiological features of the cardiovascular system in acute cardiovascular conditions
3. Learn to create a patient examination plan in an emergency situation that will allow you to quickly and effectively clarify the diagnosis and choose the correct treatment strategy.
4. Learn to quickly draw up an algorithm for treating a patient in an emergency and implement all necessary measures with the help of nursing staff.
5. To consolidate knowledge of changes in ECG and laboratory parameters in acute cardiovascular events
6. Correctly interpret the results of the main methods of functional and laboratory examination of cardiac patients
7. Formulate an adequate diagnosis and create a correct algorithm for emergency care based on a physical examination and additional diagnostic methods
8. Correctly assess the dynamics of the patient's condition against the background of the treatment and adjust the tactics of further measures

1.3. The place of practice in the structure of the main professionaleducational programhigher education

In accordance with the Federal State Educational Standard of Higher Education (2020), the "Current Issues in Cardiology" module of the "General Medical Practice" industrial practice course is part of the core component, Block 2. The total workload is 36 hours and is completed in the 11th semester of the sixth-year student. Assessment is by credit and grade in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, calendar schedule for completing the internship .

1.6. Requirements for students.

To master the practiceknowledge, skills and abilities are required, formed by previous disciplines:
Latin
Knowledge: basic medical and pharmaceutical terminology in Latin.
Skills: be able to apply knowledge for communication and obtaining information from medical literature and medical documentation.
Skills: applies medical and pharmaceutical terminology in Latin in professional activities
Biochemistry. Bioinorganic and biophysical chemistry in medicine
Knowledge: blood composition, biochemical constants of blood, hormones, buffer systems, hemoglobin oxygenation factors, erythrocyte metabolism .
Skills: analyze the contribution of biochemical processes to the functioning of organs and the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems; interpret the results of the most common laboratory diagnostic methods to identify disorders in diseases of internal organs and occupational diseases.
Skills: possess theoretical understanding of organic chemistry, knowledge of the composition, structure, and properties of organic substances—representatives of the main classes of organic compounds; possess the ability to apply these concepts in professional activities.
Biology
Knowledge: the laws of genetics and its importance for medicine; patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases; the biosphere and ecology, the phenomenon of parasitism and bioecological diseases.
Skills: analyze patterns of heredity and variability in the development of diseases of internal organs and occupational diseases.
Skills: possess skills in a range of activities aimed at maintaining and improving public health, including the development of a healthy lifestyle, the prevention of the occurrence and/or spread of diseases, their early diagnosis, the identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on health; readiness to collect and analyze complaints of patients with hereditary diseases, their medical history, the results of examination, laboratory, instrumental,

pathological and other studies in order to identify the cause, condition or establish the presence or absence of a disease; readiness for educational activities to eliminate risk factors and develop healthy lifestyle skills.
Anatomy
Knowledge: anatomical and physiological features of the respiratory, cardiovascular, digestive, and hematopoietic systems.
Skills: analyze age-gender characteristics of the structure of organs and systems.
Skills: knowledge of basic anatomical terms, medical anatomical conceptual apparatus; knowledge of the anatomy and topography of organs, systems and organ apparatuses, details of their structure and basic functions; the ability to clearly navigate the complex structure of the human body, accurately and precisely locate and determine the location and projections of organs and their parts on the body surface, possess the ability and readiness to analyze the patterns of functioning of individual organs and systems, use knowledge of anatomical and physiological principles, basic methods of clinical and immunological examination and assessment of the functional state of the body of an adult and adolescent for the timely diagnosis of diseases and pathological processes.
Normal physiology
Knowledge: the physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in the norm .
Skills : analyze the significance of regulation of biological processes in the human body on the functioning of the cardiovascular, digestive, urinary, respiratory, and hematopoietic systems.
Skills: methods; skills for interpreting the obtained results and formulating conclusions; methods for assessing the main morpho-functional indicators of an adult, methods that allow for the identification of existing violations of growth and development processes.
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in body tissues in pathologies of the cardiovascular, respiratory, digestive , urinary and blood systems .
Skills: determine the contribution of pathophysiological processes to the development of diseases of internal organs.
Skills: skills in analyzing the functioning of individual organs and systems in health and disease; basic methods for assessing the functional state of the human body; skills in analyzing and interpreting the results of modern diagnostic technologies; skills in the pathophysiological analysis of clinical syndromes.
Immunology
Knowledge: types of immunity, regulation of the immune response, causes of immunopathological conditions, clinical manifestations of immunopathology, basic methods for assessing immune status and principles of its assessment, indications for the use of immunotropic therapy.
Skills: identify syndromes and symptoms of diseases associated with immune system disorders, prescribe a clinical and immunological examination, formulate an immunological diagnosis, prescribe immunocorrective therapy and preventive measures to prevent diseases of the immune system.
Skills: algorithm for establishing a preliminary immunological diagnosis with subsequent referral to an allergist-immunologist; collecting an immunological and allergological anamnesis, analyzing and interpreting the results of laboratory indicators for assessing the immune system using tests;
Pharmacology
Knowledge : pharmacokinetics, pharmacodynamics , side effects of various drugs on the body
Skills: write prescriptions for prescribed medications, know the indications and contraindications for their use.

Skills: algorithms for selecting medications based on their pharmacokinetics, for patients with various nosological entities; cardiovascular diseases, algorithms for selecting medications based on their primary and secondary effects, and the effects of their combined use in a given pathological process; skills in providing advisory assistance to the population on issues of taking medications, taking into account the morphofunctional characteristics and physiological state of the human body, dosage, and storage conditions.
Propaedeutics of internal diseases
Knowledge: collection of complaints, anamnesis **,** objective methods of examination of patients (palpation, percussion, auscultation).
Skills: conduct anamnestic and physical examination, identify the main syndromes and symptoms of diseases of internal organs.
Skills: possess the skills of questioning and physical examination in diseases of the respiratory, cardiovascular, digestive, urinary, hematopoietic, endocrine systems and in diseases of the joints and connective tissue; technique of general medical methods of examination of patients with diseases of the respiratory system, cardiovascular system, gastrointestinal tract, hepatobiliary system, excretory system, endocrine system, hematological system, in diseases of the connective system and allergic diseases; skill in diagnosing pneumonia, bronchial asthma, myocardial infarction, hepatitis, etc. based on the ability to interpret the results of chest X-ray, ECG, gastroscopy, blood, stool, urine tests and other studies studied during the course of the discipline of propaedeutics of internal diseases.
Public health and healthcare, health economics
Knowledge: fundamentals of the Russian Federation legislation on public health protection, key regulatory and technical documents; population health indicators, factors shaping human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional , professional, genetic).
Skills: plan, analyze, and evaluate the quality of medical care, the health status of the population, and the impact of environmental and occupational factors; calculate medical statistics.
Skills: social-hygienic and clinical-statistical research methods to study the health status of the population, the volume and quality of medical care from the standpoint of evidence-based medicine; methods of statistical analysis of indicators and assessment of population health; methods of planning the activities of medical organizations;
Pathological anatomy, clinical pathological anatomy
Knowledge: etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes.
Skills: visually assess and record changes in the organs and tissues of a corpse, substantiate the nature of the pathological process and its clinical manifestations; provide an opinion on the cause of death and formulate a pathological diagnosis;
Skills: the ability to compare morphological and clinical manifestations of diseases, methods of clinical and anatomical analysis of autopsy, study of biopsy and surgical material.
Emergency conditions in therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in therapy.
Skills: diagnose an urgent condition under the main therapeutic conditions, formulate and justify a clinical diagnosis, conduct a differential diagnosis and provide emergency care.
Skills: master survey methods (questioning, collecting objective and subjective information) information) for the purpose of diagnosis and differential diagnosis of the main clinical syndromes of emergency conditions in therapy (cardiology); an algorithm for implementing the main medical diagnostic and therapeutic measures in emergency conditions in therapy; assessing the severity of the patient's condition: determining the scope of first and emergency medical care and providing it; identifying indications for urgent or planned

hospitalization; drawing up a treatment plan; identifying possible complications of drug therapy; adjusting the treatment plan in the absence of an effect or the development of complications.
Faculty therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems and occupational diseases .
Skills: formulate and justify a clinical diagnosis, prescribe an examination and treatment plan for the main therapeutic diseases, diagnose an urgent condition and provide emergency care.
Skills: algorithm for physical examination of a medical patient, methods for assessing the identified changes in organs and systems, algorithm for paraclinical examination of a patient with major cardiac diseases, assessment of the results of additional (laboratory and instrumental) examination methods when working with a patient, algorithm for treatment (medicinal and non-medicinal) of the most common medical diseases that do not require emergency care, methods for emergency diagnosis of urgent conditions, methods for conducting cardiopulmonary resuscitation on a simulator, algorithm for providing emergency care for urgent conditions in an internal medicine clinic.

1.7 Interdisciplinary links with subsequent disciplines/practices

tem No.	**Name of subsequent disciplines**	Module "Current Issues in Cardiology"
1.	Outpatient therapy	+
2.	Clinical pharmacology	+
3.	Anesthesiology, resuscitation, intensive care	+
.4	Differential diagnostics in cardiology	+

1.8. Requirements for the results of the internship

Mastering the moduleCurrent Issues in Cardiologyis aimed at developing the following competencies: **universal (UC) UC – 1, 3; general professional (GPC) GPC – 1, 4, 7, 11; and professional competencies (PC): PC – 1, 2, 3, 4, 5, 6, 10, 12, 14.**

No. p/p	Code and name of competence	Code and name of the competency achievement indicator	As a result of studying the academic discipline "Clinical Pulmonology", the student must:		
			Know	**Be able to**	**To own**
Universal competencies					
1	**UC -1.** Capable of critically analyzing problematic situations based on a systems approach and developing an action strategy.	**AI UC-1.3.** Applies systems analysis to resolve problematic situations in the professional field. **AI UC-1.5.** Critically evaluates the reliability of information sources and works with conflicting information from different sources.	The main historical stages in the development of clinical cardiology, the subject and objectives of the discipline, the relationship with other medical, biological and medical disciplines; the main terms and concepts used in clinical cardiology; principles of using logical and methodological tools for critically evaluating modern concepts of a philosophical and social nature in clinical cardiology	To characterize the stages of development of clinical cardiology as a science and its role in the present stage; to evaluate the levels of organization of the human cardiovascular system; to develop and argue a strategy for solving problematic situations based on a systemic and interdisciplinary approach in clinical cardiology,	The ability to analyze the significance of clinical cardiology at the present stage; systemic analysis of the obtained data to resolve problematic situations in the professional sphere; methods for developing and justifying strategies for solving problematic situations based on a systemic and interdisciplinary approach in clinical cardiology; a critical approach to the evaluation and reliability of information sources, and methods of working with different information obtained from different sources

2	**UC -3.** Able to organize and manage the work of a team, developing a team strategy to achieve the set goal	**AI UC-3.1.** Works in a team, and is tolerant of social, ethnic, religious, and cultural differences.	Basic principles of tolerant perception of social, ethnic, religious and cultural differences when working in a team; skills for effective and conflict-free communication in a team	Tolerantly perceive social, ethnic, religious and cultural differences when working in a team ; communicate effectively and without conflict within a team, including developing a team strategy to achieve a set goal	The ability to develop a team strategy to achieve goals, including professional ones; methods of effective and conflict-free communication within a team; tolerance of social, ethnic, religious and cultural differences
General professional competencies					
3	**GPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	**AI GPC-1.1.** Conducts professional activities in accordance with ethical standards and moral principles. **AI GPC-1.2.** Organizes professional activities, guided by healthcare legislation, knowledge of medical ethics, and deontology. **AI GPC-1.3.** Skills in expressing an independent point of view, analytical and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and roundtables, and understanding the principles of medical deontology and medical ethics.	Ethical and deontological aspects of the relationship "doctor-doctor", "doctor-patient"; principles of effective and conflict-free communication with patients; methods of effective communication between doctor and patient in difficult situations; Basic requirements for a physician's personality; general principles for conducting discussions and round tables	Conductphysical examination of the patient taking into account ethical and deontological what principles; communicate effectively and without conflict with patients, relatives, and colleagues; build effective relationships with patients; maintain confidentiality; and conduct discussions in accordance with the principles of moral and ethical reasoning.	Have communication skills with the patient and relatives colleagues, junior staff; identify problems in a patient's access to a doctor; methods of verbal and non-verbal communication with the patient; principles of confidentiality in professional activities and communication with colleagues; continuous improvement of communication skills in the professional activities of a physician
4	**GPC-4.** Capable of	**AI GPC-4.1.** Utilizes modern medical technologies, specialized	Indications and contraindications for the	Apply modern medical technologies, specialized	The ability to use modern medical technologies,

	using medical devices as prescribed by the medical care procedures, as well as conducting patient examinations to establish a diagnosis.	equipment and medical devices, disinfectants, and medications, including immunobiological and other substances and their combinations, to solve professional problems using evidence-based medicine. **AI GPC-4.2.** Understands the indications and contraindications for instrumental, functional, and laboratory examination methods, potential complications during examinations, emergency care, and their prevention. **AI GPC-4.3.** Interprets the results of the most common instrumental, laboratory, and functional diagnostic methods, including thermometry, to identify pathological processes. **AI GPC-4.5.** Formulates a preliminary diagnosis and a clinical diagnosis according to the ICD.	use of modern medical technologies , medical devices, drugs, instrumental, functional and laboratory examination methods in cardiology; interpretation of the results of the most common methods of instrumental, laboratory and functional diagnostics; methods of general clinical examination of the patient; principles of formulating a preliminary diagnosis and clinical diagnosis in cardiology according to the ICD	equipment, medical devices, and medications in accordance with the procedure for providing medical care, from the standpoint of evidence-based medicine in the field of cardiology; prescribe instrumental, functional, and laboratory examination methods; interpret the results of instrumental, laboratory, and functional diagnostic methods; conduct a clinical examination of the patient; formulate preliminary diagnosis and clinical diagnosis in cardiology according to ICD	specialized equipment, medical devices, drugs and their combinations, from the standpoint of evidence-based medicine in cardiology ; to compare the results of additional examination methods (instrumental, laboratory and functional diagnostics) to identify pathological processes; methods of general clinical examination of patients of different ages; formulation of the preliminary diagnosis and clinical diagnosis according to ICD
5	**GPC-7.** Capable of prescribing treatment and monitoring its effectiveness and safety.	**AI GPC-7.1.** Selects a drug based on its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological entities in outpatient and inpatient settings. **AI GPC-7.7.** Evaluates the efficacy and safety of drug therapy using a combination of clinical, laboratory, instrumental, and other diagnostic	Principles of drug selection based on the combination of its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various circulatory diseases; advantages of the selected drug and the	To select the optimal drug (taking into account its pharmacokinetic and pharmacodynamic characteristics) and the preferred method of its administration; to identify the main and side effects of drugs used in pulmonology, taking into account the	The ability to prescribe the optimal drug, select the preferred method of its use, taking into account the morphofunctional characteristics, physiological conditions and pathological processes in diseases of the circulatory system, and the possible

		methods.	preferred method of its administration; primary and secondary effects of drugs; morphofunctional characteristics, physiological states and pathological processes in the body of a cardiac patient when selecting a drug;	morphofunctional characteristics, physiological states and pathological processes of the human body; select over-the-counter medications and other pharmacy products taking into account the physiological conditions and pathological processes in patients with diseases of the circulatory system;	interaction of drugs with the combined use of various drugs; the ability to promptly identify side effects of drugs used in clinical cardiology
6	**GPC-11.** Able to prepare and apply scientific, research and production, design, organizational and managerial, and regulatory documentation in the healthcare system.	**AI GPC 11.1.** Applies modern methods for collecting and processing information, conducts statistical analysis of obtained data in the professional field, and interprets the results to solve professional problems. **AI GPC-11.5.** Analyzes and compiles medical records and calculates qualitative and quantitative indicators used in professional activities.	Basic methodological approaches to working with educational, scientific, reference, medical literature, including the Internet (methods of collecting and processing information) ; algorithms and software tools for decision support during the treatment and diagnostic process in clinical cardiology methods of collecting, storing, searching, and distributing information in medical information	Independently work with educational, scientific, reference, medical literature, including on the Internet (search and select information) in the field of clinical cardiology; carry out statistical processing, analysis of the obtained data and interpret the results to solve professional problems in the field of diagnosis and treatment of diseases of the circulatory system;	methods of maintaining medical records; the main scientific methods of cognition: observation, description, measurement, experiment in the field of clinical cardiology; analysis and preparation of accounting and reporting medical documentation and methods for calculating qualitative and quantitative indicators used in clinical cardiology.

			systems; methods of maintaining medical records;		
Professional competencies					
7	**PC-1.** Able to provide medical care in urgent and emergency situations	**AI PC -1.3.** Identifies conditions requiring emergency medical care. **AI PC - 1.4.** Provides emergency medical care to patients with life-threatening conditions.	Clinical signs of conditions requiring emergency medical care in cardiology; methods for providing emergency medical care in cardiology	To identify clinical signs of conditions requiring emergency medical care in cardiology; to provide emergency medical care in cardiology	Ability to diagnose and provide emergency medical care in cardiology
8	**PC-2.** Capable of collecting and analyzing complaints, life history and medical history of the patient in order to establish a diagnosis	**AI PC -2 .2.**Collects complaints, specifies them, highlighting the main and secondary ones. **AI PC -2.5 .** Collects and evaluates information about the medical history, including data on past illnesses, injuries and surgical interventions, hereditary, professional, and epidemiological history.	Methodology for collecting complaints (primary, secondary) from a patient with a cardiac disease; method for collecting the disease history (time of seeking medical care, dynamics of symptom development, amount of therapy administered and its effectiveness), life history	Establish contact with the patient; collect complaints and anamnesis of the patient with circulatory pathology, evaluate information about the medical history, paying particular attention to concomitant diseases, hereditary, professional, and epidemiological history.	The ability to establish contact and compliant relationships with a patient with a circulatory disease; collecting complaints (primary and secondary), disease history (onset, dynamics of symptom development, seeking medical help, characteristics and scope of therapy and its effectiveness).
9	**PC-3.** Able to conduct a physical examination of a patient and analyze the results of additional	**AI PC-3.1.** Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets the results. **AI PC -3.4.** Interprets and analyzes the results of patient disease information collection, data	The methodology of a complete physical examination of a patient with a circulatory disease and the interpretation of its results; the necessity, scope, sequence of diagnostic measures and	Conduct a complete physical examination of a patient with a circulatory disease and interpret the results; analyze and compare the clinical and diagnostic results obtained from the examination of a	Ability to conduct a complete physical examination of a patient with a circulatory disease and interpretation of its results; refer the patient for diagnostic procedures

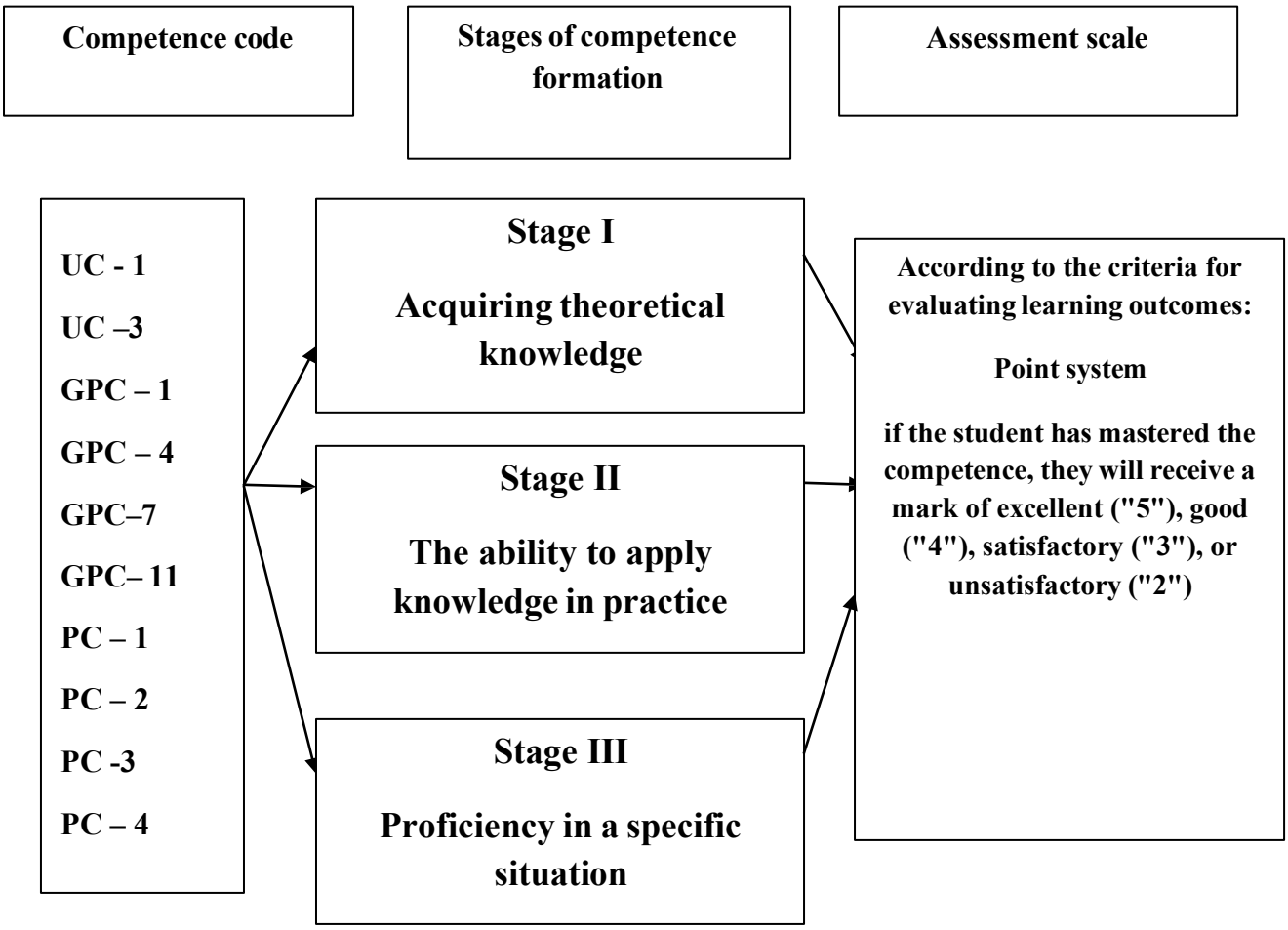
	examination methods in order to establish a diagnosis	obtained during laboratory and instrumental examinations, and during patient consultations with specialist physicians; if necessary, justifies and plans the scope of additional research. **AI PC-3.6.** Conducts differential diagnostics of internal organ diseases from other illnesses.	indications for consultation with specialist doctors; the methodology for analyzing and comparing the obtained clinical and diagnostic results of examination of a patient with a circulatory disease; indications for the appointment of additional examination methods (if necessary); principles of early diagnosis , the main symptoms and syndromes of cardiac diseases; formulation of a diagnosis taking into account the current international statistical classification of diseases and related health problems (ICD);	patient with a circulatory disease; determine the indications for the use of additional examination methods;	(laboratory, instrumental), for consultation with specialist doctors; analysis and comparison of the obtained data clinical diagnostic results of examination of a patient with diseases of the circulatory system, the ability to analyze the main clinical manifestations diseases of the circulatory system, establishing a clinical diagnosis in accordance with the current International Statistical Classification of Diseases and Related Health Problems (ICD) and justifying it;
10	**PC-4.** Capable of determining indications for hospitalization, indications for emergency, including	**AI PC-4.1.** Defines medical indications for emergency medical care, including specialized emergency medical care. **AI PC-4.2.** Referring a patient for specialized medical care in an inpatient setting or in a day hospital setting if there are medical	Medical indications for emergency, including specialized emergency, medical care in cardiology; medical indications for referring a patient for specialized medical care in an inpatient setting or in a	Determine medical indications for providing emergency, including specialized emergency, medical care to a patient with a cardiac condition; determine medical indications for referring a	Ability to determine medical indications for emergency, including specialized emergency, medical care in cardiology; ability to determine medical indications for referring a patient for specialized

	specialized emergency, medical care	indications in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care.	day hospital setting, principles for the use of medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) for the provision of medical care, taking into account the standards of medical care in cardiology.	patient for specialized medical care in a hospital or day hospital setting, principles for the use of medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) in cardiology	medical care in a hospital or day hospital setting; principles of using medical devices in accordance with current procedures for providing medical care, clinical guidelines (treatment protocols) on providing medical care to patients with cardiac pathology
11	**PC-5.** Able to prescribe treatment to patients	**AI PC-5.1.** Develops a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, comorbidities, in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC-5.3.** Prescribes non-drug treatment based on the diagnosis, age, and clinical presentation of the disease in accordance with current medical care procedures, clinical guidelines, and standards of medical care. **AI PC-5.4.** Provides palliative care	Modern methods of application, mechanism of action, indications and contraindications for the prescription of drugs and medical devices for diseases of the circulatory system (taking into account the diagnosis, age and clinical picture of the disease) in accordance with current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care in cardiology;	To draw up a treatment plan for a patient with cardiac pathology taking into account the diagnosis, age, clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care in cardiology; prescribe medications, medical devices, and non-drug treatment for diseases of the circulatory system in accordance with current	The ability to develop an individual treatment plan for a patient with cardiac pathology, taking into account the diagnosis, age, clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care in cardiology, prescribe non-drug treatment for diseases of the circulatory system

		in collaboration with specialist physicians and other healthcare professionals.		procedures for the provision of medical care and clinical guidelines	
12	**PC-6.** Capable of monitoring the effectiveness and safety of the therapy being administered	**AI PC-6.1.** Evaluates the efficacy and safety of drugs, medical devices, nutritional supplements, and other treatment methods. **AI PC-6.2.** Takes into account the pharmacodynamics and pharmacokinetics of key drug groups, prevents the development of adverse drug reactions, and corrects them if they occur.	Information on the efficacy and safety of drugs, medical devices, nutritional therapy, and other treatment methods in cardiology; pharmacodynamics and pharmacokinetics of the main groups of drugs used in cardiology	To evaluate the effectiveness and safety of the use of drugs, medical devices, therapeutic nutrition and other methods of treating patients with cardiac pathology; take into account the pharmacodynamics and pharmacokinetics of drugs used in cardiology when prescribing	The ability to evaluate the efficacy and safety of medications, medical devices, therapeutic nutrition, and other treatment methods for circulatory diseases; the ability to consider the pharmacodynamics and pharmacokinetics of medications when prescribing.
13	**PC-10.** Capable of conducting and monitoring the effectiveness of preventive measures and promoting a healthy lifestyle.	**AI PC -10.1.** Prescribes preventive measures to patients taking into account risk factors for the prevention and early detection of diseases, including socially significant diseases.	Forms and methods of educational work, preventive measures for patients taking into account risk factors for the prevention and early detection of circulatory diseases	To identify modifiable risk factors for the development of cardiovascular diseases; to prescribe preventive measures to patients in a timely manner, taking into account risk factors for the prevention and early detection of diseases of the circulatory system	The ability to conduct educational work and preventive measures for patients, taking into account the identified risk factors for the development of circulatory diseases for the prevention and early detection of pathology of circulatory diseases
14	**PC** -12. Ready to maintain medical records,	**AI PC -12.** 1. **Completes** medical documentation, including in electronic form **AI PC -12.2 .** Works with personal	Rules for the preparation of medical documentation (including electronic documentation) in	Fill out medical documentation (including electronically) in cardiology-focused	Ability to complete medical documentation (including electronically) in cardiology-focused medical

	including in electronic form	data of patients and information constituting a medical secret . **AI PC-12.3.** Prepares documents for referring patients for hospitalization, consultation, spa treatment, and medical and social assessment.	cardiology-focused medical organizations; principles for working with patients' personal data and information constituting a medical secret	medical organizations; handle patients' personal data and information constituting a medical secret; prepare documents when referring patients for hospitalization, consultation, spa treatment, and medical and social assessment	organizations; ability to work with patients' personal data and information constituting a medical secret; preparation of documents when referring patients with circulatory diseases for hospitalization, consultation, spa treatment, and medical and social assessment
15	**PC-14.** Capable of participating in scientific research activities.	**AI PC -14.2.** Analyzes medical information based on evidence-based medicine. **AI PC-14.3.** Introduces new methods and techniques into practical healthcare aimed at protecting the health of the adult population.	Methodology of conducting scientific research; main directions of scientific research in clinical cardiology; principles and methods of conducting scientific research, medical statistics	To take part in scientific research, analyze medical information based on evidence-based medicine, and introduce new methods into practical work aimed at protection of health of the adult population.	The ability to participate in scientific research; the ability to analyze medical information based on evidence-based medicine and implement new methods in practical work aimed at protection of adult population health

1.9. Stages of developing competencies and descriptions of assessment scales



2. Structure and content of practice

2.1 Scope of practice

Scope of practice	
Total labor intensity in hours, total	432
Time required for the "Current Issues in Cardiology" Module	36
Total workload in credit units, total	12
Type of intermediate assessment	credit with grade

2.2. Type of practice – industrial.

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge .

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

"3" – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

"5" - when testing, up to 10% of incorrect answers are allowed.

"4" - allows up to 20% of incorrect answers during testing.

"3" - allows up to 30% of incorrect answers during testing.

"2" - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

"5" – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

"4" – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

"3" – the student has only some practical skills and abilities.

"2" - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.

"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.
"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.
"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.
"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Material, technical and educational support for the internship

3.1. Primary Literature

3.2. Additional literature

	MAIN REFERENCES:	
1.	1.Martynov, A. I. Internal Diseases : Vol. I.: textbook / ed. Martynova A. I. , Kobalava J. D. , Moiseeva S. V. - Moscow: GEOTAR-Media, 2021. - 784 p. - ISBN 978-5-9704-5886-0. - Text: electronic. - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970458860.html
2.	2.Martynov, A. I. Internal Diseases: Vol. II.: textbook / ed. Martynova A. I. ,KobalavaJ . D. , Moiseeva S. V. - Moscow: GEOTAR-Media, 2021. - 704 p. - ISBN 978-5-9704-5887-7. - Text: electronic (date of receipt: 04.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970458877.html
	ADDITIONAL REFERENCES:	
1.	1. Ruksin, V. V. Emergency outpatient cardiology: a brief guide / Ruksin V. V. - Moscow: GEOTAR-Media, 2018. - 256 p. - ISBN 978-5-9704-4791-8. - Text: electronic (date accessed: 05/21/2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970447918.html
2.	2. Belyalov, F. I. Heart arrhythmias / F. I. Belyalov. - 8th ed., revised and enlarged . - Moscow: GEOTAR-Media, 2020. - 448 p. - ISBN 978-5-9704-5641-5. - Text: electronic (date accessed: 05/20/2021). - Access mode: by subscription	http://www.studmedlib.ru/book/ISBN9785970456415.html
3.	3. Reznik, E. V. Clinical norms. Cardiology / E. V. Reznik, I. G. Nikitin. - Moscow: GEOTAR-Media, 2020 .-- 448 p. - ISBN 978-5-9704-5851-8. - Text: electronic (date accessed: 05/20/2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970458518.html

4.	2. Arutyunov, G. P. Diagnostics and treatment of diseases of the heart and blood vessels / G. P. Arutyunov - Moscow: GEOTAR-Media, 2015. - 504 p. - ISBN 978-5-9704-3146-7. - Text: electronic (date accessed: 05/21/2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970431467.html

3.3. Educational and methodological support for practice prepared by the department staff

1. Sivyakova O.N., Konyuk E.F., Muzychenko L.V. Neurocirculatory dystonia. – Textbook. - Blagoveshchensk, 2009. - 20 p.
2. Sivyakova O.N. Diagnostics and treatment of angina pectoris. – Study guide. - Blagoveshchensk, 2010. - 47 p.
3. Landyshev Yu.S., Pogrebnaya M.V., Vakhnenko Yu.V., Dorovskikh I.E., Urazova G.E. Diagnostics and principles of treatment of congenital heart defects / Study guide, recommended by the Educational and Methodological Association for Medical and Pharmaceutical Education of Universities of Russia. Moscow-Blagoveshchensk, 2013. - 128 p.
4. Landyshev Yu.S., Pogrebnaya M.V., Vakhnenko Yu.V., Dorovskikh I.E., Urazova G.E. Acquired heart defects. Diagnostics and treatment / Study guide, recommended by the Educational and Methodological Association for Medical and Pharmaceutical Education of Universities of Russia. - Moscow-Blagoveshchensk, 2013. - 109 p.
5. Vakhnenko Yu.V., Landyshev Yu.S., Dorovskikh I.E., Urazova G.E., Pogrebnaya M.V. Diagnostics of congenital heart defects // Amurtipograf . - Blagoveshchensk. - 2013. - 156 p. (UMO)
6. Vakhnenko Yu.V. Electronic manual "Diagnostics and treatment of arterial hypertension". - EIS FSBEI HE Amur State Medical Academy. - 2020.
7. Urazova G.E. Electronic manual "Diagnostics and treatment of CHF". - EIS FSBEI HE Amur State Medical Academy. - 2020.
8. Urazova G.E. Electronic manual "Differential diagnostics of cardialgia ". - EIS FSBEI HE Amur State Medical Academy. - 2020.
7. Vakhnenko Yu.V. Electronic teaching aid "ECG diagnostics of heart rhythm disorders". - EIS FSBEI HE Amur State Medical Academy. - 2021.
8. Vakhnenko Yu.V. Electronic teaching aid "Diagnostics and treatment of chronic ischemic heart disease". - EIS FSBEI HE Amur State Medical Academy. - 2021.
9. Vakhnenko Yu.V. Electronic textbook "Myocardial infarction with ST elevation and its complications". - EIS FSBEI HE Amur State Medical Academy. - 2021.
Urazova G.E. Electronic manual "Diagnosis and Treatment of Infective Endocarditis". - EIS FSBEI HE Amur State Medical Academy. – 2021.

List of albums, tables, multimedia presentations

Tables:

1. Pulmonary embolism.
2. Rational combinations of antibacterial drugs.
3. Pickwickian syndrome.
4. Complications of systemic glucocorticoid therapy.
5. Pulmonary heart.
6. Clinical signs of chronic pulmonary heart disease.
7. Unstable angina.
8. Pathogenesis of myocardial infarction
9. Electrocardiography capabilities.
10. Types of ECG changes in ischemic heart disease.

11. Diagram of the cardiac conduction system.
12. Scheme for determining the position of the electrical axis of the heart.
13. ECG changes in myocardial infarction of different localizations.
14. Classification of cardiac arrhythmias.
15. Indications for Holter monitoring.
16. Dyslipidemia and its complications.
17. The role of ECG in the diagnosis of myocardial infarction.
18. Normal electrocardiogram.
19. Significant dates in the history of the development of electrocardiography.
20. ECG signs of myocardial hypertrophy.
21. Evaluation criteria for the exercise ECG test.
22. Classification of ventricular extrasystoles gradations.
23. Plan for analysis and preparation of a conclusion on ECG.
24. Differential diagnostics of large-focal and small-focal myocardial infarction.

Albums:

1. Pulmonary embolism.
2. Antibacterial drugs in tables and diagrams.
3. Risk factors and clinical picture of pulmonary embolism.
4. Pericarditis.
5. Aortic stenosis.
6. Stenosis of the left atrioventricular orifice (mitral stenosis).
7. Amyloidosis.
8. Album on the founders of medicine.
9. Congenital heart defects of the cyanotic type.
10. Treatment of pulmonary embolism.
11. ECG album demonstrating various cardiac rhythm and conduction disturbances.
12. ECG album for the diagnosis of myocardial infarction.
13. ECG album demonstrating hypertrophy of various parts of the heart.
14. Arterial hypertension.
15. Congenital heart defects of the pale type.

Multimedia presentations:

1. Features of the clinical picture and difficulties in diagnosing infective endocarditis and its complications.
2. Features of coronary heart disease in young people.
3. Myocardial infarction in young people.
4. Infective endocarditis of the prosthetic valve.
5. Pericardial mesothelioma.
6. Myocardial ruptures.
7. Idiopathic pulmonary arterial hypertension.
8. Prevention of thromboembolic complications in artificial valves
9. hearts.
10. Surgical correction of cardiovascular pathology.

3.4. Material and technical base for conducting internship

Medical equipment: tonometers, thermometer, phonendoscopes, pulse oximeters, height meter, medical scales, bactericidal irradiator, emergency treatment and preventive kits. In the functional, radiological, ultrasound, laboratory diagnostics, and radiological surgery rooms of the AKB: Six-channel electrocardiograph ECG-9001K, Laser capillary blood flow analyzer LAKK-

2, Blood gas and electrolyte analyzer (equipment set), ECS-500 pacemaker, 12-channel electrocardiograph ECG-1350 NihonKohden (Japan), Nihon ECG 1550 Treadmill Stress System , Holter Heart Rate Monitoring System, INKART Cardiotechnica-04 System (ABPM) (Russia), Mindray M7 Portable Ultrasound Scanner (China), Siemens Definition AS 64-Slice MSCT X- ray Computed Tomography System (Germany), TOSHIBA Excelart Magnetic Resonance Imaging SystemVantage Atlas 1.5 Tl (Japan).

3.5. Professional databases, information and reference systems, electronic educational resources.

Item No.	Name resource	Resource Description	Access	Resource address
Electronic library systems				
1	"Student Consultant" Electronic Library of the Medical University.	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/
2	"Doctor's Consultant" Electronic Medical Library.	The materials in the library were developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information was prepared taking into account the position of the scientific and practical medical community (global, European, and Russian) in the relevant specialty. All materials have undergone mandatory independent peer review.	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	https://pubmed.ncbi.nlm.nih.gov/
4	OxfordMedicine Online.	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com
5	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of	library, free access	http://humbio.ru/

		Molecular Genetics, Russian Academy of Sciences .)		
6	Medical online library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems				
7	Russian Medical Association	A professional internet resource. Purpose: to facilitate the effective professional activities of medical personnel. Contains the charter, personnel, Structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
8	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http://webmed.irkutsk.ru/
Databases				
9	Worldwide healthcare organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, free access	http://www.who.int/ru/
10	Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
11	Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications, and much more.	library, free access	https://edu.gov.ru/
12	Federal Portal "Russian Education"	A single point of access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?prubr =2.2.81.1
Bibliographic databases				
13	BD Russian Medicine	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian	library, free access	http://www.scsml.rssi.ru/

		journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.		
14	eLIBRARY.RU	A Russian information portal in science, technology, medicine, and education, containing abstracts and full texts of over 13 million scientific articles and publications. The eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals.	library, free access	http://elibrary.ru/defaultx.asp
15	Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
16	Medline.ru	Biomedical portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process

III. Commercial software products		
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system: MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution Terms: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software

		https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7 Resources of the information and telecommunications network "Internet"

Internet resources :
Primary health care standards
https://www.rosminzdrav.ru/ministry/61/22/stranitsa-979/stranitsa-983/1-standarty-pervichnoy-mediko-sanitarnoy-pomoschi

Standards of specialized medical care
https://www.rosminzdrav.ru/ministry/61/22/stranitsa-979/stranitsa-983/2-standarty-spetsializirovannoy-meditsinskoy-pomoschi

Procedures for providing medical care to the population of the Russian Federation
https://www.rosminzdrav.ru/ministry/61/4/stranitsa-857/poryadki-okazaniya-meditsinskoy-pomoschi-naseleniyu-rossiyskoy-federatsii

Federal Electronic Medical Library
http://www.femb.ru
(Clinical guidelines)

4. Assessment Fund

4.1. Examples of test tasks for intermediate knowledge assessment

(access mode: **https://educ-amursma.ru/course/view.php?id=627**
Number of test tasks – 100

Choose 1 correct answer:

1. THE MOST SEVERE COURSE OF ANGINA PECTORIS IS OBSERVED IN PATIENTS WITH THE FOLLOWING LESIONS:
   1) stenosis of the main trunk of the left coronary artery ;
   2) proximal lesion of the posterior coronary artery;
   3) distal lesion of the circumflex artery;
   4) proximal lesion of the circumflex artery;
   5) with a combination of proximal narrowing of the left and circumflex arteries.

2. THE MAIN HEMODYNAMIC SIGN OF COARCTION OF THE THORACIC AORTA IS:
   1) increased blood pressure in the lower extremities;
   2) hypotension when measuring blood pressure in the upper limbs;

3) high-grade bradycardia;
4) hypertension above and hypotension below the site of aortic stenosis ;
5) increase in BCC.

3. ARTERIAL HYPERTENSION CAN BE SUSPICIOUS BY THE FOLLOWING CLINICAL SIGNS AND MANIFESTATIONS:
1) short-term episodes of loss of consciousness;
2) disturbances of cardiac rhythm and conduction;
3) the presence of peripheral edema;
4) pain in the parietal and occipital regions;
5) disturbance of breathing rhythm.

4.2. List of practical skills that a student should possess after completing the internship

1. collection of complaints and anamnesis, active questioning about the presence, nature and severity of chest pain and shortness of breath during physical exertion, episodes of short-term weakness in the limbs, numbness of half of the face or limbs, and the volume of diuresis

2. General examination and physical examination, including palpation of peripheral vessels and auscultation of the subclavian, carotid, renal and femoral arteries, measurement of body mass index and waist circumference.

3. Interpretation of laboratory data: hemoglobin and/or hematocrit, fasting plasma glucose, total cholesterol, low-density lipoprotein cholesterol, high-density lipoprotein cholesterol, serum triglycerides, serum potassium and sodium, uric acid, serum creatinine (with calculation of SCF), urine albuminuria test and albuminuria criteria

4. risk factors, signs of subclinical damage to target organs and associated clinical conditions that influence the patient's prognosis and are used to stratify overall cardiovascular risk

5. determine absolute and relative contraindications for prescribing various groups of antihypertensive drugs to a patient

6. Questioning about the presence, severity and nature of chest pain at rest and under stress, the number of nitroglycerin tablets taken per day/week, shortness of breath, intermittent claudication, episodes of short-term weakness in the limbs or numbness of half the face or limbs.

7. conducting and interpreting the results of stress tests (bicycle ergometry, treadmill test, stress echocardiography) in case of pre-test probability of coronary heart disease, when taken under dispensary observation or in case of an increase in FC for more than 1 month for the purpose of risk stratification, outpatient ECG monitoring if there is a suspicion of concomitant paroxysmal arrhythmia or vasospastic angina;

8. Know the ankle -brachial index values for suspected peripheral atherosclerosis (stenosis) based on a survey and peripheral arterial pulsation test.

9. explaining to the patient and/or providing him with a reminder on the algorithm of emergency actions in case of a life-threatening condition, the probability of which the patient is most likely to develop

10. CHA2DS2-VASc score in the presence of atrial fibrillation

11. apply classification (risk stratification) to analyze the nature of ventricular ectopic activity and its clinical manifestations, as well as the presence or absence of organic heart disease as the cause of its occurrence.

12. diagnosis of signs of CHF, identification of its clinical symptoms and verification of functional disorders and organic heart damage.

13. evaluation of the main parameters of echocardiography when performed in patients with CHF-NFV (size of the heart cavities, zones of hypokinesis, akinesis and dyskinesis , the value of the ejection fraction)

14. Taking and interpreting ECG.

15. Conducting vagal and drug tests.

16. Clinical signs and emergency care for pulmonary edema.

17. Conducting and interpreting daily ECG monitoring.

18. Conducting and interpreting daily blood pressure monitoring.

19. diagnose complications and provide emergency care in case of an attack of angina pectoris, myocardial infarction, cardiogenic shock and acute heart failure, heart rhythm disturbances, hypertensive crisis.
20. Perform indirect cardiac massage, know the criteria for effectiveness
21. Perform artificial ventilation of the lungs (mouth to mouth, mouth to nose), know the criteria for effectiveness.
22. Draw up a plan for rehabilitation and preventive measures for cardiac diseases

4.3. List of questions for the test

1. Develop tactics for managing a patient with ACS.
2. Coronary artery disease. Stable angina: classification, clinical features, diagnostics, differential diagnosis, treatment, and prevention.
3. Coronary artery disease. Acute coronary syndrome. Unstable
4. Angina pectoris. Myocardial infarction: classification, clinical presentation, diagnostics, differential diagnosis, treatment, prevention.
5. Complications of myocardial infarction. Predisposing factors. Classification, clinical presentation, diagnostics, differential diagnosis, treatment, and prevention.
6. Present a schematic diagram of the mechanism of development of paroxysmal arrhythmias.
7. Heart rhythm disorders (atrial extrasystole, paroxysmal supraventricular tachycardia), pathogenesis, clinical presentation, changes in hemodynamics and ECG, treatment, indications for electropulse therapy.
8. Atrial fibrillation and atrial flutter: pathogenesis, classification, ECG changes, treatment, indications for electroconvulsive therapy, and interventional treatments. Prevention of thromboembolic complications.
9. Sick sinus syndrome: diagnosis, clinical features, treatment, and indications for pacemaker implantation. Tachy-brady syndrome .
10. Morgagni -Adams-Stokes syndrome : etiology, clinical features, diagnosis, treatment.
11. Atrioventricular block: pathogenesis, classification, clinical features, ECG characteristics, and treatment. Indications for temporary cardiac pacing and pacemaker implantation.
12. Develop an algorithm for emergency treatment of a patient with VT and hemodynamic impairment.
13. Assess the prognosis and develop treatment tactics for a patient who has had a myocardial infarction and has an AV block, depending on the size of the myocardial damage and the nature of the intraventricular conduction disturbances.
14. Develop a strategy for examining a patient with CHF against the background of malignant arterial hypertension and hypertensive heart disease.

15. What features of the functional state of the myocardium can be expected in CHF against the background of arterial hypertension?
16. Acute heart failure, cardiogenic shock. Classification, mechanism of development, clinical features, diagnosis, differential diagnosis, treatment, and prevention.
17. How is the malignant variant of hypertension diagnosed?
18. Arterial hypertension in pregnant women: etiology and classification. Hemodynamic characteristics, diagnostic criteria, differential diagnosis, and treatment.
19. Arterial hypertension in coarctation of the aorta: hemodynamics, clinical picture, diagnostic criteria, differential diagnosis, indications for surgical treatment.
20. Arterial hypertension in elderly patients: hemodynamics, clinical features, diagnostic criteria, and treatment. Prevention of postural syncope.
21. Renal arterial hypertension: classification, clinical presentation, diagnostics, differential diagnosis, treatment.
22. Endocrine arterial hypertension (Itsenko-Cushing's syndrome and disease, pheochromocytoma, aldosteronoma), clinical presentation, diagnostics, differential diagnosis, treatment.
23. Infective endocarditis: classification, clinical features, diagnostics, differential diagnosis, treatment, prevention.
24. Myocarditis: classification, clinical features, diagnostics, differential diagnosis, treatment, prevention
25. Pulmonary embolism: clinical presentation, diagnostics, differential diagnosis, treatment, prevention.
26. Preoperative preparation of cardiac patients. Goals and objectives. Selection of drug therapy.

MODULE 4 " ACUTE CARDIOVASCULAR PATHOLOGY IN GENERAL MEDICAL PRACTICE "

1.2. Purpose and objectives of the practice

The purpose of the internship is to consolidate and deepen the theoretical knowledge acquired in previous classes, to reinforce the professional skills and abilities developed by the future doctor during practical classes in previous courses, to develop readiness to carry out diagnostic and therapeutic measures, to provide emergency medical care for pathologies of the circulatory system at the level of a final-year student, and to be able to independently conduct informational and educational work to promote a healthy lifestyle and prevent cardiovascular diseases.

Practice objectives :

1. To promote the development of professional skills in examining a patient with acute cardiovascular pathology, substantiating his clinical diagnosis and providing emergency medical care taking into account the identified clinical syndromes
2. To consolidate knowledge of the physiological features of the cardiovascular system in acute cardiovascular conditions
3. Learn to create a patient examination plan in an emergency situation that will allow you to quickly and effectively clarify the diagnosis and choose the right treatment strategy
4. Learn to quickly formulate a treatment algorithm for a patient in an emergency situation and implement all necessary measures with the help of nursing staff
5. To consolidate knowledge of changes in ECG and laboratory parameters in acute cardiovascular events
6. Correctly interpret the results of the main methods of functional and laboratory examination of cardiac patients

7. Formulate an adequate diagnosis and create a correct algorithm for emergency care based on a physical examination and additional diagnostic methods
8. Correctly assess the dynamics of the patient's condition against the background of the treatment and adjust the tactics of further measures

1.3 Place of practice in the structure of the main professionaleducational programhigher education

In accordance with the Federal State Educational Standard of Higher Education (2020), the "Acute Cardiovascular Pathology in General Medical Practice" module of the "General Medical Practice" industrial practice course is part of the core component, Block 2. The total workload is 36 hours and is completed in the 11th semester of the sixth-year student. Assessment is by credit and grade in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, calendar schedule for completing the internship .

1.6. Requirements for students

To master the practiceknowledge, skills and abilities are required, formed by previous disciplines:
Spiritual and moral aspects of medicine
Knowledge: moral and ethical standards, rules and principles of professional conduct of a physician, the rights of the patient and the physician, the main ethical documents regulating the activities of a physician
Skills: build and maintain working relationships with patients and members of the medical institution team.
Skills : building working relationships with patients and the work team.
Professional foreign language
Knowledge : basic medical and pharmaceutical terminology in a foreign language.
Skills : apply knowledge to communication and obtaining professional information from foreign sources.
Skills: application of language skills for communication and obtaining professional information from foreign sources.
Histology, embryology, cytology
Knowledge:histological structure of tissues of the cardiovascular system in terms of influence on the electrophysiological properties of the heart
Skills: explain the relationship between changes in the ECG and the innervation and blood supply of the heart, the structure of cardiomyocytes and cells of the conduction system
Skills: explanation of the pathogenesis of changes on the ECG with the features of the structure, innervation and blood supply of the heart
Physics, mathematics.
Knowledge: mathematical methods for solving intellectual problems and their application in medicine; theoretical foundations of computer science, search, storage, processing, transformation and distribution of information in medical systems; the use of information

computer systems in medicine and healthcare; the operating principles and design of equipment used in medicine, the fundamentals of the physical foundations of methods used in functional diagnostics
Skills: use electronic search systems for educational and scientific literature, use programs for storing medical information, medical statistics programs, work with electrical equipment taking into account safety regulations **.**
Skills: use of electronic search systems for educational and scientific literature, use of programs for storing and searching medical documentation, medical statistics programs, work with an electrocardiograph and spirograph taking into account safety regulations
Biology
Knowledge: the laws of genetics and their significance for medicine, the patterns of heredity and variability in individual development as the basis for a scientific understanding of the pathogenesis of hereditary and multifactorial heart diseases
Skills: analyze the role of heredity and variability in the development of heart disease, in particular, heart rhythm disorders
Skills: analysis of the role of hereditary factors and multifactorial mechanisms in the development of the studied pathological conditions of the heart and blood vessels
Normal physiology
Knowledge:synaptic connections at the level of the heart and blood vessels and cardiac electrophysiology
Skills : analyze the importance of regulating biological processes in the body for the functioning of the cardiovascular system
Skills: analysis of the state of regulation of myocardial functions and electrophysiological processes in it and the cardiac conduction system in the studied pathological conditions
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in tissuesorganism in case of cardiovascular pathology andrespiratory system
Skills: determine the contribution of pathophysiological processes to the development of cardiac pathology and its signs on the ECG
Skills: identifying possible causes of ECG changes in a given pathological condition from a pathophysiological perspective
Propaedeutics of internal diseases
Knowledge: methods for collecting complaints and clarifying the anamnesis of the disease, physical examination of a patient with cardiac and vascular pathology
Skills: collect complaints and anamnesis, conduct a physical examination of the patient, identify the main clinical syndromes of heart disease, interpret the obtained data in conjunction with the results of functional and laboratory diagnostic methods
Skills: examining a patient with a cardiovascular disease, taking into account all the canons of propaedeutics of internal diseases, determining the diagnosis of the disease taking into account the examination data and additional diagnostic methods
Public health and healthcare, health economics
Knowledge: Fundamentals of the Russian Federation legislation on public health protection, key regulatory and technical documents; population health indicators, factors shaping human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional , professional, genetic)
Skills: plan, analyze, and evaluate the quality of medical care, the health status of the population, and the impact of environmental and occupational factors; calculate medical statistics.
Skills: working with basic medical documentation of a hospital and clinic within the scope of duties of a department physician or general practitioner, organizing medical care and analyzing its quality for the population at the medical site, assessing the health status of the population and the impact of environmental and industrial factors on morbidity, calculating medical statistics

Emergency conditions in therapy
Knowledge: Etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in cardiology
Skills: diagnose the main urgent conditions in cardiology and pulmonology, formulate and justify a clinical diagnosis, conduct their differential diagnosis and provide emergency care.
Skills: diagnostics based on ECG data of emergency conditions in cardiology - acute myocardial infarction and its complications, rhythm and conduction disorders, differential diagnosis and provision of emergency care to patients with these changes
Faculty therapy. Outpatient therapy.
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, principles of diagnosis, treatment and prevention of major cardiovascular diseases
Skills: identify and explain ECG signs of the heart diseases being studied, prescribe additional functional examination methods necessary to confirm them, formulate a clinical diagnosis of the diseases taking into account the data obtained
Skills: identifying and explaining the essence of ECG changes detected in patients with the heart diseases under study, prescribing additional functional examination methods necessary to confirm the diagnosis, formulating a clinical diagnosis of the disease taking into account the data obtained

1.7. Interdisciplinary connections of the module with subsequent disciplines and practices

Knowledge and skills acquired during the course of mastering the module and necessary for studying subsequent disciplines and practices:

No.	Name of subsequent disciplines	Module "Acute Cardiovascular Pathology in General Medical Practice"
1.	Clinical pharmacology	+
2.	Forensic medicine	+
3.	Outpatient therapy	+
4.	Hospital therapy	+

1.8. Requirements for the results of the internship

Mastering the module **"Acute cardiovascular pathology in general medical practice "** is aimed at developing the following competencies: universal (**UC**), general professional (GPC) and professional (PC): **UC** - 1, 4, 6, 7, 9; GPC - 1, 4, 5, 7, 10, 11; PC – 1, 2, 3, 4, 5, 6, 10, 12, 14.

No. p/p	Code and Name competencies	**As a result of** mastering the module **"Acute cardiovascular pathology in general medical practice " the student must:**			Code and name indicator achievements competencies
		Know	**Be able to**	**To own**	
1	**UC -1.** Capable of critically analyzing problematic situations based on a systems approach and developing an action strategy.	The main historical stages of the development of Cardiology, the subject and objectives of Cardiology, including Emergency Cardiology, the relationship with other medical, biological, and medical disciplines; the main terms and concepts used in Cardiology; modern concepts in the study of cardiac pathology, including emergency conditions; principles of using logical and methodological tools for a critical assessment of modern philosophical and social concepts in Cardiology.	To characterize the stages of development of cardiology in Russia as a science and its role in the present day; to evaluate the contribution of Russian scientists to the development of cardiology; to develop and justify a strategy for solving problematic situations based on a systemic and interdisciplinary approach to cardiology; to evaluate the levels of organization of the human cardiovascular system.	Skills in analyzing the importance of cardiology at the present stage; systematic analysis of the obtained data to resolve problematic situations in the professional sphere;methodology for developing and arguing strategies for solving problematic situations based on a systemic and interdisciplinary approach in Cardiology, a critical approach to the evaluation and reliability of information sources, and a methodology for working with conflicting information obtained from different sources	**AI UC-1.1.** Analyzes a problem situation using a systems approach. **AI UC-1.2.** Develops and argues strategies for solving problematic situations based on a systemic and interdisciplinary approach. **AI UC-1.3.** Applies systems analysis to resolve problematic situations in the professional field. **AI UC-1.4.** Uses logical and methodological tools to critically evaluate contemporary philosophical and social concepts in their subject area. **AI UC-1.5.** Critically evaluates the reliability of information sources and works with conflicting information from different sources.
2	**UC -4.** Able to use	Principles of application of modern communication	Apply modern communication	Skills in using modern communication	**AI UC-4.1.** Uses communicative and linguistic tools to build effective

	modern communication technologies, including in foreign language(s), for academic and professional interaction	technologies , including in foreign language(s), for academic and professional interaction	technologies, including in foreign language(s), for academic and professional interaction	technologies, including in foreign language(s), for academic and professional interaction	partnerships with patients and colleagues; selects a communication style. **AI UC-4.2.** Uses modern communication resources to search, process, and transmit information necessary for the effective performance of professional tasks and the achievement of professionally significant goals. **AI UC-4.3.** Compiles, translates from a foreign language into the state language of the Russian Federation and from the state language of the Russian Federation into a foreign language, edits various academic texts (abstracts, essays, reviews, articles, etc.). **AI UC-4.4.** Presents the results of academic and professional activities at various public events, including international ones, choosing the most appropriate format. **AI UC-4.5.** Defends their positions and ideas in a reasoned and constructive manner in academic and professional discussions in the official language of the Russian Federation and a foreign language.
3	**UC -6.** Able to identify and implement	Principles for defining and implementing priorities for one's own activities and	Identify and implement priorities for one's own activities and ways to	Skills for identifying and implementing priorities for one's own activities and	**AI UC-6.1** . Assesses personal, situational, and time resources and utilizes them optimally to complete

	priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning.	ways to improve them based on self-assessment and lifelong learning	improve them based on self-assessment and lifelong learning	ways to improve them based on self-assessment and lifelong learning	assigned tasks. **AI UC-6.2.** Plans his/her activities within the framework of professional tasks. **AI UC-6.3.** Conducts critical self-analysis of the results of one's own activities. **AI UC-6.4.** Identifies professional growth priorities and ways to improve one's own performance based on self-assessment against selected criteria.
4	**UC** -7. Able to maintain an adequate level of physical fitness to ensure full social and professional functioning.	Principles of maintaining an adequate level of physical fitness to ensure full social and professional activity	Maintain an adequate level of physical fitness to ensure full social and professional functioning	Skills to maintain an adequate level of physical fitness to ensure full social and professional activity	**AI UC -7.1.** Compliance with and promotion of healthy lifestyle norms in various life situations and in professional activities. **AI UC-7.2.** Planning work and leisure time to optimally balance physical and mental stress and ensure performance. **AI UC-7.3.** Skills in selecting health-preserving technologies to maintain a healthy lifestyle, taking into account the physiological characteristics of the body.
5	**UC** -9. Able to apply basic defectological knowledge in social and professional	Principles of using basic defectological knowledge in social and professional spheres	To use knowledge of the basics of defectology in social and professional spheres	Skills in using basic knowledge of defectology in social and professional spheres	**AI UC-9.1.** Principles of non-discriminatory interaction in communication in various spheres of life, taking into account the socio-psychological characteristics of persons with disabilities.

	spheres.				**AI UC-9.2.** Organization of joint professional activities with the participation of persons with disabilities.
	General professional competencies				
5	**GPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	Ethical and deontologicalAspects of doctor-to-doctor, doctor-to-patient, and doctor-to-patient relationships; principles of effective and conflict-free communication with patients; methods of effective communication between doctor and patient in difficult situations; basic requirements for the personality of a doctor; general principles of conducting discussions and round tables	Conduct a survey and physical examination of the patient, draw up a plan for additional examination using laboratory, functional, radiation and other diagnostic methods, taking into account ethical and deontological principles; Communicate effectively and without conflict with patients, relatives, and colleagues; build effective relationships with patients; observe confidentiality principles; conduct discussions in accordance with the principles of moral and ethical reasoning	Communication skills with patients, relatives, colleagues, and mid-level and junior staff; methods of verbal and non-verbal communication with patients; principles of confidentiality in professional activities and communication with colleagues; skills for conflict-free and productive communication in the work team	**AI GPC -1.1.** Carrying out professional activities in accordance with ethical standards and moral principles. **AI GPC-1.2.** Organization of professional activities, guided by healthcare legislation, knowledge of medical ethics and deontology. **AI GPC-1.3.** Skills in expressing an independent point of view, analytical and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and roundtables, and principles of medical deontology and medical ethics.
6	**GPC-4.** Capable of using medical devices as provided for by	Indications and contraindications for the use of modern medical technologies, medical	Apply modern medical technologies, specialized equipment, medical devices, and medications	Skills in the use of modern medical technologies, specialized equipment, medical devices, drugs and	**AI GPC -4.1.** Use of modern medical technologies, specialized equipment and medical devices, disinfectants, medications, including

	the procedure for providing medical care, as well as conducting patient examinations to establish a diagnosis	devices, medications, instrumental, functional, and laboratory examination methods in cardiology; interpretation of the results of the most common methods of instrumental, laboratory, and functional diagnostics; methods of general clinical examination of the patient; principles of formulating a clinical diagnosis in cardiology according to the ICD	in accordance with the procedure for providing medical care, from the standpoint of evidence-based medicine in the field of cardiology; prescribe instrumental, functional, and laboratory examination methods; interpret the results of using the listed methods; conduct a clinical examination of the patient; formulate clinical diagnosis in cardiology according to ICD	their combinations from the standpoint of evidence-based medicine in cardiology ; to compare the results of the survey, anamnesis data, physical examination with the data of additional examination methods (instrumental, laboratory and functional diagnostics) to identify pathological processes; methods of general clinical examination of patients of different ages; formulation of a clinical diagnosis according to the ICD, taking into account the combination of the above-mentioned clinical and additional examination methods	immunobiological and other substances and their combinations in solving professional problems from an evidence-based medicine perspective. **AI GPC-4.2.** Knowledge of indications and contraindications for instrumental, functional, and laboratory examination methods, possible complications during examination, emergency care, and their prevention. **AI GPC-4.3.** Interpretation of the results of the most common methods of instrumental, laboratory and functional diagnostics, thermometry to identify pathological processes. **AI GPC-4.4.** Proficiency in methods of general clinical examination of patients of various ages. **AI GPC-4.5.** Formulation of preliminary diagnosis and clinical diagnosis according to ICD.
7	**GPC-5.** Capable of assessing morphofunctional, physiological states and pathological	Principles of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	To evaluate morphofunctional, physiological states and pathological processes in the human body to solve professional problems	Skills for assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	**AI GPC -5.1.** Knowledge of the functional systems of the human body, their regulation and self-regulation when interacting with the external environment under normal and pathological conditions. **AI GPC-5.2.** Knowledge of the etiology, pathogenesis,

	processes in the human body to solve professional problems				morphogenesis of disease development, and the main nosologies. **AI GPC-5.3.** Information on the indicators of the morphofunctional and physiological state of a healthy person and the ability to determine them. **AI GPC-5.4.** Information on the use of morphofunctional, physiological, and pathological process indicators for examining the human body to establish a diagnosis, prescribe treatment, and monitor its effectiveness and safety. **AI GPC-5.5.** Methods of analysis and interpretation of macroscopic and microscopic changes in normal and pathologically altered tissues and organs.
8	**GPC-7.** Capable of prescribing treatment and monitoring its effectiveness and safety.	drug selection based on the combination of its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various circulatory diseases; advantages of the selected drug and the preferred route of administration; primary and secondary effects of	To select the optimal drug (taking into account its pharmacokinetic and pharmacodynamic characteristics) and the preferred method of its administration; to identify the main and side effects of drugs used in cardiology, taking into account the morphofunctional	Skills in prescribing the optimal medication, choosing the preferred method of its use, taking into account the morphofunctional characteristics, physiological conditions and pathological processes in diseases of the circulatory system, and the possible interaction of drugs with the	**AI GPC -7.1.** Selection of a medicinal product based on its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient and inpatient settings. **AI GPC-7.2.** Selecting the optimal minimum of the most effective means using convenient methods of their application. **AI GPC-7.3.** Explanation of the

		drugs; morphofunctional characteristics, physiological states, and pathological processes in the body of a cardiac patient when selecting a drug; results of possible drug interactions with the combined use of various drugs in cardiology; criteria for the effectiveness and safety of drug therapy based on a combination of clinical, laboratory, instrumental, and other diagnostic methods for circulatory diseases.	characteristics, physiological states and pathological processes of the human body; Select over-the-counter medications and other pharmacy products based on the physiological conditions and pathological processes in patients with circulatory diseases; consider potential drug interactions when using various medications in combination in cardiology; and evaluate the effectiveness and safety of drug therapy using a combination of clinical, laboratory, instrumental, and other diagnostic methods in cardiology.	combined use of various drugs; the ability to promptly identify side effects of drugs used in clinical cardiology; determination of the effectiveness and safety of drug therapy for diseases of the circulatory system based on a combination of clinical, laboratory, instrumental and other diagnostic methods.	primary and secondary effects of drugs, the effects of their combined use and interaction with food, taking into account the morphofunctional characteristics, physiological conditions, and pathological processes in the human body. **AI GPC-7.5.** Consideration of morphofunctional characteristics, physiological states, and pathological processes in the human body when selecting over-the-counter medications and other pharmacy products. **AI GPC-7.6.** Analysis of the results of potential drug interactions with the combined use of various drugs. **AI GPC -7.7.** Evaluation of the effectiveness and safety of drug therapy using a combination of clinical, laboratory, instrumental and other diagnostic methods.
9	**GPC-10.** Capable of solving standard professional tasks using information and bibliographic resources, medical and biological	Principles for solving standard professional tasks using information and bibliographic resources, medical and biological terminology, and information and communication technologies, taking into	Methods for solving standard professional tasks using information and bibliographic resources, medical and biological terminology, and information and communication technologies, taking into	Skills in solving standard professional tasks using information, bibliographic resources, medical and biological terminology, and information and communication technologies, taking into account the basic	**AI GPC-10.1.** Maintaining Confidentiality When Working with Information Databases and Individual Citizen Data. **AI GPC-10.2.** Skills for effectively searching for information necessary to solve professional problems using legal reference systems and professional pharmaceutical

	terminology, and information and communication technologies, taking into account basic information security requirements.	account the basic requirements of information security	account the basic requirements of information security	requirements of information security	databases. **AI GPC-10.3.** Skills in using specialized software for the mathematical processing of observational and experimental data when solving problems in professional activities. **AI GPC -10.4.** Skills in using automated information systems in the internal processes of a medical organization, as well as for organizing interactions between medical personnel and patients of medical organizations.
10	**GPC-11.** Able to prepare and apply scientific, research and production, design, organizational and managerial, and regulatory documentation in the healthcare system.	Basic methodological approaches to working with educational, scientific, reference medical literature, including on the Internet (methods of collecting, storing and processing information) ; Algorithms and software tools for decision support during the treatment and diagnostic process in clinical cardiology; methods for collecting, storing, searching, processing, transforming and disseminating information in medical	Independently work with educational, scientific, reference, medical literature, including on the Internet (search and select information) in the field of clinical cardiology; carry out statistical processing, analysis of the obtained data and interpret the results to solve professional problems in the field of diagnosis and treatment of diseases of the circulatory system; interprets and applies data from physical, chemical, mathematical and other natural science concepts	Skills in a systematic approach to the analysis of educational, scientific, reference, medical information, including Internet sources (methods of collecting and processing information) ; basic skills in using medical information systems and Internet resources; methods of maintaining medical records; The main scientific methods of cognition: observation, description, measurement, experimentation in the field of clinical cardiology; analysis and preparation of	**AI GPC 11.1.** Applying modern methods for collecting and processing information, conducting statistical analysis of the obtained data in the professional field, and interpreting the results to solve professional problems. **AI GPC 11.2.** Identification and analysis of problematic situations, search and selection of scientific, regulatory, and organizational documentation in accordance with the specified objectives. **AI GPC 11.3.** Interpretation and application of physical, chemical, mathematical, and other natural science concepts and methods to solve professional problems. **AI GPC-11.4.** Conducting scientific

		information systems; methods of maintaining medical records; Basic statistical methods for solving intellectual problems and their application in clinical, including emergency, cardiology.	and methods to solve professional problems in the field of clinical, including emergency cardiology.	accounting and reporting medical documentation and methods for calculating qualitative and quantitative indicators used in clinical, including emergency, cardiology.	and practical research, analyzing information using the historical method and preparing a publication based on the research results. **AI GPC-11.5.** Analysis and compilation of accounting and reporting medical documentation and calculation of qualitative and quantitative indicators used in professional activities.
	Professional competencies				
11	**PC-1.** Capable of providing medical care in urgent and emergency situations.	Clinical signs of conditions requiring emergency medical care in cardiology (ACS, ACS complicated by pulmonary edema or cardiogenic shock, hypertensive crisis, paroxysmal supraventricular tachycardia, paroxysmal ventricular tachycardia, paroxysmal atrial fibrillation/flutter, complete AV block); methods for providing emergency medical care in	To identify clinical signs of conditions requiring emergency medical care in cardiology (ACS without complications, ACS complicated by pulmonary edema, cardiogenic shock, pulmonary embolism, cardiac ruptures; hypertensive crisis; paroxysmal supraventricular tachycardia, paroxysmal ventricular tachycardia, paroxysmal atrial fibrillation/flutter,	Skills in diagnosing and providing emergency medical care in cardiology for ACS without complications, ACS complicated by pulmonary edema, cardiogenic shock, cardiac ruptures; hypertensive crisis; paroxysmal supraventricular tachycardia, paroxysmal ventricular tachycardia , paroxysmal atrial fibrillation/flutter, complete AV block	**AI PC -1.3.** Identification of conditions requiring emergency medical care **AI PC - 1.4.** Providing emergency medical care to patients with life-threatening conditions

		cardiology	complete AV block); to provide emergency medical care in cardiology		
12	**PC-2.** Capable of collecting and analyzing complaints, life history and medical history of the patient in order to establish a diagnosis	Methodology for collecting complaints (primary and secondary) from a patient with cardiac pathology; method for collecting the patient's medical history (timing of seeking medical care, dynamics of symptom development, volume of therapy administered and its effectiveness), life history, including risk factors for circulatory diseases, data on past illnesses, injuries and surgical interventions, hereditary, professional, and epidemiological history.	Establish rapport with the patient; collect complaints and a medical history of the patient with cardiovascular pathology, analyze the obtained data; determine risk factors for the patient's existing circulatory disease; evaluate information on the patient's medical history, paying particular attention to concomitant diseases, hereditary, allergic, professional, and epidemiological history.	Skills for establishing contact and compliant relationships with a patient with a circulatory disease; collecting complaints (primary and secondary), disease history (onset, dynamics of symptom development, seeking medical care, characteristics and scope of therapy and its effectiveness), life history (risk factors, comorbidities, allergy, occupational, epidemiological history) of a patient with a cardiovascular disease.	**AI PC -2 .1.** Establishing contact with the patient. **AI PC -2 .2.**Collection of complaints, specification of them, identification of main and secondary ones. **AI PC -2 .3.** Collection and analysis of information on the onset of the disease, the presence of risk factors, the dynamics of the development of symptoms and the course of the disease. **AI PC -2 .4.** Analysis of the timing of the first and repeated requests for medical care, the volume of therapy administered, and its effectiveness. **AI PC -2.5 .** Collection and evaluation of information on the medical history, including data on past illnesses, injuries and surgical interventions, hereditary, professional, and epidemiological history.
13	**PC-3.** Capable of performing a physical examination of a patient and analyzing the results of	The methodology of a complete physical examination of a patient with cardiovascular disease (inspection, palpation, percussion, auscultation) and	Conduct a complete physical examination of a patient with cardiovascular disease (inspection, palpation, percussion, auscultation) and interpret the results; determine the	Skills in conducting a complete physical examination of a patient with cardiovascular disease (inspection, palpation, percussion, auscultation) and interpreting its results;	**AI PC -3.1.** Conducting a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interpreting its results **AI PC-3.2.** Justification of the necessity, scope, and sequence of

	additional examination methods to establish a diagnosis.	interpretation of its results; the need, scope, sequence of diagnostic measures and indications for consultation with specialist doctors; the methodology for analyzing and comparing the obtained clinical and diagnostic results of examination of a patient with circulatory disease; indications for prescribing additional examination methods (if necessary); principles of early diagnosis , the main symptoms and syndromes of cardiovascular diseases; formulation of a diagnosis taking into account the current International Statistical Classification of Diseases and Related Health Problems (ICD); differential diagnosis of circulatory diseases.	need, scope, and sequence of diagnostic measures and indications for consultation with specialist doctors; analyze and compare the obtained clinical and diagnostic results of the examination of the patient with circulatory disease; determine indications for prescribing additional examination methods; identify cardiovascular disease syndromes , substantiate their clinical diagnosis in accordance with the current International Statistical Classification of Diseases and Related Health Problems (ICD); conduct differential diagnostics of the identified cardiovascular pathology.	refer the patient for diagnostic procedures (laboratory, instrumental), for consultation with specialist doctors; analysis and comparison of the obtained clinical and diagnostic results of examination of the patient with circulatory disease; the ability to analyze the main clinical manifestations cardiovascular disease, establishing a clinical diagnosis in accordance with the current International Statistical Classification of Diseases and Related Health Problems (ICD) and justifying it; conducting differential diagnostics of the identified cardiovascular pathology with other diseases.	diagnostic procedures (laboratory, instrumental) and referral of the patient to specialist doctors for consultations **AI PC-3.3.** Analysis of the obtained results of the patient examination, if necessary, justification and planning of the scope of additional studies. **AI PC -3.4.** Interprets and analyzes the results of collecting information about the patient's disease, data obtained during laboratory and instrumental examinations and during consultations with specialist doctors; if necessary, justifies and plans the scope of additional research. **AI PC -3.5.** Early diagnosis of internal organ diseases. Diagnosis is made in accordance with the current International Statistical Classification of Diseases and Related Health Problems (ICD). **AI PC-3.6.** Differential diagnosis of internal organ diseases from other diseases.
14	**PC-4.** Capable of determining indications for hospitalization, indications for emergency medical care,	Medical indications for emergency, including specialized emergency, medical care in cardiology; medical indications for referring a patient for specialized medical care in	Determine medical indications for providing emergency, including specialized emergency, medical care to a patient with cardiovascular disease; determine medical	Skills in determining medical indications for emergency, including specialized emergency, medical care in cardiology; the ability to determine medical indications for	**AI PC -4.1.** Determination of medical indications for the provision of emergency, including specialized emergency, medical care **AI PC-4.2.** Referral of a patient for specialized medical care in an inpatient setting or in a day hospital

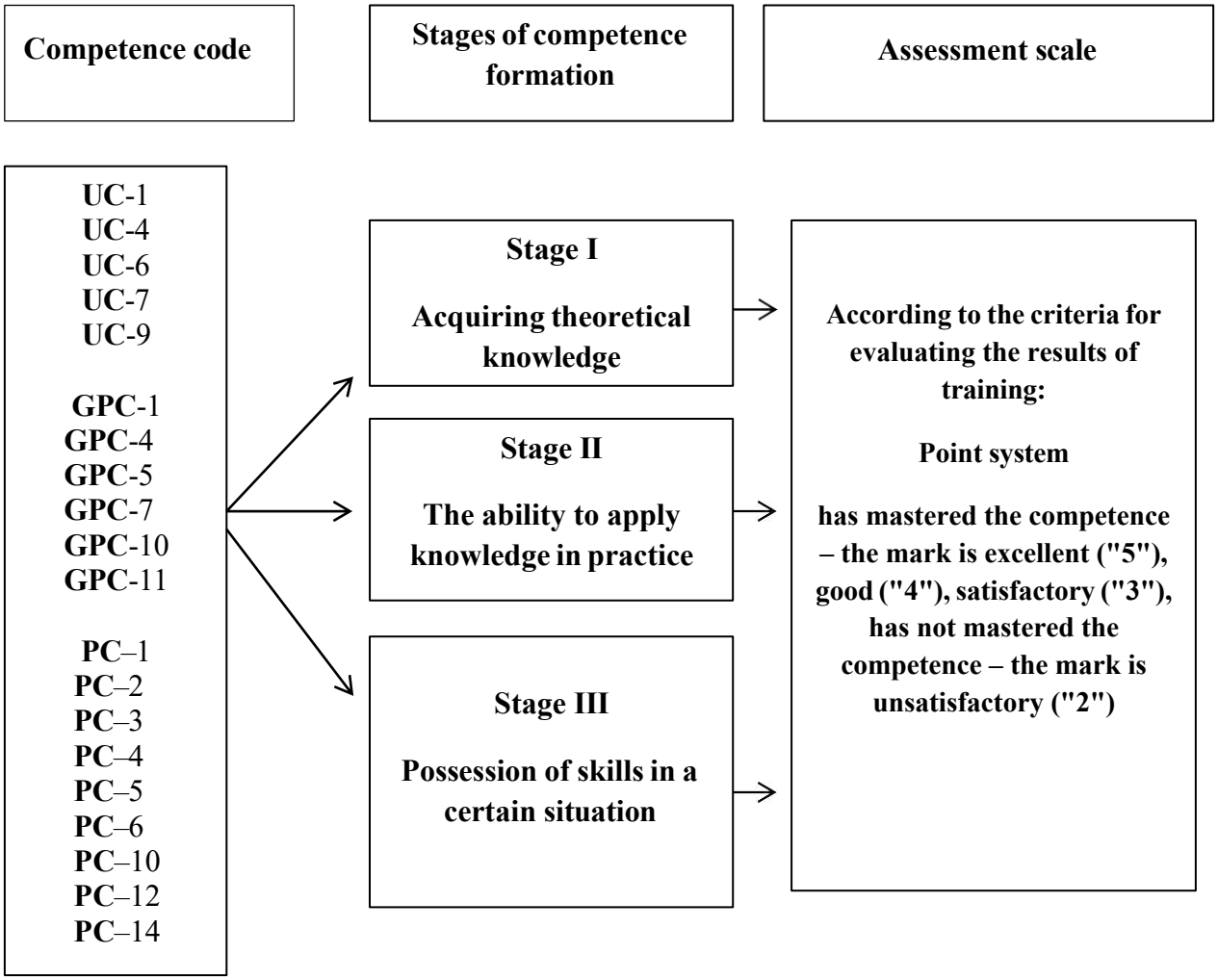
	including specialized emergency medical care.	an inpatient setting or in a day hospital setting, principles for the use of medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) for the provision of medical care, taking into account the standards of medical care in cardiology.	indications for referring a patient for specialized medical care in a hospital or day hospital setting, principles for the use of medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) in cardiology	referring a patient for specialized medical care in a hospital or day hospital setting; principles of using medical devices in accordance with current medical care procedures, clinical guidelines (treatment protocols) for providing medical care to patients with cardiovascular pathology.	setting if there are medical indications in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) for the provision of medical care, taking into account the standards of medical care. **AI PC-4.3.** Use of medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) for the provision of medical care, and care taking into account standards of medical care.
15	**PC-5.** Able to prescribe treatment to patients	Modern methods of application, mechanism of action, indications and contraindications for the prescription of drugs and medical devices for diseases of the circulatory system (taking into account the diagnosis, age and clinical picture of the disease) in accordance with current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical	To develop a treatment plan for a patient with cardiac pathology taking into account the diagnosis, age, and clinical presentation of the disease in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account standards of medical care in cardiology; to prescribe medications, medical devices, and non-	Skills in developing an individualized treatment plan for a patient with cardiac pathology, taking into account the diagnosis, age, and clinical presentation of the disease in accordance with current procedures for providing medical care, clinical guidelines (treatment protocols) on providing medical care, taking into account standards of medical care in cardiology; prescribe non-drug treatment for diseases of the	**AI PC -5.1.** Drawing up a treatment plan for a patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC-5.2.** Prescribing medications, medical devices, and therapeutic nutrition based on the diagnosis, age, and clinical picture of the disease in accordance with current

		care, taking into account the standards of medical care in cardiology; Non-drug treatment based on the diagnosis, age, and clinical presentation of cardiovascular disease; principles of providing palliative care to patients with circulatory diseases; principles of organizing personalized patient treatment, including pregnant women and elderly and senile patients with cardiovascular diseases	drug treatment for diseases of the circulatory system; to provide palliative care to patients with diseases of the circulatory system; to organize personalized treatment for the patient, including pregnant women, elderly patients with cardiovascular diseases, in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols)	circulatory system; provide palliative care to patients with diseases of the circulatory system; organize personalized treatment for patients, including pregnant women, elderly patients with cardiovascular diseases, in accordance with current procedures for providing medical care, clinical guidelines (treatment protocols) on providing medical care, taking into account standards of medical care in cardiology.	procedures for providing medical care, clinical guidelines, and standards of medical care **AI PC-5.3.** Prescribing non-drug treatment based on the diagnosis, age, and clinical presentation of the disease in accordance with current medical care procedures, clinical guidelines, and standards of medical care. **AI PC-5.4.** Providing palliative care in collaboration with specialist physicians and other health care professionals **AI PC-5.5.** Organization of personalized patient treatment, including pregnant women, elderly patients
16	**PC-6.** Capable of monitoring the effectiveness and safety of the therapy being administered.	Information on the efficacy and safety of drugs, medical devices, nutritional therapy, and other treatment methods in cardiology; pharmacodynamics and pharmacokinetics of the main groups of drugs used in cardiology	Assess the efficacy and safety of medications, medical devices, nutritional therapy, and other treatment methods for patients with cardiovascular disease; consider the pharmacodynamics and pharmacokinetics of drugs used in cardiology when prescribing.	Skills in assessing the efficacy and safety of medications, medical devices, nutritional therapy, and other treatment methods for circulatory diseases; the ability to take into account the pharmacodynamics and pharmacokinetics of drugs used in the treatment of circulatory diseases when prescribing	**AI PC -6.1.** Evaluation of the effectiveness and safety of drugs, medical devices, therapeutic nutrition, and other treatment methods **AI PC-6.2.** Teaches the pharmacodynamics and pharmacokinetics of key drug groups, prevents adverse drug reactions, and corrects them if they occur.
17	**PC-10.** Capable of conducting and monitoring	Forms and methods of educational work, preventive measures for	To identify modifiable risk factors for the development of	Skills in conducting educational work, preventive measures for	**AI PC-10.1.** Prescribing preventive measures to patients taking into account risk factors for the

	the effectiveness of preventive measures and promoting a healthy lifestyle.	patients taking into account risk factors for the prevention and early detection of circulatory diseases, including socially significant diseases; risk factors for the development of cardiovascular diseases	cardiovascular diseases; to promptly prescribe preventive measures to patients taking into account risk factors for the prevention and early detection of circulatory diseases, including socially significant diseases in cardiology	patients taking into account the identified risk factors for the development of cardiovascular diseases for the prevention and early detection of pathology of the circulatory organs, including socially significant ones	prevention and early detection of diseases, including socially significant diseases
18	**PC-12.** Ready to maintain medical records, including in electronic form	Rules for the preparation of medical documentation (including electronic documentation) in cardiology-focused medical organizations; principles for working with patients' personal data and information constituting a medical secret	Fill out medical documentation (including electronically) in cardiology-focused medical organizations; handle patients' personal data and information constituting a medical secret; prepare documents when referring patients for hospitalization, consultation, spa treatment, and medical and social assessment	Skills in completing medical documentation (including electronically) in cardiology-focused medical organizations; ability to work with patients' personal data and information constituting a medical secret; preparation of documents when referring patients with cardiac diseases for hospitalization, consultation, spa treatment, and medical and social assessment	**AI PC -12.1 .**Completion of medical documentation, including in electronic form **AI PC -12.2 .**Working with patients' personal data and information constituting a medical secret **AI PC-12.3.** Preparation of documents for referring patients for hospitalization, consultation, spa treatment, and medical and social assessment.
19	**PC-14.** Capable of participating in scientific research activities.	Methodology of conducting scientific research; main directions of scientific research in clinical cardiology; principles and methods of conducting scientific research, medical statistics	Conduct scientific research, analyze medical information based on evidence-based medicine, and implement new methods in practical work aimed at protecting the health of the adult	Skills in participating in scientific research; the ability to analyze medical information based on evidence-based medicine and implement new methods in practical work aimed at protecting the	**AI PC-14.1.** Participation in scientific research **AI PC-14.2.** Evidence-Based Analysis of Medical Information **AI PC -14.3.** Implementation of new methods and techniques aimed at protecting the health of the adult population in practical healthcare

			population, including the prevention of cardiovascular diseases.	health of the adult population	

1.9. Stages of competence development and descriptions of assessment scales



2. Structure and content of practice

2.1. Scope of practice

Scope of practice	
Total labor intensity in hours, total	432 hours
Time required for the ―Acute Cardiovascular Pathology in General Practice‖ Module	36 hours
Total workload in credit units, total	12 z.e.
Type of intermediate assessment	Credit with grade

2.2. Type of practice

Type of practice - industrial .

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

"3" – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

"5" - when testing, up to 10% of incorrect answers are allowed.

"4" - allows up to 20% of incorrect answers during testing.

"3" - allows up to 30% of incorrect answers during testing.

"2" - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

"5" – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

"4" – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

"3" – the student has only some practical skills and abilities.

"2" - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.

"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical

questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.
"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.
"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.
"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Educational, methodological, logistical and informational support for practice

3.1 Main literature

1. Martynov, A. I. Internal diseases: T. I.: textbook / edited by Martynov A. I., Kobalava Zh. D., Moiseev S. V. - Moscow: GEOTAR-Media, 2021. - 784 p. - ISBN 978-5-9704-5886-0. - Text: electronic (date accessed: 05/04/2021). - Access mode: by subscription.
http://www.studmedlib.ru/book/ISBN9785970458860.html
2. Martynov, A. I. Internal Diseases : Vol. II. : textbook / ed. Martynova A. I. , Kobalava J. D. , Moiseeva S. V. - Moscow : GEOTAR-Media, 2021. - 704 p. - ISBN 978-5-9704-5887-7. - Text : electronic (date of receipt: 04.05.2021).
http://www.studmedlib.ru/book/ISBN9785970458877.html
3. Makolkin , V. I. Internal diseases: textbook / Makolkin V. I., Ovcharenko S. I., Sulimov V. A. - 6th ed.,reworked and additional Moscow: GEOTAR-Media, 2017. - 768 p. - ISBN 978-5-9704-4157-2. - Text: electronic (access date: 05/04/2021).
http://www.studmedlib.ru/book/ISBN9785970441572.html

3.2 Further reading

1. Arutyunov, G.P. Diagnostics and treatment of diseases of the heart and blood vessels / GEOTAR-Media. - 2015. - P. 504. ISBN 978-5-9704-3146-7. Text: electronic (date accessed: 05/21/2021). - Access mode: by subscription.
http://www.studmedlib.ru/book/ISBN9785970431467.html
2. Belyalov F.I. Cardiac arrhythmias / GEOTAR-Media. - 2020. - P. 448. ISBN 978-5-9704-5641-5. - Text: electronic (accessed: 05/20/2021). - Access mode: by subscription.
http://www.studmedlib.ru/book/ISBN9785970456415.html
3. Beresten N.F. Functional diagnostics: national guidelines / edited by N.F. Beresten, V.A. Sandrikov , S.I. Fedorova. - GEOTAR-Media. - 2019. P. 784. (Series "National Guidelines") - ISBN 978-5-9704-4242-5. - Text: electronic (date accessed: 05/20/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970442425.html
4. Vertkin A.L. Emergency medical care at the prehospital stage: textbook / A. L. Vertkin , L. A. Aleksanyan, M. V. Balabanova et al.; edited by A. L. Vertkin . - GEOTAR-Media. - 2016. - P. 544. ISBN 978-5-9704-3579-3. Text: electronic (date accessed: 05/06/2021). - Access mode: by subscription. http://www.studmedlib.ru/ru/book/ISBN9785970435793.html
5. Gantseva , H.H. Clinical examination of the patient / Gantseva H.H. , Ishmuratova R.Sh. ,Kzyrgalin Sh. R., Gainullin A. Kh. - GEOTAR-Media. - 2021. – P. 208. ISBN 978-5-9704-

6035-1. - Text: electronic (access date: 05/14/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970460351.html
6. Kolpakov E.V. ECG in arrhythmias: atlas / Kolpakov E.V.,LyusovV.A., Volov N.A. - GEOTAR-Media. - 2013. - P. 288. ISBN 978-5-9704-2603-6. Text: electronic (accessed: 05/20/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970426036.html
7. First aid and medical knowledge: a practical guide to actions in emergency situations / edited by L.I. Dezhurny, I.P. Minnullin. - GEOTAR-Media. - 2019. - P. 256. ISBN 978-5-9704-5426-8.- Text : electronic (date accessed: 05/06/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970454268.html
8. Reznik E.V. Clinical norms. Cardiology / GEOTAR-Media. - 2020. - P. 448 p. ISBN 978-5-9704-5851-8. - Text: electronic (accessed: 05/20/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970458518.html
9. Ruksin V.V. Emergency outpatient cardiology: a brief guide / GEOTAR-Media. - 2018. - P. 256. ISBN 978-5-9704-4791-8. - Text: electronic (date accessed: 05/21/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970447918.html
10. Trukhan D.I. Internal Medicine. Cardiology. Rheumatology: a textbook / D.I. Trukhan, I.A. Viktorova. - Moscow: OOO Izd-vo "MIA". - 2013. - P. 376.
11. Shchekotova V.V. Differential diagnostics of internal diseases / edited by V.V. Shchekotov , A.I. Martynov, A.A. Spassky. - GEOTAR-Media. - 2018. - P. 928. ISBN 978-5-9704-4778-9. Text: electronic (date accessed: 05/04/2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970447789.html
12. Shchukin Yu.V. Functional diagnostics in cardiology / Yu.V. Shchukin - GEOTAR-Media. - 2017. - P. 336. ISBN 978-5-9704-3943-2. - Text: electronic (accessed: 05.05.2021). - Access mode: by subscription. http://www.studmedlib.ru/book/ISBN9785970439432.html

3.3. Educational and methodological support for the discipline, prepared by the department staff

1. Vakhnenko Yu.V., Landyshev Yu.S., Dorovskikh I.E., Urazova G.E., Pogrebnaya M.V. Diagnostics of congenital heart defects // Amurtipograf . - Blagoveshchensk. - 2013. - 156 p. (UMO)
2. Urazova G.E., Landyshev Yu.S., Naydenov A.V., Semikin E.N. Sinus node dysfunction // Blagoveshchensk. – 2006. – 46 p. (UMO)
3. Urazova G.E., Landyshev Yu.S., Dorovskikh I.E., Vakhnenko Yu.V., Naidengov A.V. Acquired heart defects: diagnosis and treatment // Amurtipograf . - Blagoveshchensk. - 2013. - 107 p. (UMO)
4. Vakhnenko Yu.V. Electronic teaching aid "ECG diagnostics of heart rhythm disorders". - EIS FSBEI HE Amur State Medical Academy. - 2021.
5. Vakhnenko Yu.V. Electronic teaching aid "Diagnostics and treatment of chronic ischemic heart disease". - EIS FSBEI HE Amur State Medical Academy. - 2021.
6. Vakhnenko Yu.V. Electronic textbook "Hypertrophy of the left and right chambers of the heart". - EIS FSBEI HE Amur State Medical Academy. - 2020.
7. Vakhnenko Yu.V. Electronic teaching aid ―Normal ECG‖. – Electronic Information and Training Manual of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy. – 2020.
8. Vakhnenko Yu.V. Electronic textbook ―ECG diagnostics of various clinical conditions‖. –EIS FGBOU VO Amur State Medical Academy. – 2020.
9. Vakhnenko Yu.V. Electronic textbook "Myocardial infarction with ST elevation and its complications". - EIS FSBEI HE Amur State Medical Academy. - 2021.
10. Vakhnenko Yu.V. Electronic manual "Diagnostics and treatment of arterial hypertension". - EIS FSBEI HE Amur State Medical Academy. - 2020.

3.4. Material and technical base for conducting internship

Item No.	Name	Quantity
	Head of Department's Office	
1	Personal computer	**1**
2	Spirometer SHILLER SPIROVIT	**1**
3	Laximeter	**1**
4	Laptop	**1**
5	Systemicblock	**2**
6	Diagnostic complex for analysis of the vascular wall condition	**1**
7	Pulse oximeter	**2**
8	Printer	**1**
	Workshops No. 155-161	
9	Pulse oximeter	**5**
19	Binocular microscope	**4**
11	Spiroanalyzer	**1**
12	Single-channel electrocardiograph EK1K-01	**1**
13	Six-channel electrocardiograph ECG – 9001K	**1**
14	SpiroanalyzerFucudaSangyoST – 95	**1**
15	VitalgrafCOPD – 6	**1**
16	Diagnostic spirometric system with determination of airway resistance	**1**
17	Laser blood microcirculation analyzer LAKK-2	**1**
18	Portable diagnostic complex	**1**
19	Negatoscope	**4**
2 0	Blood Gas and Electrolyte Analyzer (Equipment Set)	**1**
2 1	Pneumatochograph with 4-seat integrator	**1**
22	Monitor	**6**
23	Brother DCP-1512R Multifunctional Device	**2**
	Computer class	
2 4	Computer	**5**
2 6	Printer	**5**
2 7	Laptop	**4**
28	Multimedia video projector	**2**
29	System unit	**5**
	Online class	**1**
	Practical skills class	
3 0	Model of an adult heart	**1**
31	Coronary anastomoses, introductory model	**1**
32	Giant Heart	**1**
33	A professional medical training mannequin simulating an adult human being for practicing advanced cardiopulmonary resuscitation techniques and training personnel in teamwork.	**1**

Multimedia materials on electronic media (CD , DVD)

Scientific library

1. Abashin A.A. Electronic atlas ECG. B in 8 parts. Ch.1 // Abashin. - 2010. - S. 200. - Format : chm / rar + 3%. - Size : 31.61 Mb
2. Aksenova GA , Domnitskaya TM Atlas of electrocardiograms with unified conclusions // Medpraktika -M. – 2008. - ISBN: 978-5-98803-147-5

3. Internal diseases in 2 volumes: textbook / Edited by N.A. Mukhin, V.S. Moiseev, A.I. Martynov - M .: "GEOTAR-Media". - 2010. - 1264 p. (C D -disc)
4. Internal Medicine. 333 test problems and commentary to them: a textbook for universities / Edited by Dvoretsky L.I., Mikhailov A.A., Strizhova N.V., Chistova V.S. – 2nd edition. - M.: "GEOTAR-Media". - 2008. - 160 p. (CD -ROM)
5. Internal Medicine: A Guide to Practical Classes in Faculty Therapy: A Textbook / Edited by Professor V.I. Podzolkov . – Moscow: GEOTAR-Media. - 2010. – 640 p. (CD)
6. Internal Medicine: Textbook. //M.: OJSC "Izdatelstvo Medicine". - 2008. - 720 p. (Educational literature for students of medical universities) (CD -ROM)
7. Vorobiev A.S. Electrocardiography. The latest reference book // Sova. – 2003. – P. 543. - Format : djvu / rar + 3%. - Size : 29.7 MB
8. Grigorov S. S., Votchal F. B., Kostyleva O. V. Title : Electrocardiogram with an artificial cardiac pacemaker // Medicine. - 1990. - P. 240. - Format : djvu / rar + 3%. - Size : 5.14 Mb
9. Diagnostics of internal diseases: medical encyclopedia // M.: 2007. (C D -disk)
10. Intensive care (national guidelines) // M.: "GEOTAR-Media". (C D -disc)
11. Kushakovsky M.S., Zhuravleva N.B. Arrhythmias and heart block (atlas of electrocardiograms) // 1981. – P. 340. - Format:djvu . - 37.2 MB
12. Medical Encyclopedia // M. - 2007. - 10 volumes (2 CD -ROMs)
13. Medical standards, clinical protocols, and procedures for providing medical care. (C D -disc)
14. Murashko V. V., Strutynsky A. V. Electrocardiography // MEDpress-infom . – 2007. - Format : djvu . - Size : 12.6 Mb
15. General Medical Practice: A Study Guide on CD-ROM for Medical Students (CD -ROM)
16. Orlov V.N. Guide to Electrocardiography // MIA. - 1997. - P. 528. - Format: DJVU. - Size: 10.1 Mb
17. Patient management plans. Therapy // M.: "GEOTAR-Media". - 2011. (C D -disc)
18. Standards of medical care (information system). - M.: "GEOTAR-Media" - 2008. (CD -ROM)
19. Strutynsky A.V. Electrocardiogram: analysis and interpretation // MEDpress-inform . - 2010. - P. 224/100. - Format : doc / rar + 3%. - Size : 37.09 Mb
20. Hampton J. Fundamentals of ECG (electrocardiography) // Medical Literature. - 2007. - P. 274. - Format: djvu . - Size: 5.41 Mb
21. Hampton J. Fundamentals of ECG (electrocardiography) // Medical Literature. - 2007. - P. 224. - Format : djvu / rar + 3%. - Size : 5.41 Mb
22. Hampton J.R. Atlas of the ECG (electrocardiogram). 150 clinical situations // Medical Literature. - 2008. - Format : djvu / rar + 3%. - Size : 48.48 Mb
23. Zimmerman F. Clinical electrocardiography // Binom. - 2008. - P. 424. - Format : djvu / rar + 3%. - Size : 24.16 MB
24. Ebert, G.-H. Simple ECG analysis: interpretations, differential diagnosis // Logosfera . - 2010. - P. 280. - Format : djvu / rar + 3%. - Size : 16.1 MB
25. Express analysis of electrocardiogram // Scientific and Medical Center "Mysl". – 2010. - Format : djvu / rar + 3%. - Size : 13.27 Mb
26. Electronic medical library: foreign practical guidelines // M.: Praktika. - 2007. (From D -disk)
27. Yartsev S.S. Electrocardiography. A practical guide and reference book for doctors // 2014. - P. 227. - Format:djvu . - Size: 26.17 MB

At the department (CD -disks) - multimedia presentations:

1. Normal ECG
2. ECG diagnostics of disorders of automatism and excitability functions
3. Supraventricular tachycardias with narrow and wide QRS complexes
4. ECG diagnostics of conduction function disorders
5. ECG diagnostics of cardiac hypertrophy
6. ECG diagnostics of chronic ischemic heart disease and myocardial infarction

7. Modern methods of functional diagnostics in cardiology
8. Rare ECG syndromes
9. ECG diagnostics of certain conditions in cardiology
10. Modern methods of functional diagnostics in pulmonology

Lectures (CD):

1. Electrophysiology of the heart. Elements of a normal ECG and their clinical significance.
2. Diagnosis of disorders of automatism and excitability
3. Diagnosis of conduction dysfunction
4. Diagnosis of chronic ischemic heart disease and myocardial infarction
5. Part 1. Diagnosis of left and right heart hypertrophy

Part 2. Methods of functional diagnostics of respiratory diseases

Videos and photographs used in teaching students (prepared by department staff)

Video films (DVD)

1. Propaedeutics of internal diseases.
2. Propaedeutics of Internal Diseases (RSMU).
3. Methodology for conducting spirometry.
4. Methodology for conducting a bronchodilator test.

Photo materials:

1. Sets of training ECGs for each practical lesson
2. Spirogram sets for Practical Lesson 10
3. Photo album "Heart rhythm and conduction disorders"
4. Photo album "ECG diagnostics of myocardial infarction"
5. Photo album "ECG diagnostics of left and right heart hypertrophy"

Albums, stands, tables, tablets, handouts used in training (prepared by department staff)

Stands

1. Conduction system of the heart
2. Anticoagulants in the treatment of heart disease
3. Differential Diagnosis in Electrocardiography
4. The development of electrocardiography as a diagnostic method in Russia and abroad
5. ECG diagnostics of coronary heart disease
6. Biventricular cardiac pacing
7. Types of cardiac pacing

Tables

1. Electrocardiographic signs of myocardial hypertrophy.
2. Normal electrocardiogram
3. Significant dates in the development of electrocardiography
4. Membrane theory of cell and muscle fiber excitation
5. Electrocardiography capabilities
6. Plan for analysis and preparation of a conclusion on electrocardiography
7. Evaluation criteria for exercise electrocardiography
8. Indications for Holter monitoring.
9. Bazett's table
10. The role of electrocardiography in the diagnosis of myocardial infarction
11. Changes in the electrocardiogram in acute myocardial infarction of various locations
12. Differential diagnostics of large-focal and small-focal myocardial infarction.
13. Types of electrocardiogram changes in ischemic heart disease
14. Unstable angina
15. Classification of cardiac arrhythmias
16. Lown's classification of ventricular extrasystoles

17. Differential diagnosis of extrasystole
18. Heart rhythm disturbances associated with changes in excitation
19. Decreased ventilation function of the lungs
20. Classification of respiratory failure by severity
21. Chronic obstructive pulmonary disease.
22. Indications for peak flowmetry in patients with bronchial asthma
23. Spirometry of the lungs
24. Indications for the use of spirography
25. Spirogram indicators
26. Applications of spirometry
27. Plethysmography

Albums

1. Cardiac rhythm and conduction disorders
2. ECG diagnostics of myocardial infarction
3. "ECG diagnostics of left and right heart hypertrophy"
4. Methods of functional diagnostics in pulmonology
5. Rare ECG syndromes in cardiology

Equipment of the Accreditation and Simulation Center used for practical training

Name of simulation equipment*	Model
A mannequin with the ability to simulate auscultatory images of heart and lung diseases	MW2810 Cardiology Patient Simulator "K" Plus Training System ver.2
General purpose negatoscope " Armed " - personnel	
Auscultation simulator with Smartoscope	Auscultation Trainer and Smartscope LF01172
On-screen virtual patient simulator	
Electrocardiograph EKZT-01-R-D 1/3-channel	
A robot simulator for training advanced cardiopulmonary resuscitation skills	Gaumard Scientific, USA
A mannequin for auscultation with the ability to simulate the auscultatory picture of various diseases	SAKAMOTO, Japan
A patient simulator simulating an adult male for ECG skills training	Laerdal ™, Norway

3.5. Professional databases, information and reference systems, electronic educational resources

Item No.	**Name resource**	**Resource Description**	**Access**	**Resource address**
Electronic library systems				
1.	"Student Consultant" Electronic Library of the Medical University.	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids,	library, individual access	http: // www . studmedlib.ru/

		and periodicals.		
2.	"Doctor's Consultant" Electronic Medical Library.	The materials in the library were developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information was prepared taking into account the position of the scientific and practical medical community (global, European, and Russian) in the relevant specialty. All materials have undergone mandatory independent peer review.	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3.	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	https://pubmed.ncbi.nlm.nih.gov/
4.	OxfordMedicine Online.	A collection of Oxford Medical Press publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include TheOxfordHandbookofClinicalMedicine and TheOxfordTextbookofMedicine , the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com
5.	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of Molecular Genetics, Russian Academy of Sciences .)	library, free access	http://humbio.ru/
6.	Medical online library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems				
7.	Russian Medical Association	A professional internet resource. Purpose: to facilitate the effective professional activities of medical personnel. Contains the charter, personnel, Structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
8.	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and	library, free access	http://webmed.irkutsk.ru/

		staff of medical universities and research institutions.		
Databases				
9.	Worldwide healthcare organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, free access	http://www.who.int/ru/
10.	Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
11.	Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications, and much more.	library, free access	https://edu.gov.ru/
12.	Federal Portal "Russian Education"	A single point of access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?prubr =2.2.81.1
Bibliographic databases				
13.	BD Russian Medicine	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
14.	eLIBRARY.RU	A Russian information portal in science, technology, medicine, and education, containing abstracts and full texts of over 13 million scientific articles and publications. The eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals.	library, free access	http://elibrary.ru/defaultx.asp
15.	Portal Electronic library of	Currently, the Electronic Library of Dissertations of the Russian State	library, free access	http://diss.rsl.ru/?me

	dissertations	Library contains more than 919,000 full texts of dissertations and abstracts.		nu=disscatalog/
16.	Medline.ru	Biomedical portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process

I. Commercial software products		
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system: MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution Terms: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunications network "Internet"

Ministry of Health of the Russian Federation. Standards of Primary Health Care – https://www.rosminzdrav.ru/61/22/stranitsa-979/stranitsa-983?1-standarty-pervichnoy-mediko-sanitarnoy-pomoschi

Ministry of Health of the Russian Federation. Standards of Specialized Medical Care - https://www.rosminzdrav.ru/ministry/61/22/stranitsa-979/stranitsa-983/2-standarty-spetsializirovannoy-meditsinskoy-pomoschi
Ministry of Health of the Russian Federation. Procedure for Providing Medical Care to the Population of the Russian Federation - https://www.rosminzdrav.ru/61/4/stranitsa-857/poryadki-okazaniya-meditsinskoy-pomoschi-naseleniyu-rossiyskoy-federatsii
Clinical guidelines of the Russian Ministry of Health – https://medi.ru/klinicheskie-rekomendatsii/
Website of the Russian Respiratory Society http://spulmo.ru
Website of the Russian Society of Cardiology http://scardio.ru

4. Evaluation Fund

4.1. Examples of test tasks for intermediate knowledge assessment

Testing is conducted in the Moodle system (email address https://educ-amursma.ru/course/view.php?id=90). There are 100 test tasks in total.

Choose 1 correct answer:

1. WHEN CORONARY ARTERY STENTING IS PLANNED, A PATIENT WITH ACS MUST TAKE CLOPIDOGREL IN A DOSE

1. 200 mg
2. 300 mg
3. 600 mg
4. 900 mg

2. IN THE EVENT OF AN ATTACK OF PRINZMETAL'S ANGINA, THE PATIENT IS SHOWN

1. bisoprolol and nitrates
2. diltiazem and nitrates
3. metoprolol and nitrates
4. ACE inhibitors

3. THE MOST ACUTE STAGE OF MYOCARDIAL INFARCTION WITH ST ELEVATION IS CHARACTERIZED BY THE FOLLOWING ECG SIGNS

1. the presence of a monophasic curve (ST elevation)
2. the presence of a monophasic curve and a pathological Q wave
3. Q wave without changes in the ST segment
4. all of the listed signs may be present

Answers : 3, 2, 1

4.2. List of practical skills that a student should possess after completing the internship

1. Methodology for collecting complaints from a patient with cardiovascular pathology
2. Methodology for collecting anamnesis of the disease in a patient with cardiovascular pathology
3. Methodology for collecting anamnesis of life in a patient with cardiovascular pathology
4. Methodology of physical examination of a patient with cardiovascular pathology

5. ECG diagnostics of myocardial infarction with ST elevation with determination of stage and localization
6. Algorithm for diagnosing myocardial infarction without ST elevation
7. Drawing up an examination plan for a patient with ACS without complications
8. Drawing up an examination plan for a patient with ACS complicated by pulmonary edema
9. Drawing up an examination plan for a patient with ACS complicated by cardiogenic shock
10. Drawing up an examination plan for a patient with ACS complicated by rhythm disturbance
11. Drawing up an examination plan for a patient with ACS complicated by cardiac ruptures
12. Drawing up a prescription sheet for a patient with ACS complicated by pulmonary edema
13. Drawing up a prescription list for a patient with ACS complicated by cardiogenic shock
14. Drawing up a prescription sheet for a patient with ACS complicated by rhythm disturbance
15. Drawing up a prescription sheet for a patient with ACS complicated by cardiac ruptures
16. Drawing up an examination plan for a patient with uncomplicated hypertensive crisis
17. Drawing up an examination plan for a patient with complicated hypertensive crisis
18. Drawing up a prescription sheet for a patient with uncomplicated hypertensive crisis
19. Drawing up a prescription sheet for a patient with complicated hypertensive crisis
20. ECG diagnostics of supraventricular paroxysmal tachycardias
21. ECG diagnostics of ventricular paroxysmal tachycardias
22. ECG diagnostics of atrial fibrillation
23. ECG diagnostics of atrial flutter
24. ECG diagnostics of Frederick's syndrome
25. Drawing up an examination plan for a patient with paroxysmal supraventricular tachycardia
26. Drawing up an examination plan for a patient with paroxysmal ventricular tachycardia
27. Drawing up an examination plan for a patient with paroxysmal atrial fibrillation
28 Drawing up an examination plan for a patient with tachystolic atrial fibrillation and signs of heart failure
29. Drawing up an examination plan for a patient with paroxysmal supraventricular tachycardia in Wolff-Parkinson-White syndrome
30. Drawing up a prescription sheet for a patient with paroxysmal ventricular tachycardia
31. Drawing up a prescription sheet for a patient with paroxysmal atrial fibrillation
32. Drawing up a prescription sheet for a patient with tachystolic atrial fibrillation and signs of heart failure
33. Drawing up a prescription sheet for a patient with paroxysmal supraventricular tachycardia in Wolff-Parkinson-White syndrome
34. Conducting differential diagnostics of ventricular tachycardia and supraventricular tachycardia with wide QRS complexes
35. Termination of supraventricular tachycardia using ― vagal tests‖
36. Determination of indications for drug cardioversion in paroxysmal atrial fibrillation/flutter and prescription of drugs indicating dosages suitable for this purpose in accordance with the underlying diagnosis
37. Determination of indications for electrical cardioversion in paroxysmal atrial fibrillation/flutter
38. Algorithm for preparing a patient for electrical cardioversion
39. Determination of indications for radiofrequency/ cryoablation in atrial fibrillation/flutter
40. Algorithm for preparing a patient for radiofrequency/ cryoablation for atrial fibrillation/flutter
41. Determination of indications for surgical treatment of Wolff- Parkinson -White syndrome
42. ECG diagnostics of sinoatrial block
43. ECG diagnostics of AV block
44. ECG diagnostics of right bundle branch block
45. ECG diagnostics of left bundle branch block
46. ECG diagnostics of both bundle branch block

47. Drawing up an examination plan for a patient with high-degree sinoatrial block
48. Drawing up an examination plan for a patient with high-degree AV block
49. Drawing up a prescription sheet for a patient with high-degree sinoatrial block
50. Drawing up a prescription sheet for a patient with high-degree AV block
51. Drawing up a prescription sheet for a patient with Frederick's syndrome
52. Determination of indications for temporary cardiac pacing in high-degree SA and AV blocks
53. Determination of indications for permanent cardiac pacing in high-degree SA and AV blocks
54. Justification for the choice of a pacemaker depending on the specific clinical situation.
55. Determination of indications for implantation of a three-chamber pacemaker
56. ECG analysis with an implanted single-chamber pacemaker
57. ECG analysis with an implanted dual-chamber pacemaker
58. ECG analysis with a three-chamber pacemaker
59. 12-lead ECG recording
60. Interpretation of Holter monitoring results

4.3. List of questions for the test

1. What does a medical history include?
2. What does a life history include?
3. What does a physical examination of the cardiovascular system include?
4. ECG signs of myocardial infarction with ST elevation in the acute stage
5. ECG signs of myocardial infarction with ST elevation in the subacute stage
6. ECG signs of myocardial infarction with ST elevation in the scarring stage
7. Algorithm for diagnosing myocardium with ST elevation
8. Algorithm for diagnosing myocardial infarction without ST elevation
9. Algorithm for diagnosing ACS complicated by pulmonary edema
10. Algorithm for diagnosing ACS complicated by cardiogenic shock
11. Algorithm for diagnosing ACS complicated by rhythm disturbance
12. Algorithm for diagnosing ACS complicated by cardiac ruptures
13. Algorithm for diagnosing ACS complicated by pulmonary edema
14. Algorithm for the treatment of ACS complicated by cardiogenic shock
15. Algorithm for the treatment of ACS complicated by rhythm disturbances
16. Algorithm for the treatment of ACS complicated by cardiac ruptures
17. Algorithm for examining a patient with uncomplicated hypertensive crisis
18. Algorithm for examining a patient with complicated hypertensive crisis
19. Algorithm for treating a patient with uncomplicated hypertensive crisis
20. Algorithm for treating a patient with complicated hypertensive crisis
21. ECG signs of supraventricular paroxysmal tachycardia
22. ECG signs of ventricular paroxysmal tachycardia
23. ECG signs of atrial fibrillation
24. ECG signs of atrial flutter
25. ECG signs of Frederick's syndrome
26. Algorithm for examining a patient with paroxysmal supraventricular tachycardia
27. Algorithm for examining a patient with paroxysmal ventricular tachycardia
28. Algorithm for examining a patient with paroxysmal atrial fibrillation
29. Algorithm for examining a patient with tachystolic atrial fibrillation and signs of heart failure
30. Algorithm for examining a patient with paroxysmal supraventricular tachycardia in Wolff-Parkinson-White syndrome
31. Treatment algorithm for a patient with paroxysmal ventricular tachycardia
32. Algorithm for treating a patient with paroxysmal atrial fibrillation
33. Treatment algorithm for a patient with tachystolic atrial fibrillation and signs of heart failure
34. Algorithm for treating a patient with paroxysmal supraventricular tachycardia in Wolff-Parkinson-White syndrome

35. Differential diagnostic criteria for ventricular tachycardia and supraventricular tachycardia with wide QRS complexes
36. Methods of stopping supraventricular tachycardia using ― vagal tests‖
37. Indications for drug-induced cardioversion in paroxysmal atrial fibrillation/flutter and prescription of medications with dosages appropriate for this purpose in accordance with the underlying diagnosis
38. Indications for electrical cardioversion in paroxysmal atrial fibrillation /flutter
39. Algorithm for preparing a patient for electrical cardioversion
40. Indications for radiofrequency/ cryoablation in atrial fibrillation/flutter
41. Algorithm for preparing a patient for radiofrequency/ cryoablation for atrial fibrillation /flutter
42. Indications for surgical treatment of Wolff- Parkinson -White syndrome
43. ECG signs of sinoatrial block
44. ECG signs of AV block
45. ECG signs of right bundle branch block
46. ECG signs of left bundle branch block
47. ECG signs of block of both branches of the His bundle
48. Algorithm for examining a patient with high-degree sinoatrial block
49. Algorithm for examining a patient with high-degree AV block
50. Algorithm for treating a patient with high-degree sinoatrial block
51. Algorithm for treating a patient with high-degree AV block
52. Treatment algorithm for a patient with Frederick's syndrome
53. Indications for temporary cardiac pacing in high-degree SA and AV blocks
54. Indications for permanent cardiac pacing in high-degree SA and AV blocks
55. Selecting the type of pacemaker depending on the specific clinical situation.
56. Indications for implantation of a three-chamber pacemaker
57. Changes in the ECG with an implanted single-chamber pacemaker
58. Changes in the ECG with an implanted dual-chamber pacemaker
59. Changes in the ECG with a three-chamber pacemaker
60. Safety precautions when recording an ECG
61. Sensor installation points when recording 12-lead ECG
62. Holter monitoring capabilities

MODULE 5 "ONCOLOGICAL DISEASES, ONCOPROPHYLAXIS, PALLIATIVE CARE"

1.2 Purpose and objectives of the practice

The purpose of the internship is to practically apply theoretical knowledge in oncology, to develop practical skills in students in providing outpatient medical care to cancer patients in a three-tier system of specialized oncological care, prevention, and principles of providing palliative care to patients with malignant neoplasms.

The objectives of the internship are to develop a set of work activities and skills within the framework of mastering job functions: preparing and entering medical documentation for cancer patients, examining patients with suspected malignant neoplasms and tumors to establish a diagnosis, developing a specialized treatment plan for patients with malignant neoplasms and monitoring its effectiveness. Knowledge of the side effects and complications of specialized treatments and the ability to make adjustments. Mastering methods of primary, secondary, and tertiary cancer prevention, as well as medical rehabilitation.

1.3. The place of practice in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education (2020), the " Oncological Diseases, Oncoprophylaxis , Palliative Care" module of the "General Medical Practice" industrial practice program is part of the core component, Block 2. The total workload is 36 hours and is completed in the 11th semester of the sixth-year student. Assessment is by credit and grade in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, individual problem-based assignment for industrial practice, calendar schedule for completing the practice .

1.6. Requirements for students

To master the practice, knowledge, skills and abilities formed by previous disciplines/practices are necessary:
Latin
Knowledge: basic medical and pharmaceutical terminology in Latin.
Skills: be able to apply knowledge for communication and obtaining information from medical literature, medical documentation
Skills: applies medical and pharmaceutical terminology in Latin in professional activities
Professional foreign language
Knowledge: basic medical and pharmaceutical terminology in a foreign language
Skills: be able to apply knowledge for communication and obtaining information from foreign sources
Skills: applies medical and pharmaceutical terminology in a foreign language in professional activities
Bioethics
Knowledge: moral and ethical standards, rules and principles of professional medical conduct, rights of the patient and the doctor, basic ethical documents regulating the activities of the doctor
Skills : build and maintain working relationships with patients and other team members.
Skills: applies moral and ethical standards, rules and principles of professional medical conduct, the rights of the patient and the doctor, the main ethical documents regulating the activities of the doctor in his professional activities
Biochemistry
Knowledge : blood composition, biochemical blood constants, hormones, buffer systems,

hemoglobin oxygenation factors, erythrocyte metabolism
Skills: analyze the contribution of biochemical processes to the functioning of organs and the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems; interpret the results of the most common laboratory diagnostic methods to identify disorders in diseases of internal organs and occupational diseases.
Skills: applies knowledge of blood composition, blood biochemical constants, hormones, buffer systems, hemoglobin oxygenation factors, and red blood cell metabolism in their professional activities
Biology
Knowledge: the laws of genetics and its importance for medicine; the patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases; the biosphere and ecology, the phenomenon of parasitism and bioecological diseases
Skills: analyze patterns of heredity and variability in the development of diseases of internal organs and occupational diseases.
Skills: applies knowledge of the laws of genetics and its importance for medicine; the patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases in their professional activities
Normal physiology
Knowledge : physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in normal conditions
Skills: analyze the importance of regulation of biological processes in the human body on the functioning of the cardiovascular, digestive, urinary, respiratory, and hematopoietic systems.
Skills: applies knowledge of the physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in their professional activities
Topographic anatomy, operative surgery
Knowledge : structure, topography of cells , tissues, organs and systems of the body in interaction with their function in normal and pathological conditions
Skills : analyze the functional features of the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems in normal and pathological conditions.
Skills: applies knowledge about the structure, topography of cells , tissues, organs and systems of the body in interaction with their function in norm and pathology in their professional activities
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in body tissues in pathologies of the cardiovascular, respiratory, digestive , urinary and blood systems
Skills: determine the contribution of pathophysiological processes to the development of diseases of internal organs.
Skills: applies knowledge of morphological changes in body tissues in pathologies of the cardiovascular, respiratory, digestive , urinary and blood systems in their professional activities
Pharmacology
Knowledge : pharmacokinetics, pharmacodynamics , side effects of various drugs on the

body
Skills: write prescriptions for prescribed medications, know the indications and contraindications for their use.
Skills: applies knowledge of pharmacokinetics, pharmacodynamics , and side effects of various drugs on the body in his/her professional activities
Propaedeutics of internal diseases
Knowledge: collection of complaints, anamnesis **,** objective methods of examination of patients (palpation, percussion, auscultation
Skills : conduct anamnestic and physical examination, identify the main syndromes and symptoms of diseases of internal organs.
Skills: applies knowledge of collecting complaints, anamnesis, objective methods of examining patients (palpation, percussion, auscultation) **in his professional activities**
Public health and healthcare, health economics
Knowledge: Fundamentals of the Russian Federation legislation on public health protection, key regulatory and technical documents; population health indicators, factors shaping human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional , professional, genetic)
Skills: plan, analyze, and evaluate the quality of medical care, the health status of the population, and the impact of environmental and occupational factors; calculate medical statistics.
Skills: applies knowledge of the fundamentals of the Russian Federation legislation on public health protection, the main regulatory and technical documents; population health indicators, factors that shape human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional , professional, genetic) in their professional activities
Pathological anatomy, clinical pathological anatomy
Knowledge: etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes.
Skills: visually assess and record changes in the organs and tissues of a corpse, substantiate the nature of the pathological process and its clinical manifestations; provide an opinion on the cause of death and formulate a pathological diagnosis;
Skills: applies knowledge of the etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes in their professional activities
Emergency conditions in therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in therapy
Skills: diagnose an urgent condition under the main therapeutic conditions, formulate and justify a clinical diagnosis, conduct a differential diagnosis and provide emergency care.
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in their professional activities

Faculty therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems
Skills: formulate and justify a clinical diagnosis, prescribe an examination and treatment plan for the main therapeutic diseases, diagnose an urgent condition and provide emergency care.
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems in their professional activities
Hospital therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems
Skills: formulate and justify a clinical diagnosis, prescribe a plan for examination of one's professional activity and treatment for the main therapeutic diseases
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems in their professional activities

1.7. Interdisciplinary links with subsequent disciplines/practices

Knowledge and skills acquired during the course of studying the module and necessary for studying subsequent disciplines and practices:

No.	Name of subsequent disciplines	Module "Oncological diseases, oncoprophylaxis , palliative care"
1.	Clinical pharmacology	+
2.	Forensic medicine	+
3.	Outpatient therapy	+
4.	Hospital therapy	+

1.8. Requirements for the results of the internship

Mastering the module ― Oncological diseases, oncological prevention , palliative care‖ is aimed at the formation and improvement of the following universal (**UC**), general cultural (GPC) and professional competencies (PC): **UC** -1, **UC** -6, GPC-1, 5, 8, PC-1, PC-2, PC-4, PC-5, PC-6, PC-9, PC-14.

No. p/p	Code and name of competence	Code and the name of the indicator of achievement of competence	As a result of studying the academic discipline, the student must:		
			Know	**Be able to**	**To own**
Universal competencies					
1	**UC -1** Capable realize critical analysis of problematic situations based on a systems approach, to develop strategy of action	**AI UC-1.1.** Analyzes a problem situation as a system, identifying its components and the connections between them. **AI UC-1.2.** Identifies gaps in information needed to solve problem situations and designs processes to eliminate them. **AI UC-1.3.** Applies systems analysis to resolve problematic situations in the professional sphere.	Concepts, principles and methods of self-development, self-realization, self-education, and the use of creative potential	Use the principles and methods of self-development, self-realization, self-education, and the use of creative potential	Methods of self-development, self-realization, self-education, and the use of creative potential
2	**UC -6** Capable to identify and implement priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	**AI UC -6.1.** Assesses his personal, situational and time resources and uses them optimally to complete the assigned task. **AI UC-6.3.** Carries out critical self-analysis of the results of one's own activities.	Principles of using information, bibliographic resources, information and communication technologies, taking into account the basic requirements of information security, medical and biological terminology.	Use information, bibliographic resources, and information and communication technologies taking into account the basic requirements of information security	Methods for solving standard professional tasks using information and bibliographic resources, medical and biological terminology, information and communication technologies, and taking into account the basic requirements of

					information security
General professional competencies					
3	**GPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	**AI GPC-1.1.** Provides professional services activities in accordance with ethical standards and moral principles. **AI GPC-1.2.** Organizes professional activities guided by legislation in the field of healthcare, knowledge of medical ethics and deontology. **AI GPC-1.3.** Has presentation skills independent point of view, analysis and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and round tables, principles of medical deontology and medical ethics.	Principles of using information, bibliographic resources, information and communication technologies, taking into account the basic requirements of information security, medical and biological terminology.	Use information, bibliographic resources, and information and communication technologies taking into account the basic requirements of information security	Methods for solving standard professional tasks using information and bibliographic resources, medical and biological terminology, information and communication technologies, and taking into account the basic requirements of information security
4	**GPC-5.** Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	**AI GPC -5.1.** Knows the functional systems of the human body, their regulation and self-regulation when interacting with the external environment under normal conditions and during pathological processes. **AI GPC -5.2.** Knows the etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, and the basic concepts of nosology. **AI GPC-5.3.**	Methods for analyzing the results of one's own activities. Concept and types professional mistakes.	Analyze the results of your own activities to prevent professional mistakes	Methods for analyzing the results of one's own activities to prevent professional mistakes

		Knows the indicators morphofunctional, physiological state of a healthy person and is able to measure/determine them. **AI GPC-5.4.** Applies indicators morphofunctional, physiological state and pathological process for examination of the human body for the purpose of establishing a diagnosis, appointment treatment and monitoring of its effectiveness and security. **AI GPC-5.5.** Analyzes and interprets macroscopic and microscopic changes in normal and pathologically altered tissues and organs. **AI GPC-5.6.** Interprets the results of biopsy and surgical material studies to solve professional problems and formulate a diagnosis in accordance with the ICD.			
5	**GPC-8.** Capable of implementing and monitoring the effectiveness of medical rehabilitation of a patient, including the implementation of individual rehabilitation and habilitation programs	**AI GPC-8.1.** Assesses the functional reserves and adaptive abilities of a person, reduced in the process adverse impact of environmental factors and activities or as a result of illness. **AI GPC-8.2.** Identifies risk groups with the aim of	Drug nomenclature, pharmacodynamics, pharmacokinetics, indications and contraindications, primary mechanisms of action, and clinical effects. Treatment regimens.	Use medications and other substances and their combinations when solving professional problems	Methods of using drugs and other substances and their combinations in solving professional problems

	for people with disabilities, and assessing the patient's ability to perform work activities	recovery and determination of rehabilitation potential for subsequent restorative treatment and rehabilitation of patients. **AI GPC-8.3.** Develops and organizes a plan medical events rehabilitation of patients, including non-drug methods treatment (natural healing factors, physiotherapy and reflexology, therapeutic exercise). **AI GPC-8.4.** Interprets the results clinical, laboratory and instrumental diagnostic methods to monitor the effectiveness of medical rehabilitation programs and assess the patient's ability to perform work activities.			
6	**GPC-11** Capable prepare and apply scientific, scientific-industrial, design, organizational-managerial and regulatory documentation in the healthcare system	**AI GPC 11.1.** Applies modern methods of collecting and processing information, conducts statistical analysis of the obtained data in a professional manner areas and interprets results for solving professional problems. **AI GPC-11.2.** Identifies and analyzes problematic situations, carries out search and selection of scientific, regulatory and legal organizational and administrative documentation in accordance with	Types and methods of use of medical devices provided for by the procedures for providing medical care in oncology	Use medical devices as provided for by the procedures for providing medical care	Methods of using medical devices provided for by the procedures for providing medical care

		with given goals. **AI GPC-11.4.** Conducts scientific and practical research, analyzes information using the historical method and prepares publications based on the research results. **AI GPC-11.5.** Analyzes and compiles accounting and reporting medical documentation and calculates qualitative and quantitative indicators used in professional activities.			
Professional competencies					
8	**PC-1** Able to provide medical care in urgent and emergency situations	**AI PC - 1.1.** emergency medical care **AI PC -1.2.** Provides emergency medical care to patients with sudden acute illnesses, conditions, and exacerbations of chronic diseases without obvious signs of a threat to the patient's life. **AI PC -1.3.** Identifies conditions that require provision of medical care in an emergency form **AI PC - 1.4.** Provides emergency medical care to patients conditions that pose a threat to the patient's life **AI PC -1.5.** Reveals signs	Principles and methods for maintaining and strengthening children's health, including the formation of a healthy lifestyle, prevention of the occurrence and (or) spread of diseases, their early diagnosis, identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on children's health	To implement a set of measures aimed at preserving and strengthening the health of children and including the formation of a healthy lifestyle, the prevention of the occurrence and (or) spread of diseases, their early diagnosis, the identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on the health of children	A set of measures aimed at maintaining and strengthening the health of children and including the formation of a healthy lifestyle, the prevention of the occurrence and (or) spread of diseases, their early diagnosis, the identification of the causes and conditions of their occurrence and development, as well as aimed at eliminating the harmful effects of environmental factors on the health of children

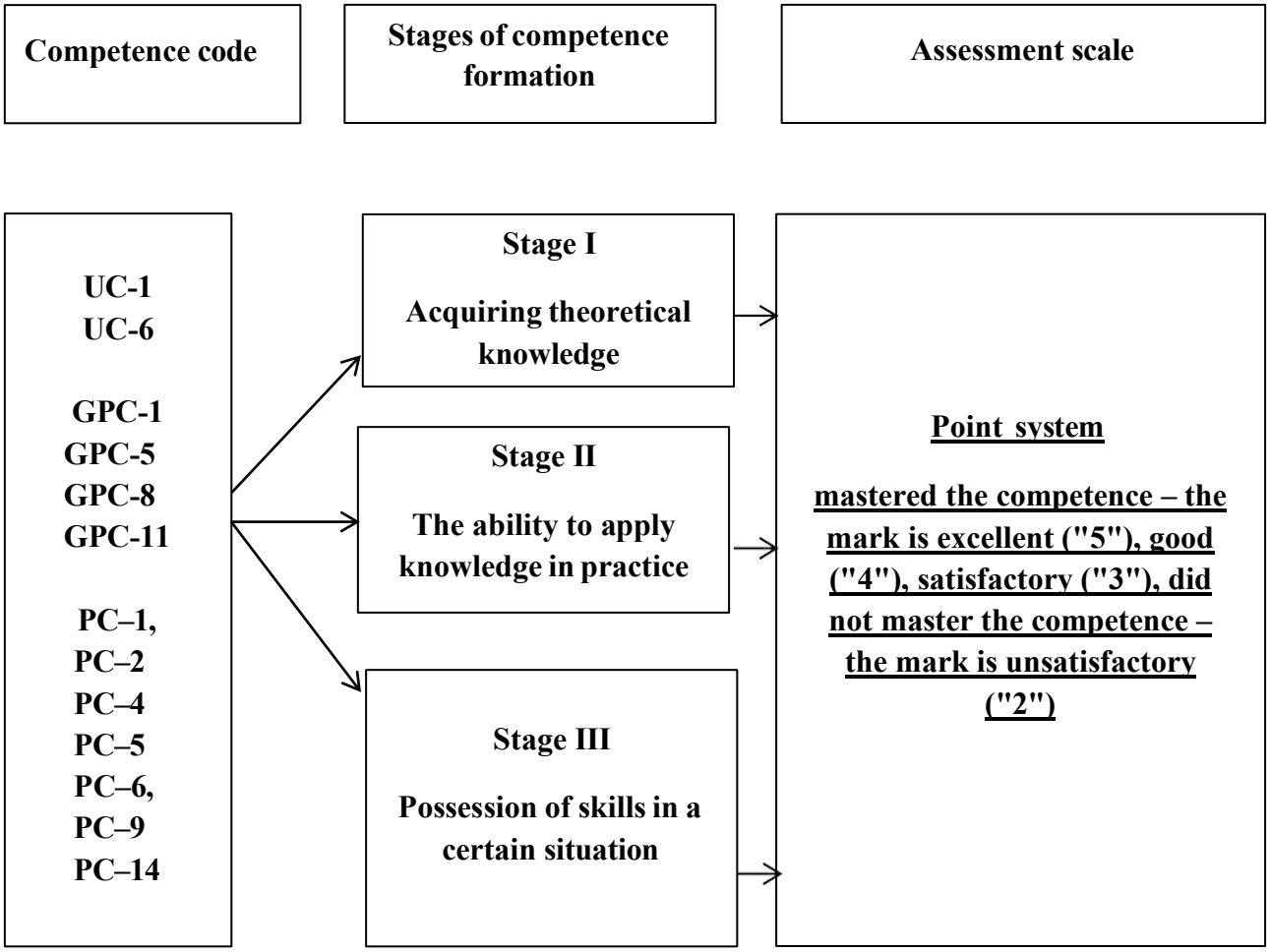
		sudden termination circulation and respiration **AI PC - 1.6.** Carries out basic activities cardiopulmonary resuscitation in in combination with electropulse therapy (defibrillation) in case of clinical death of the patient (in case of sudden cessation of circulation and/or respiration) .			
9	**PC-2.** Capable of collecting and analyzing complaints, life history and anamnesis diseases patient for the purpose establishments diagnosis	**AI PC -2 .1.** Establishes rapport with the patient. **AI PC -2 .2.** Collects complaints, specifies them, highlighting the main and secondary ones. **AI PC -2 .3.** Collects and analyzes information about the onset of the disease, the presence of risk factors, the dynamics of symptom development and the course of the disease. **AI PC -2 .4.** Analyzes the timing of the first and repeated requests for medical care, the volume of therapy administered, and its effectiveness. **AI PC -2 .5.** Collects and evaluates information about the patient's medical history, including data on past illnesses, injuries and surgeries, hereditary, professional, and epidemiological history.	A method for collecting and analyzing patient complaints, data from his anamnesis, results of examination, laboratory, instrumental, pathological and other studies in order to recognize a condition or establish the presence or absence of a disease	Collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental, pathological and other studies in order to recognize the condition or establish the presence or absence of a disease	Methods of collecting and analyzing patient complaints, data from his anamnesis, results of examination, laboratory, instrumental, pathological - anatomical and other studies in order to recognize the condition, or establish the fact of the presence or absence of a disease

10	**PC-4.** Capable determine indications for hospitalization, indications for the provision of emergency, including emergency specialized, medical care	**AI PC-4.1.** Determines medical indications for emergency care, including emergency specialized medical care **AI PC-4.2.** Refer the patient for specialized medical care in an inpatient setting or in a day hospital setting if there are medical indications in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC-4.3.** Uses medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, care taking into account the standards of medical care	The procedure and principles for providing primary health care to children with sudden, acute eye diseases, conditions, exacerbation of chronic eye diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care	rovide primary health care to children with sudden, acute eye diseases, conditions, exacerbation of chronic eye diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care	Methods of providing primary health care to children with sudden, acute eye diseases, conditions, exacerbation of chronic eye diseases that are not accompanied by a threat to the patient's life and do not require emergency medical care
11	**PC-5.** Able to prescribe treatment to patients	**AI PC -5. 1.** Draws up a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC -5. 2.**	A method for collecting and analyzing patient complaints, his anamnesis data, examination results, laboratory, instrumental, pathological - anatomical and other studies in order to recognize a condition or establish the presence	Collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental, pathological and other studies in order to recognize the condition or establish the presence or absence of a disease	Methods of collecting and analyzing patient complaints, data from his anamnesis, results of examination, laboratory, instrumental, pathological - anatomical and other studies in order to recognize the condition, or establish the fact of

		Prescribes medications, medical devices and therapeutic nutrition taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical guidelines, taking into account the standards of medical care **AI PC -5. 3.** Prescribes non-drug treatment treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical guidelines, taking into account medical standards help **AI PC -5. 4.** Provides palliative care in collaboration with specialist doctors and other healthcare professionals **AI PC -5. 5.** Provides personalized treatment to patients, including pregnant women, elderly patients, and the elderly.	or absence of a disease		the presence or absence of a disease
12	**PC-6.** Capable of monitoring the effectiveness and safety of the therapy being administered	**AI PC -6.1.** Assesses the effectiveness and safety of drugs, medical devices and therapeutic nutrition and other treatment methods **AI PC-6.2.** Takes into account the	The main pathological conditions, symptoms, syndromes of malignant neoplasms, nosological forms in accordance with the International Statistical Classification	Diagnose the main pathological conditions, symptoms, malignant neoplasms, and nosological forms in accordance with ICD-10	Methods for diagnosing the main pathological conditions, symptoms, disease syndromes, and nosological forms in accordance with ICD-10

		pharmacodynamics and pharmacokinetics of the main groups of drugs, prevents the development of adverse drug reactions, and corrects them if they occur.	of Diseases and Related Health Problems in accordance with ICD-10		
13	**PC-9.** A method for conducting preventive medical examinations , clinical examinations and implementing clinical observation of patients with chronic diseases	**AI PC 9.1.** Organizes and conducts medical examinations taking into account age, health status, profession in accordance with current regulatory legal acts and other documents **AI PC 9.2.** Conducts medical examination of the adult population for the purpose of early detection of chronic non-communicable diseases, the main factors risk of their development	Principles of management and treatment of patients with various nosological forms in outpatient and day hospital settings	Treat patients with various nosological forms in outpatient and day hospital settings	Methods of management and treatment of patients with various nosological forms in outpatient and day hospital settings
14	**PC-14.** Capable of participating in research activities	**AI PC -14. 1.** Participates in scientific research research **AI PC -14. 2.** Analyzes medical information based on evidence-based medicine **AI PC -14.3** Implements into practice Healthcare: new methods and techniques aimed at protecting the health of the adult population	Principles of Analysis and Public Presentation of Medical Information. Fundamentals of Evidence-Based Medicine	Analyze and publicly present medical information based on evidence-based medicine	Methods of analyzing and publicly presenting medical information. Fundamentals of evidence-based medicine

1.9. Stages of competence development and description of assessment scales



2. Structure and content of practice

2.1 Scope of practice

Scope of practice	
Total labor intensity in hours, total	431
Labor intensity in hours of the Module " Oncological diseases, cancer prevention , palliative care"	36 hours
Total workload in credit units, total	12 z.e.
Type of intermediate assessment	Credit with grade

2.2. Type of practice

Type of practice - industrial .

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

"3" – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

"5" - when testing, up to 10% of incorrect answers are allowed.

"4" - allows up to 20% of incorrect answers during testing.

"3" - allows up to 30% of incorrect answers during testing.

"2" - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

"5" – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

"4" – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

"3" – the student has only some practical skills and abilities.

"2" - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.
"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.

"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.

"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.

"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Educational, methodological, logistical and informational support for practice

3.1 Main literature

3.2 Further reading

MAIN LITERATURE:	Source link
1. Trufanov, G. E. Radiation therapy (radiotherapy) / G. E. Trufanov [et al.] ; edited by G. E. Trufanov - Moscow: GEOTAR-Media, 2018. - 208 p. - ISBN 978-5-9704-4420-7. Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970444207.html
2.Cherenkov, V. G. Oncology : textbook / V. G. Cherenkov. - 4th ed. , espr . and additional. - Moscow : GEOTAR-Media, 2020. - 512 p. : ill. - 512 p. - ISBN 978-5-9704-5553-1. Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970455531.html
3.Davydov, M. I. Oncology : textbook / M. I. Davydov, Sh. H. Gantsev [et al.] . - Moscow : GEOTAR Media, 2020. - 920 p. : ill. - 920 s. - ISBN 978-5-9704-5616-3. Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970456163.html
ADDITIONAL REFERENCES:	
1. Gorbunova, V. A. Neuroendocrine tumors. General principles of diagnosis and treatment: a practical guide / edited by V. A. Gorbunova. - Moscow: GEOTAR-Media,	http://www.studmedlib.ru/book/ISBN9785970459973.html

2021. - 600 p. - ISBN 978-5-9704-5997-3. - Text: electronic (accessed: 05.05.2021). - Access mode : by subscription.	
2. Gancev, SH Skin cancer. Melanoma / Gancev SH , Kzyrgalin SH , Timin KE. - Moscow: GEOTAR-Media, 2020. - 160 p. (Series "Oncology") - ISBN 978-5-9704-5658-3. - Text: electronic (date accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970456583.html

3.3. Educational and methodological support for practice prepared by the department staff

1. O.V. Lysenko. Methodological guidelines for teachers for conducting practical classes on the fundamentals of oncology. Blagoveshchensk. - 2017. 12 p.

2. T.N. Korobkova. Methodological recommendations for students for practical classes in the oncology course. Blagoveshchensk. - 2017. 9 p.

3. O. V. Lysenko. Lecture notes on oncology. Blagoveshchensk. - 2015. 20 p.

4. V.P. Gordienko. Methodological recommendations "Independent work of students on the course of oncology". Blagoveshchensk. - 2016. 4 p.

5. T. N. Korobkova. Tutorial for writing a medical history of an oncology patient. Blagoveshchensk. - 2016. 4 p.

6. O. V. Lysenko, O. A. Mazharova. Study guide "The thyroid gland and its diseases". Blagoveshchensk. - 2014. 30 p.

7. V.P. Gordienko. Study guide "Lung tumors. Mediastinal neoplasms". Blagoveshchensk. - 2015. 4 p.

8. O. V. Lysenko. Study guide "Diseases of the mammary gland". Blagoveshchensk. - 2015. 10 p.

9. Sets of situational problems by topic

- breast tumors
- thyroid tumors
- skin tumors
- malignant lymphomas
- tumors of the kidneys and retroperitoneal space
- childhood tumors
- deontology in pediatric oncology

3.4. Material and technical base for conducting internship

Discipline	Names of classroom equipment	Square (sq.m.)	Number of seats	Address of classrooms
Oncology	Two oncology and radiation therapy training rooms. Basic equipment: whiteboard, tables and chairs, bookcase, wall-mounted screen, multimedia projector, laptop; visual aids, display stands.	48	24	675006, Amur Region, Blagoveshchensk, Oktyabrskaya St., Building 110, 1st floor, Room No. 53

Department equipment used for teaching students		
1	ACER laptop and Epson video projectorEMP -X5	1
2	X-ray television complex KRT "OKO"	1
3	Mammograph "Elektronika"; mammograph " Mammodiagnost "	2
4	Philips BigBore 16- slice CT scanner	1
5	Single-photon emission computed tomography scanner Medisco 101043	1
6	Mindray DC 8 Expert Ultrasound Scanner	1
7	Negatoscope	3
Multimedia materials, electronic library		
1	www . medlib . ru - student advisor	
2	MD Consul - First Consult	
3	Database "Medicine"	
4	Polpred . com – media review	
5	Electronic Business Encyclopedia "Medical Management"	
6	Computerized knowledge test on topics covered in practical classes and lectures	
Photo and video materials		
1	Microphotographs (slides): Malignant neoplasms of the skin and soft tissues Breast cancer	

	Stomach cancer
2	Presentations of lectures and practical classes: "General Oncology Issues. Structure and Organization of Cancer Care in the Russian Federation" Epithelial tumors of the skin "Melanoma" Breast cancer - radiation mastectomy syndrome Lung cancer Hodgkin's disease Stomach cancer Lung cancer Emergency Conditions in Oncology Chemotherapy for malignant tumors Esophageal cancer Colorectal cancer
3	Videos: Biopsy techniques Breast surgery Thyroid Cancer Surgery Methods of isotope examination of patients with thyroid cancer Endoscopic surgery for tumors of the lung and mediastinum
Other visual aids	
1	Thematic stands: Lung cancer Stomach cancer Breast cancer

	Chemotherapy of malignant neoplasms The Structure of Cancer Care in the Russian Federation

3.5. Professional databases, information and reference systems, electronic educational resources

Item No.	Name resource	Resource Description	Access	Resource address
Electronic library systems				
1.	"Student Consultant" Electronic Library of the Medical University.	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/
2.	"Doctor's Consultant" Electronic Medical Library.	The materials in the library were developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information was prepared taking into account the position of the scientific and practical medical community (global, European, and Russian) in the relevant specialty. All materials have undergone mandatory independent peer review.	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3.	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	https://pubmed.ncbi.nlm.nih.gov/
4.	OxfordMedicine Online.	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com

5.	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of Molecular Genetics, Russian Academy of Sciences .)	library, free access	http://humbio.ru/
6.	Medical online library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems				
7.	Russian Medical Association	A professional internet resource. Purpose: to facilitate the effective professional activities of medical personnel. Contains the charter, personnel, Structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
8.	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http://webmed.irkutsk.ru/
Databases				
9.	Worldwide healthcare organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, free access	http://www.who.int/ru/
10.	Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
11.	Ministry of Education	The website of the Ministry of	library, free	https://edu

	of the Russian Federation.	Education of the Russian Federation contains news, newsletters, reports, publications, and much more.	access	.gov.ru/
12.	Federal Portal "Russian Education"	A single point of access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?prubr=2.2.81.1
Bibliographic databases				
13.	BD Russian Medicine	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
14.	eLIBRARY.RU	A Russian information portal in science, technology, medicine, and education, containing abstracts and full texts of over 13 million scientific articles and publications. The eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals.	library, free access	http://elibrary.ru/defaultx.asp
15.	Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/

16.	Medline.ru	Biomedical portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process

I. Commercial software products		
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system: MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution Terms: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html

5.	LibreOffice	Free Distributable License: https://en.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunication network "Internet"

https:// www.rosminzdrav.ru /ministry/61/22/page-979/page-983/1-standardty-primary-medic about - sanitarnoy-pomoschi

https:// www.rosminzdrav.ru /ministry/61/22/page-979/page-983/2standardty-specialized-medical-aid

https:// www.rosminzdrav.ru /ministry/61/4/stranitsa857/poryadki-okazaniya-meditsinskoy-pomoschi-naseleniyu-rossiyskoy-federatsii

http :// www . femb . ru Clinical guidelines)

EBS

www . medlib . ru – student advisor

(http :// www . amursma . ru / sveden / obiects / biblioteki / elektronnye - obrazovatelnye - resursy /)

Professional databases, information reference systems, electronic educational resources

No. p.p.	Name resource	Resource Description	Access	Resource address
Electronic library systems				
1.	Student Consultant. Medical University Electronic Library	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/
2.	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	http:// www. ncbi.nlm.nih . gov/ pubmed /
3.	Oxford Medicine Online	A collection of Oxford Press medical publications, bringing together over 350 titles into a	library, free access	http://www.oxfordmedicine.com

		single, cross- searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are continually updated.		
Information systems				
4.	Russian Medical Association	A professional online resource. Purpose: to promote the effective professional activities of medical personnel. Contains the charter, personnel, structure, membership rules, and information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
5.	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases				
6.	World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, freeaccess	http://www.who.int/ru/
7.	Ministry of Education and Science of the Russian Federation	The official resource of the Ministry of Education and Science of the Russian Federation. The site contains news, newsletters, reports, publications, and much more.	library, free access	http : //минобрнауки.рф/
8.	Federal Portal "Russian Education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?p rubr=2.2.81.1
Bibliographic databases				

9.	Database "Russian Medicine"	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
10.	ELIBRARY.RU	A Russian information portal in the fields of science, technology, medicine, and education, containing abstracts and full texts of more than 13 million scientific articles and publications. eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals .	library, free access	http://elibrary.ru/defaultx.asp
11.	Portal Electronic Library of Dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/

4. Assessment Fund

4.1. Examples of test tasks for intermediate knowledge assessment

Testing is carried out in the Moodle system (http://194.186.41.210/course/index.php?categoryid=40) The total number of tests posted in the system is 200 tests .

1. ARE PATIENTS WITH STOMACH ULCERS SUBJECT TO DYNAMIC MONITORING?

A) no;
B) always;
B) for long-term ulcers.

2. CHARACTERISTIC MANIFESTATIONS OF INITIAL FORMS OF ESOPHAGEAL CANCER

A) a feeling of scratching behind the breastbone or sticking when swallowing;
B) hoarseness of voice;
B) hypersalivation ;
D) dysphagia I - II degrees.

3. TREATMENT OF LOCALIZED FORMS OF SOFT TISSUE SARCOMAS

A) physiotherapy (including resorption);
B) economical excision of the tumor;
B) combination treatment;
D) chemotherapy.

Answers: B, A, C

4.2. List of practical skills that a student should have after completing the internship

In the section on general oncology:

1. Collect anamnesis, analyze the nature of complaints (organ dysfunction, pain syndrome, pathological discharge, changes in general condition).
2. Conduct a physical and general clinical examination of an oncology patient , Analyze the data of the general clinical examination.
3. Conduct a physical examination of the primary tumor site, areas of regional and distant metastasis.
4. Establish a preliminary diagnosis of oncological disease.

Under the section on radiation therapy:

1. Formulate a preliminary diagnosis (with subsequent referral to a specialist).
2. Draw up a plan for clinical and instrumental examination of a patient with suspected malignant tumor.
3. Evaluate the results of instrumental research methods:

X-ray, endoscopic, radioisotope, ultrasound, CT and MRI, cytological and histological.

4. Compilation of topographic and dosimetric maps of radiation therapy.
5. Skills in operating equipment for remote and contact y-therapy, short-range , orthovoltage X-ray therapy, and a linear electron accelerator.
6. Providing emergency care for life-threatening complications associated with radiation therapy (acute respiratory distress, vascular collapse

In the section on private oncology:

1. To form groups of individuals at increased risk of developing malignant tumors.
2. Perform the most common medical procedures (diagnostic puncture and taking smears for cytological examination, etc.).
3. Complete the necessary documentation upon initial detection of a patient with a malignant neoplasm.
4. Conduct a clinical examination of a patient with suspected malignant neoplasm.

4.3. List of questions for the test

1. Features of the methodology for collecting and evaluating the life history of a patient with a tumor disease and the history of the tumor disease.
2. Features of the examination methodology for patients with tumor diseases, modern methods of drug and non-drug therapy for tumor diseases, in accordance with current clinical guidelines

(treatment protocols), procedures for providing medical care and taking into account the standards of medical care.
3. Rules for conducting diagnostic, therapeutic and preventive measures for tumor diseases.
3. Rules for providing palliative care for tumor diseases.
Rules for registration of medical documentation, including in electronic form, in medical organizations providing outpatient medical care to patients with tumor diseases.

MODULE 6 "DETECTION OF TUBERCULOSIS IN THE GENERAL TREATMENT NETWORK"

1.2. Goals and objectives of practice.

The purpose of the internship is to develop and improve practical skills based on the consolidation of theoretical knowledge obtained during training in the organization and provision of anti-tuberculosis care, and the implementation of non-specific preventive work among individuals belonging to groups
risk of tuberculosis.

The objectives of the internship are to develop a set of work actions and skills within the framework of mastering work functions: conducting medical examinations, screening and preventive examinations of the adult population for the purpose of early detection of tuberculosis, the main risk factors for its development, the formation of a healthy lifestyle and sanitary and hygienic education of the population.

1.3. The place of practice in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education (FSES VO) – specialty 31.05.01 General Medicine (2020). The "Tuberculosis Detection in General Healthcare Network" module of the "General Practice" industrial practice course is part of the core component, Block 2. The total workload is 36 hours and is conducted in the 11th semester of the 6th-year student. Assessment is a credit test with a grade in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, individual assignment for industrial practice, calendar schedule for completing the practice **.**

1.6. Requirements for students.

To master the practiceknowledge, skills and abilities are required, formed by previous disciplines:
Spiritual and moral aspects of medicine
Knowledge: moral and ethical standards, rules and principles of professional conduct of a physician, the rights of the patient and the physician, the main ethical documents regulating the

activities of a physician
Skills: build and maintain working relationships with patients and members of the medical institution team.
Skills : building working relationships with patients and the work team.
Professional foreign language
Knowledge : basic medical and pharmaceutical terminology in a foreign language.
Skills : apply knowledge to communication and obtaining professional information from foreign sources.
Skills: application of language skills for communication and obtaining professional information from foreign sources.
Histology, embryology, cytology
Knowledge:histological structure of tissues of the cardiovascular system in terms of influence on the electrophysiological properties of the heart
Skills: explain the relationship between changes in the ECG and the innervation and blood supply of the heart, the structure of cardiomyocytes and cells of the conduction system
Skills: explanation of the pathogenesis of changes on the ECG with the features of the structure, innervation and blood supply of the heart
Physics, mathematics.
Knowledge: mathematical methods for solving intellectual problems and their application in medicine; theoretical foundations of computer science, search, storage, processing, transformation and distribution of information in medical systems; the use of information computer systems in medicine and healthcare; the operating principles and design of equipment used in medicine, the fundamentals of the physical foundations of methods used in functional diagnostics
Skills: use electronic search systems for educational and scientific literature, use programs for storing medical information, medical statistics programs, work with electrical equipment taking into account safety regulations **.**
Skills: use of electronic search systems for educational and scientific literature, use of programs for storing and searching medical documentation, medical statistics programs, work with an electrocardiograph and spirograph taking into account safety regulations
Biology
Knowledge: the laws of genetics and their significance for medicine, the patterns of heredity and variability in individual development as the basis for a scientific understanding of the pathogenesis of hereditary and multifactorial heart diseases
Skills: analyze the role of heredity and variability in the development of heart disease, in particular, heart rhythm disorders
Skills: analysis of the role of hereditary factors and multifactorial mechanisms in the development of the studied pathological conditions of the heart and blood vessels
Normal physiology
Knowledge:synaptic connections at the level of the heart and blood vessels and cardiac electrophysiology
Skills : analyze the importance of regulating biological processes in the body for the functioning of the cardiovascular system
Skills: analysis of the state of regulation of myocardial functions and electrophysiological processes in it and the cardiac conduction system in the studied pathological conditions
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in tissuesorganism in case of cardiovascular pathology andrespiratory system
Skills: determine the contribution of pathophysiological processes to the development of cardiac pathology and its signs on the ECG

Skills: identifying possible causes of ECG changes in a given pathological condition from a pathophysiological perspective
Propaedeutics of internal diseases
Knowledge: methods for collecting complaints and clarifying the anamnesis of the disease, physical examination of a patient with cardiac and vascular pathology
Skills: collect complaints and anamnesis, conduct a physical examination of the patient, identify the main clinical syndromes of heart disease, interpret the obtained data in conjunction with the results of functional and laboratory diagnostic methods
Skills: examining a patient with a cardiovascular disease, taking into account all the canons of propaedeutics of internal diseases, determining the diagnosis of the disease taking into account the examination data and additional diagnostic methods
Public health and healthcare, health economics
Knowledge: Fundamentals of the Russian Federation legislation on public health protection, key regulatory and technical documents; population health indicators, factors shaping human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional, professional, genetic)
Skills: plan, analyze, and evaluate the quality of medical care, the health status of the population, and the impact of environmental and occupational factors; calculate medical statistics.
Skills: working with basic medical documentation of a hospital and clinic within the scope of duties of a department physician or general practitioner, organizing medical care and analyzing its quality for the population at the medical site, assessing the health status of the population and the impact of environmental and industrial factors on morbidity, calculating medical statistics
Emergency conditions in therapy
Knowledge: Etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in cardiology
Skills: diagnose the main urgent conditions in cardiology and pulmonology, formulate and justify a clinical diagnosis, conduct their differential diagnosis and provide emergency care.
Skills: diagnostics based on ECG data of emergency conditions in cardiology - acute myocardial infarction and its complications, rhythm and conduction disorders, differential diagnosis and provision of emergency care to patients with these changes
Faculty therapy. Outpatient therapy.
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, principles of diagnosis, treatment and prevention of major cardiovascular diseases
Skills: identify and explain ECG signs of the heart diseases being studied, prescribe additional functional examination methods necessary to confirm them, formulate a clinical diagnosis of the diseases taking into account the data obtained
Skills: identifying and explaining the essence of ECG changes detected in patients with the heart diseases under study, prescribing additional functional examination methods necessary to confirm the diagnosis, formulating a clinical diagnosis of the disease taking into account the data obtained

1.7. Interdisciplinary connections of the module with subsequent disciplines/practices

Knowledge and skills acquired during the course of mastering the module and necessary for studying subsequent disciplines and practices:

No.	Name of subsequent disciplines	Module "Detection of Tuberculosis in the General Healthcare Network"
1.	Clinical pharmacology	+

2.	Forensic medicine	+
3.	Outpatient therapy	+
4.	Hospital therapy	+

1.8. Requirements for the results of mastering the practice

Mastering the module ―Detection of tuberculosis in the general medical network‖ of the practice ―Practice of the general medical profile‖ is aimed at the formation/improvement of the following competencies: universal (**UC**) - 1,4,6,7,9, general professional (GPC) - 1,2,4,5,6,7,8,10 and professional (PC) - 1,2,3,4,5,6,7,8,9,11.

Item No.	UC code and name	Upon completion of the module "Otolaryngology in the Practice of a Pediatrician", the student should:			UC achievement indicator
		know	be able to	own	
Universal competencies					
1	**UC -1.** Able to carry out a critical analysis of problematic situations based on a systems approach and develop an action strategy	Principles for implementing a critical analysis of problem situations based on a systems approach, principles for developing an action strategy	Conduct a critical analysis of problematic situations based on a systems approach and develop an action strategy	The ability to carry out a critical analysis of problem situations based on a systems approach, the ability to develop an action strategy	**AI UC-1.1.** Analyzes a problematic situation as a system, identifying its components and the connections between them. **AI UC-1.2.** Identifies gaps in information needed to solve problem situations and designs processes to eliminate them. **AI UC-1.3.** Applies systems analysis to resolve problematic situations in the professional field. **AI UC-1.4.** Uses logical and methodological tools to critically evaluate contemporary philosophical and social concepts in their subject area. **AI UC-1.5.** Critically evaluates the reliability of information sources and works with conflicting information from different sources.
2	**UC -4.** Able to apply modern communication technologies, including in foreign language(s), for academic and	Principles of application of modern communication technologies ,	Apply modern communication technologies, including in foreign language(s), for	Ability to use modern communication technologies , including in foreign	**AI UC -4.1.** Uses communicative and linguistic tools to build effective partnerships with patients and colleagues; selects a communication style. **AI UC-4.2.** Uses modern communication

	professional interactions	including in foreign language(s), for academic and professional interaction	academic and professional interaction	language(s), for academic and professional interaction	resources to search, process, and transmit information necessary for the effective performance of professional tasks and the achievement of professionally significant goals. **AI UC-4.3.** Compiles, translates from a foreign language into the state language of the Russian Federation and from the state language of the Russian Federation into a foreign language, edits various academic texts (abstracts, essays, reviews, articles, etc.). **AI UC-4.4.** Presents the results of academic and professional activities at various public events, including international ones, choosing the most appropriate format. **AI UC-4.5.** Defends their positions and ideas in a reasoned and constructive manner in academic and professional discussions in the official language of the Russian Federation and a foreign language.
3	**UC -6.** Able to identify and implement priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	Principles for defining and implementing priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	Identify and implement priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	The ability to identify and implement priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	**AI UC -6.1.** Assesses personal, situational, and time resources and uses them optimally to complete assigned tasks. **AI UC-6.2.** Plans his/her activities within the framework of professional tasks. **AI UC-6.3.** Conducts critical self-analysis of the results of one's own activities. **AI UC-6.4.** Identifies professional growth

					priorities and ways to improve one's own performance based on self-assessment against selected criteria.
4	**UC -7.** Able to maintain an adequate level of physical fitness to ensure full social and professional functioning	Principles of maintaining an adequate level of physical fitness to ensure full social and professional activity	Maintain an adequate level of physical fitness to ensure full social and professional functioning	The ability to maintain an adequate level of physical fitness to ensure full social and professional activity	**AI UC-7.1.** Adheres to and promotes healthy lifestyle standards in various life situations and in professional activities. **AI UC-7.2.** Plans work and leisure time to optimally balance physical and mental workload and ensure productivity. **AI UC-7.3.** Selects health-preserving technologies to support a healthy lifestyle, taking into account the physiological characteristics of the body.
5	**UC -9.** Able to apply basic defectological knowledge in social and professional spheres.	Principles of using basic defectological knowledge in social and professional spheres	To use basic defectological knowledge in social and professional spheres	The ability to use basic defectological knowledge in social and professional spheres	**AI UC -9.1.** Has an understanding of the principles of non-discriminatory interaction in communication in various areas of life, taking into account the socio-psychological characteristics of individuals with disabilities. **AI UC-9.2.** Defines adequate methods for organizing joint professional activities with the participation of persons with disabilities.
General professional competencies					
6	**GPC-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	Principles of using information, bibliographic resources, information and communication technologies, taking into account the	Use information, bibliographic resources, and information and communication technologies taking into account the basic requirements of	Methods for solving standard professional tasks using information and bibliographic resources, medical and biological terminology,	**AI GPC-1.1.** Conducts professional activities in accordance with ethical standards and moral principles. **AI GPC-1.2** . Organizes professional activities, guided by healthcare legislation, knowledge of medical ethics, and deontology. **AI GPC-1.3.** Skills in expressing an

		basic requirements of information security, medical and biological terminology.	information security	information and communication technologies, and taking into account the basic requirements of information security	independent point of view, analytical and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and roundtables, and understanding the principles of medical deontology and medical ethics.
7	**GPC-2.** Capable of conducting and monitoring the effectiveness of measures to prevent infectious and non-infectious diseases, promote healthy lifestyles, and educate the population about public health and hygiene.	Principles for conducting and monitoring the effectiveness of measures to prevent infectious and non-infectious diseases in children, the formation of a healthy lifestyle and sanitary and hygienic education of the population	Conduct and monitor the effectiveness of measures to prevent infectious and non-infectious diseases in children, promote a healthy lifestyle and educate the population about health and hygiene	The ability to conduct and monitor the effectiveness of measures to prevent infectious and non-infectious diseases in children, promote a healthy lifestyle and educate the population about health and hygiene	**AI GPC -2.1.** Uses preventive medicine methods aimed at improving public health. **AI GPC -2.2.** Promotes a healthy lifestyle aimed at improving hygiene and disease prevention among patients (the population); organizes events for sanitary and hygiene education and the development of healthy lifestyle skills. **AI GPC-2.3.** Develops a plan to promote healthy lifestyles for various groups (medical staff and patients, various professional and social groups), taking into account the sanitary and epidemiological situation. **AI GPC-2.4.** Ranks public health risk factors and selects and justifies optimal measures to minimize and eliminate health risks. **AI GPC-2.5.** Uses physical education methods and tools to promote a healthy lifestyle and ensure fulfilling social and professional functioning. **AI GPC-2.6.** Assesses population health

					characteristics and environmental factors that impact the body, and understands the biophysical mechanisms of such impacts. **AI GPC-2.7.** Assesses the need for drug and non-drug prophylaxis, natural healing factors, and other methods aimed at preventing the occurrence of infectious and non-infectious diseases and eliminating the factors that contribute to their development.
8	**GPC-4.** Capable of using medical devices as prescribed by the medical care procedures, as well as conducting patient examinations to establish a diagnosis.	The principles of using medical devices, as stipulated by the procedure for providing medical care, as well as conducting a patient examination for the purpose of establishing a diagnosis	To use medical devices provided for by the procedure for providing medical care, as well as to conduct examinations of the patient in order to establish a diagnosis	The ability to use medical devices, as provided for by the procedure for providing medical care, as well as conducting an examination of the patient for the purpose of establishing a diagnosis	**AI GPC-4.1.** Utilizes modern medical technologies, specialized equipment and medical devices, disinfectants, and medications, including immunobiological and other substances and their combinations, to solve professional problems using evidence-based medicine. **AI GPC-4.2.** Understands the indications and contraindications for instrumental, functional, and laboratory examination methods, potential complications during examinations, emergency care, and their prevention. AI GPC-4.3. Interprets the results of the most common instrumental, laboratory, and functional diagnostic methods, including thermometry, to identify pathological processes. **AI GPC -4.4.** Proficient in methods of general clinical examination of patients of various ages. **AI GPC-4.5.** Formulates a preliminary

					diagnosis and a clinical diagnosis according to the ICD.
9	**GPC-5.** Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	Principles of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	Assess morphofunctional, physiological states and pathological processes in the human body to solve professional problems	The ability to assess morphofunctional, physiological states and pathological processes in the human body to solve professional problems	**AI GPC-5.1.** Understands the functional systems of the human body, their regulation, and self-regulation in interactions with the external environment under normal and pathological conditions. **AI GPC-5.2.** Knowledge of etiology, pathogenesis, morphogenesis, pathomorphism of disease development, and basic concepts of nosology. **AI GPC-5.3.** Understands the morphofunctional and physiological state indicators of a healthy person and can measure/determine them. **AI GPC-5.4.** Uses indicators of morphofunctional, physiological state, and pathological processes to examine the human body to establish a diagnosis, prescribe treatment, and monitor its effectiveness and safety. **AI GPC-5.5.** Analyzes and interprets macroscopic and microscopic changes in normal and pathologically altered tissues and organs. **AI GPC-5.6.** Interprets biopsy and surgical specimen results to solve professional problems and formulate a diagnosis in accordance with the ICD.
10	**GPC-6.** Capable of organizing patient care, providing	Principles of organizing patient care, providing	Organize patient care, provide primary health care, ensure	The ability to organize patient care, provide	**AI GPC-6.1.** Organizes patient care and provides primary health care and emergency care to patients.

	primary health care, ensuring the organization of work and making professional decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	primary health care, ensuring the organization of work and making professional decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	the organization of work and the adoption of professional decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	primary health care, ensure the organization of work and make professional decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	**AI GPC-6.2.** Uses medical equipment for protection, prevention, provision of medical care, and treatment of injuries caused by toxic substances of various origins, radioactive substances, and biological agents. **AI GPC-6.3.** Makes professional decisions in emergency situations and provides first aid at the pre-hospital stage, during emergencies, epidemics, and in areas of mass casualties. **AI GPC-6.4.** Organizes the work of medical personnel and implements anti-epidemic measures to protect the population during emergencies, epidemics, and in areas of mass casualties.
11	**GPC-7.** Capable of prescribing treatment and monitoring its effectiveness and safety.	Principles of treatment prescription and monitoring of its effectiveness and safety	Prescribe treatment and monitor its effectiveness and safety	Ability to prescribe treatment and monitor its effectiveness and safety	**AI GPC-7.1.** Selects a drug based on its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological entities in outpatient and inpatient settings. **AI GPC-7.2.** Selects the optimal minimum of the most effective products, using convenient methods of application. **AI GPC-7.3.** Explains the primary and secondary effects of medications, the effects of their combined use, and interactions with food, taking into account morphofunctional characteristics, physiological conditions, and pathological processes in the human body. **AI GPC-7.4.** Prescribes medications for

					the treatment of diseases and correction of pathological conditions, based on the pharmacokinetics and pharmacodynamics of the drugs. **AI GPC-7.5.** Takes into account morphofunctional characteristics, physiological states, and pathological processes in the human body when selecting over-the-counter medications and other pharmacy products. **AI GPC-7.6.** Analyzes the results of potential drug interactions when various medications are used in combination. **AI GPC-7.7.** Evaluates the efficacy and safety of drug therapy using a combination of clinical, laboratory, instrumental, and other diagnostic methods.
12	**GPC-8.** Capable of implementing and monitoring the effectiveness of medical rehabilitation of a patient, including the implementation of individual rehabilitation programs, and assessing the patient's ability to perform work activities	Principles for the implementation and monitoring of the effectiveness of medical rehabilitation of a patient, including the implementation of individual rehabilitation and habilitation programs for a disabled child, and the assessment of	Implement and monitor the effectiveness of medical rehabilitation of the patient, including the implementation of individual rehabilitation and habilitation programs for a disabled child, and assess the patient's ability to perform work	The ability to implement and monitor the effectiveness of medical rehabilitation of a patient, including the implementation of individual rehabilitation and habilitation programs for a disabled child, and to assess the	**AI GPC -8.1.** Assesses a person's functional reserves and adaptive abilities, reduced by adverse environmental factors and activities or as a result of illness. **AI GPC-8.2.** Identifies risk groups for the purpose of improving health and determining rehabilitation potential for subsequent restorative treatment and rehabilitation of patients. **AI GPC-8.3.** Develops and organizes a plan of medical rehabilitation for patients, including non-drug treatment methods (natural healing factors, physical and reflexology, exercise therapy).

		the patient's ability to perform work activities	activities	patient's ability to perform work activities	**AI GPC-8.4.** Interprets the results of clinical, laboratory, and instrumental diagnostic methods to monitor the effectiveness of medical rehabilitation programs and assess the patient's ability to perform work activities.
13	**GPC-10.** Able to solve standard professional tasks using information and bibliographic resources, medical and biological terminology, and information and communication technologies, taking into account the basic requirements of information security.	Principles for solving standard professional tasks using information and bibliographic resources, medical and biological terminology, and information and communication technologies, taking into account the basic requirements of information security	Solve standard professional tasks using information and bibliographic resources, medical and biological terminology, and information and communication technologies, taking into account the basic requirements of information security.	The ability to solve standard professional tasks using information, bibliographic resources, medical and biological terminology, information and communication technologies, taking into account the basic requirements of information security	**AI GPC-10.1.** Maintains confidentiality when working with information databases and personal data of citizens. **AI GPC-10.2.** Efficiently searches for information needed to solve professional problems using legal reference systems and professional pharmaceutical databases. **AI GPC-10.3.** Uses specialized software for the mathematical processing of observational and experimental data when solving problems in professional activities. **AI GPC-10.4.** Utilizes automated information systems in the internal processes of a medical organization, as well as to organize interactions between medical personnel and patients within medical organizations.
Professional competencies					
14	**PC-1** Able to collect and analyze complaints, life history and illnesses in order to establish a diagnosis	Principles of collecting and analyzing complaints, anamnesis of life and illness of a	Collect and analyze complaints, life history and illness of the child in order to establish a diagnosis	The ability to collect and analyze complaints, life history and illness of a child in order to establish a	**AI 1.1.** Establishes contact with the child, parents (legal representatives) and persons caring for the child. **AI 1.2.** Collects and evaluates information about the age of parents and environmental risk factors that have a

		child for the purpose of establishing a diagnosis		diagnosis	negative impact on the child's development and health. **AI1.3.** Obtains information about hereditary and chronic diseases in parents, immediate relatives and caregivers. **AI1.4.** Creates a family tree within three generations of relatives, starting with the sick child. **AI1.5.** Collects and evaluates information about the child's medical history , taking into account his/her age, past illnesses, surgeries, preventive vaccinations, and the results of the Mantoux test and Diaskin test. **AI1.6.** Receives information about complaints, timing of onset of the disease, timing of first and repeat visits, and treatment provided.
15	**PC-2** Able to conduct objective research and analyze the results of additional examinations in order to establish a diagnosis	Principles of conducting an objective study, analysis of the results of additional examination of a child in order to establish a diagnosis	Conduct an objective examination, analyze the results of additional examination of the child in order to establish a diagnosis	The ability to conduct an objective study, analyze the results of additional examination of the child in order to establish a diagnosis	**AI 2. 1.** Conducts a physical examination and assesses the condition of organs and systems. **AI2.2.** Assesses the indicators of physical and psychomotor development of children of different age groups. **AI2.3.** Determines the need and scope of additional examination methods: laboratory, instrumental, in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care and taking into account the standards of medical care **AI2.4.** Informs the children's parents

					(their legal representatives) about the child's preparation for laboratory and instrumental examination **AI2.5.** Interprets laboratory and instrumental examination methods, taking into account age and gender groups. **AI2.6.** Determines the need to refer children for consultation with specialist doctors in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account standards of medical care. **AI2.7.** Conducts differential diagnosis with other diseases **AI2.8.** Formulates a diagnosis in accordance with the International Statistical Classification of Diseases and Related Health Problems **AI2.9.** Properly uses medical equipment that is included in the standard equipment of the local TB doctor's office in accordance with the procedure for providing medical care.
16	**PC-3** Able to determine indications for hospitalization, assess the severity of the condition, and identify indications for emergency care.	Principles for determining indications for hospitalization, assessing the severity of the condition, and identifying	Determine indications for hospitalization, assess the severity of the condition, and identify indications for emergency care.	The ability to determine indications for hospitalization, assess the severity of the condition, and identify indications for	**AI3.1.** Assesses the clinical picture of diseases and conditions requiring emergency care **AI3.2.** Assesses the clinical picture of diseases and conditions requiring emergency care **AI3.3.** Refer children for hospitalization in accordance with current clinical

		indications for emergency care.		emergency care.	guidelines (treatment protocols), procedures for providing medical care, and taking into account standards of medical care
17	**PC-4** Able to prescribe treatment and monitor its effectiveness and safety	Principles of prescribing treatment to children and monitoring its effectiveness and safety	Prescribe treatment to children and monitor its effectiveness and safety	The ability to prescribe treatment to children and monitor its effectiveness and safety.	**AI 4.1**Draws up a treatment plan for diseases and conditions, diagnosis and clinical picture of the disease and in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care and taking into account standards of medical care **AI4. 2.** Prescribes diet therapy, drug and non-drug therapy taking into account weight, diagnosis and clinical picture of the disease, as well as taking into account the recommendations of medical specialists **AI4.3.** Explains the need for and rules for taking medications, non-drug therapy, and the use of dietary therapy. **AI4.4.** Analyzes the effects of medications based on their pharmacological effects on the body, depending on the child's age, and prevents the development of complications and adverse reactions when prescribing treatment. **AI4.5.** Analyzes the effectiveness of non-drug therapy; prevents the development of complications and adverse reactions when prescribing non-drug treatment and

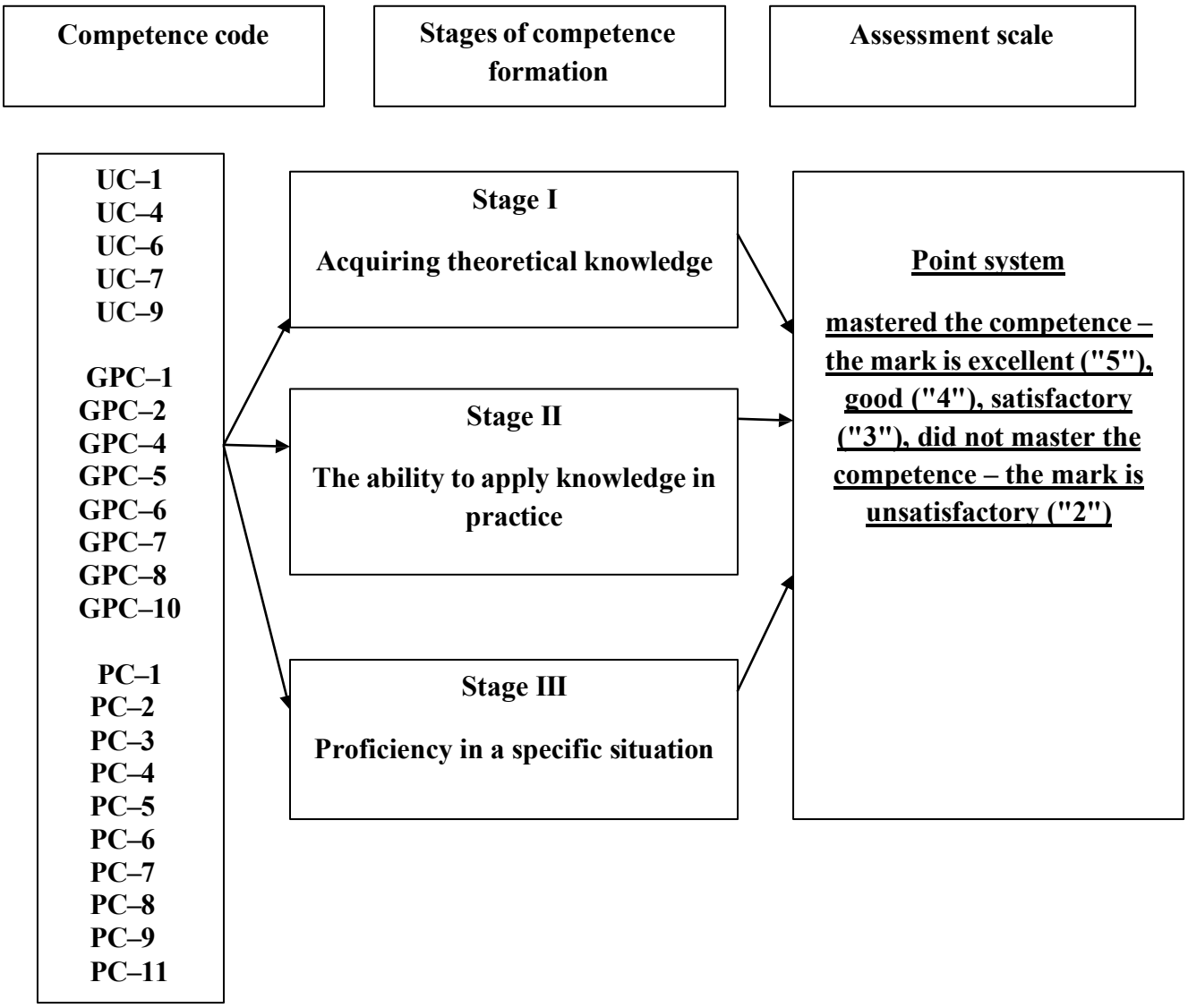
					dietary therapy.
18	**PC-5** Capable of participating in the provision of urgent , emergency medical care when organizing primary health care	Principles of providing urgent , emergency and palliative medical care to children when organizing primary health care	Provide urgent , emergency and palliative medical careassistance to children in organizing primary health care	The ability to provide urgent , emergency and palliative medical care to children when organizing primary health care	**AI 5.1.** Provides medical care in the event of emergency conditions in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account medical care standards. **AI5.2.** Provides emergency medical care (including cardiopulmonary resuscitation) in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account standards of medical care. **AI5.3.** Provides palliative care to children in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account standards of medical care.
19	**PC-6** Able to refer patients to organizations for medical and social assessment.	Principles for referring children to organizations for medical and social examination and for the provision of palliative care	Refer children to organizations to undergo medical and social examination.	The ability to refer children to organizations to undergo medical and social examination.	**AI6. 1.** Highlightshealth problems that lead to limitations in their life activities **AI6. 2.** Refer patients with disabilities to early intervention services. **AI6.3.** Refers patients with disabilities that limit their life activities for medical and social assessment. **AI6.4.** Refers patients with disabilities that limit their life activities to medical organizations.
20	**PC-7** Implements and monitors	Principles of implementation and	Implement and monitor the	Ability to implement and	**AI7. 1.** Determines medical indications and contraindications for rehabilitation

	the effectiveness of individual rehabilitation programs	monitoring of the effectiveness of individual rehabilitation programs	effectiveness of individual rehabilitation programs	monitor the effectiveness of individual rehabilitation programs	measures in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account standards and medical care **AI7. 2.** Determines medical specialists to carry out rehabilitation measures in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care and taking into account the standards of medical care **AI7.3.** Monitors the effectiveness and safety of rehabilitation measures in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account standards and medical care **AI7.4.** Prescribes and evaluates the effectiveness and safety of spa treatment for long-term and frequently ill children and children with chronic diseases, taking into account the child's age, diagnosis, in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and standards of medical care. **AI7.5.** Assesses the implementation of the individual rehabilitation program, developed by the medical and social expert physician.

21	**PC -8** A method for conducting preventive medical examinations , clinical examinations and implementing clinical observation	Principles of conducting preventive medical examinations , clinical examinations and implementation of clinical observation	Conduct preventive medical examinations , clinical examinations and carry out clinical follow - up observations	The ability to conduct preventive medical examinations , clinical examinations and carry out clinical	**AI8.1.**Organizes and ensures the implementation of preventive medical examinations in accordance with current regulatory legal acts **AI8.2.** Organizes and monitors the implementation of immunoprophylaxis **AI8.3.** Determines the dispensary registration group and risk factors for the development of the disease, and therefore prescribes individual treatment and health measures in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account medical care standards. **AI8.4.** Establishes a health group based on the diagnosis and previous illness **AI8.5.** Conducts outpatient observation in accordance with current clinical guidelines (treatment protocols), procedures for providing medical care, and taking into account medical care standards.
22	**PC 9** It is capable of implementing a set of measures aimed at preserving and strengthening health , including for conducting health education work among the population	Principles for the implementation of a set of measures aimed at preserving and strengthening the health of children , including conducting health education work	To implement a set of measures aimed at preserving and strengthening the health of children , including conducting health education work among the population	The ability to implement a set of measures aimed at preserving and strengthening the health of children , including conducting health education work	**AI9.1.** Promotes the benefits of breastfeeding in children under one year of age, including exclusive breastfeeding for the first 6 months, and the rules for introducing complementary foods in accordance with current clinical guidelines. **AI9.2.** Explains to children, their parents (legal representatives), and persons caring

		among the population		among the population	for the child the rules for a rational, balanced diet for children of different age groups. **AI9.3.** Explains the rules for developing a healthy lifestyle, taking into account the child's age and health status. Uses various forms and methods of health education. **AI9.4.** Organizes the implementation of sanitary and anti-epidemic (preventive) measures in the event of an outbreak of infection.
23	**PC-11** Ready to maintain medical records, including in electronic form	Principles of maintaining medical records, including in electronic form	Maintain medical records, including in electronic form	Ability to maintain medical records, including in electronic form	**AI11.1.**Obtains voluntary informed consent from parents (legal representatives) and children over 15 years of age for examination, treatment and immunoprophylaxis, as well as for the processing of personal data **AI 11.2.** Completes medical documentation, including in electronic form, in accordance with established legal requirements. **AI11.3.** Prepares documents for referring children for hospitalization, spa treatment, medical and social assessment, attendance at educational institutions, and temporary disability.

1.9 Stages of competencies development and description of assessment scales



2. Structure and content of practice

2.1. Scope of practice

Scope of practice	
Total labor intensity in hours, total	432 hours
Labor intensity in hours of the Module "Detection of tuberculosis in the general health care network"	36 hours
Total workload in credit units, total	12 z.e.
Type of intermediate assessment	Credit with grade

2.2. Type of practice – industrial.

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

"3" – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

"5" - when testing, up to 10% of incorrect answers are allowed.

"4" - allows up to 20% of incorrect answers during testing.

"3" - allows up to 30% of incorrect answers during testing.

"2" - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

"5" – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

“4” – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.
“3” – the student has only some practical skills and abilities.
“2” - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.
"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.

"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.

"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.

"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Educational, methodological, logistical and informational support for practice

3.1. Primary Literature

3.2 Further reading

MAIN LITERATURE:	
1. Giller, D. B. Phthisiology: textbook / D. B. Giller, V. Yu. Mishin et al. - Moscow: GEOTAR-Media, 2020. - 576 p. - ISBN 978-5-9704-5490-9. Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970454909.html
2.Mishin, V. Yu. Phthisiatry : textbook / V. Yu. Mishin, S. P. Zavrazhnov, A. V. Mitronin , A. V. Mishina. - 3rd ed. ,overworker . and additional. - Moscow : GEOTAR-Media, 2020. - 528 p. - ISBN 978-5-9704-5400-8. Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970454008.html
3. Koshechkin, V. A. Phthisiology: textbook / V. A. Koshechkin. - Moscow: GEOTAR-Media, 2018. - 304 p.: ill. - 304 p. - ISBN 978-5-9704-4627-0. Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970446270.html
ADDITIONAL REFERENCES:	

1. Borodulina, E. A. Radiation diagnostics of pulmonary tuberculosis: a tutorial / Borodulina E. A., Borodulin B. E., Kuznetsova A. N. - Moscow: GEOTAR-Media, 2021. - 120 p. - ISBN 978-5-9704-5991-1. Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970459911.html
2. Perelman, M. I. Phthisiology: textbook / M. I. Perelman, I. V. Bogadejnikova . - 4th ed.revised and enlarged . - Moscow: GEOTAR-Media, 2015. - 448 p. - ISBN 978-5-9704-3318-8. - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970433188.html

3.3. Educational and methodological support for practice, prepared by the department's staff

1. Mishuk V.P. "Tuberculosis pleurisy". 2012 - teaching aid
2. Mishuk V.P. "Alternative etiotropic therapy of tuberculosis". 2012 - teaching aid.
3. Mishuk V.P., Tyak E.P., Sayapin S.R. – ―Drug-resistant tuberculosis‖. 2010.
4. Mishin V. Yu. ―Caseous pneumonia: diagnostics, clinical features and treatment‖ // Problems of tuberculosis . 2012. No. 3. P. 22.

3.4. Material and technical base for conducting internship

Classroom 2, area – 20.3 sq. m, for clinical practical classes, group and individual consultations, ongoing, midterm control and midterm certification. 675000, Amur Region, Blagoveshchensk, Liteynaya St. 5, AOPTD, 1st floor

Medical products: tonometers, phonendoscopes, pulse oximeters, height meters, medical scales, bactericidal irradiators, kits for emergency treatment and preventive measures, negatoscope, consumables.

3.5. Professional databases, information and reference systems, electronic educational resources.

Item	Resource name	Resource Description	Access	Resource address
Electronic library systems				
1.	"Student Consultant." Medical University Electronic Library	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/
2.	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	http:// www. ncbi.nlm.nih . gov/ pubmed /

3.	Oxford Medicine Online	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com
Databases				
1	Ministry of Science and Higher Education of the Russian Federation	The official resource of the Ministry of Science and Higher Education of the Russian Federation. The site contains news, newsletters, reports, publications, and much more.	library, free access	http://www. minobrnauki . gov . ru
Information systems				
1.	Russian Medical Association	A professional online resource. Purpose: to promote the effective professional activities of medical personnel. Contains the charter, personnel, structure, membership	library, free access	http://www.rmass.ru/
2.	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students,	library, free access	http://webmed.irkutsk.ru/
Bibliographic databases				
1.	Database "Russian Medicine"	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the	library, free access	http://www.scsml.rssi.ru/
2.	eLIBRARY.RU	A Russian information portal in the fields of science, technology, medicine, and education, containing abstracts and full texts of more than 13 million scientific articles and publications. eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical	library, free access	http://elibrary.ru/defaultx.asp

3.	Portal Electronic Library of Dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/

3.6. Licensed and freely distributed software used in the educational process

No. p/p	I. Commercial software products	
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system: MS Windows 10 Pro, MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
	Freely distributable software	
1.	Google Chrome	Freely distributed Distribution Terms: https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https://yandex.ru/legal/browser_agreement/
3.	Dr. Web CureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	Open Office	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	Libre Office	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7 Resources of the information and telecommunications network "Internet"

1. ttps://www.rosminzdrav.ru /ministrv/61/22/stranitsa-979/stranitsa-983/l-standartv-pervichnov-inediko- sanitarnov-pomoschi
2. https://www.rosminzdrav.ru/ministrv/61/22/stranitsa-979/stranitsa-983/2-standarty-spetsializirovannov- meditsinskov-pomoschi
3. https://www.rosminzdrav.rU/ministrv/6_l/4/stranitsa-857/porvadki-okazaniva-meditsinskoy-pomoschi- naseleniyu-rossivskoy-federatsii
4. http :// www . femb . ru(Clinical guidelines)

4. The module's assessment tools include:

4.1. Examples of test tasks for intermediate knowledge assessment

Testing is conducted in the Moodle system (e-mail address https://educ-amursma.ru/course/view.php?id=600 In total – 100 test tasks.

Choose 1 correct answer:

1. THE MAIN METHOD OF DETECTING TUBERCULOSIS AMONG THE ADULT POPULATION IS:

A) bacteriological examination of sputum
B) tuberculin diagnostics
B) fluorographic examination of the respiratory organs
D) test with recombinant tuberculosis allergen

2. STUDY OF SPUTUM FOR MYCOBACTERIUM TUBERCULOSIS IS THE MAIN METHOD OF DETECTING TUBERCULOSIS IN PATIENTS WITH

A) peptic ulcer of the gastrointestinal tract
B) chronic lung diseases
B) chronic alcoholism
C) diabetes mellitus

3. THE FIRST MANTOUX TEST WITH 2 TE CHILDREN VACCINATED WITH BCG IN THE MATERNITY HOSPITAL IS CONDUCTED IN

A) 12 months
B) 6 months
B) 2 months
D) 3 months

4. AFTER SETTINGINTRADERMAL TESTWITH THE DRUG DIASKINTEST THE RESULT IS EVALUATED THROUGH

A) 48 hours
B) 72 hours
B) 24 hours
D) 5 days

5. SENSITIVITY OF THE BACTERIOSCOPIC METHOD IN USING A LIGHT MICROSCOPE TO IDENTIFY acid-fast mycobacteriaAMOUNTS MORE THAN _____ MICROBIAL BODIES IN 1 ML:

A) 1000
B) 10,000
B) 1,000,000
D) 100

6. X-RAY EXAMINATION FOR RESPIRATORY DISEASES SHOULD BEGIN WITH

A) fluorography in direct and lateral projections
B) fluoroscopy in various projections
B) tomography of the lungs in direct and lateral projections
D) plain radiography in direct and lateral projections

7. THE MOST INFORMATIVE METHOD OF MANDATORY DIAGNOSTIC MINIMUM TO ALLOW ESTABLISHING THE ETIOLOGICAL DIAGNOSIS OF PULMONARY TUBERCULOSIS

A) objective examination of the patient
B) clinical blood and urine tests
Ziehl -Neelsen sputum microscopy
C) chest x-ray

4.2. List of practical skills that a student should possess after completing the internship

1) formation of a differential diagnostic seriesif availableradiological syndromes characteristicfor tuberculosisand other respiratory diseases
2) formulation of an algorithm for collecting anamnesis from a patient with suspected tuberculosis.
3) drawing up a plan for examining a patient with suspected tuberculosis, interpreting the resultslaboratory andinstrumental research methods.

4.3. List of questions for the test

1. What laws and regulations govern the conduct of preventive examinations of the population for tuberculosis?
2. The main tasks of general health care institutions when examining the population for tuberculosis.
3. Name the methods for active identification of patients with respiratory tuberculosis.
4. What does the increase in the proportion of patients with fibro-cavernous tuberculosis among newly diagnosed tuberculosis patients?
5. Population groups at increased risk of developing tuberculosis.
6. Frequency of testing risk groups for tuberculosis.
7. Microbiological examination of patients with suspected tuberculosis in the general health care network.
8. Chest radiography. Main advantages and limitations.
9. Fluorography. Methodology. Objectives and tasks. Advantages and disadvantages.
10. What is the algorithm, essence and indications for the use of radiation methods? diagnostics for pulmonary tuberculosis?
11. List the main methods for detecting tuberculosis in adults and children.
12. Name the main symptoms and syndromes of pulmonary tuberculosis, determine the value of the patient’s subjective sensations.

13. Describe the algorithm for identifying and diagnosing pulmonary tuberculosis in the practice of a general practitioner.
14. Endoscopic methods for diagnosing tuberculosis. Indications, biopsy material, and methods of examination.
15. Diagnostic capabilities of sputum smear microscopy for AFB, rules for collecting high-quality sputum samples from patients with suspected tuberculosis.
16. Classical cultural (bacteriological) examination of sputum and alternative research methods (automated and semi-automated systems for accelerated cultural diagnostics of tuberculosis).
17. Molecular genetic research methods as additional methods for accelerated diagnosis of tuberculosis.

MODULE 7 "SOCIALLY SIGNIFICANT ENDOCRINE DISEASES"

1.2. Purpose and objectives of the practice

The purpose of the internship is to improve and systematize theoretical knowledge, develop practical skills in organizing and providing outpatient and inpatient medical care, and prevent the occurrence and spread of socially significant endocrine diseases.

Practice objectives :

1. Formation of a set of work actions and skills within the framework of mastering work functions: examination of patients with the aim of
2. learn to carry out early diagnosis, treatment, prevention, EVI, and medical examination of the most common endocrine diseases in an outpatient setting under the supervision of an endocrinologist and a local physician, taking into account the clinical experience acquired in the departments, establishing a diagnosis, prescribing treatment and monitoring its effectiveness and safety
3. conduct differential diagnostics of the main nosological forms of endocrine diseases
4. correctly interpret the data of additional examination methods
5. to draw up individual plans of treatment and rehabilitation measures for patients with various endocrine diseases depending on the etiological factor, the characteristics of the pathogenesis, the degree of activity of the pathological process, the functional state of organs and systems
6. to learn the basic principles of providing emergency care in urgent conditions within the nosological forms being studied
7. implementation of preventive measures, including health education work, among patients and their relatives
8. organization of activities of medical personnel
9. maintaining medical records when providing outpatient care to patients with socially significant endocrine diseases
10. reinforcement of communication skills with patients, taking into account ethics and deontology depending on the identified pathology

1.3. The place of practice in the structure of the main professionaleducational programhigher education

In accordance with the Federal State Educational Standard of Higher Education (2020),

the " Socially Significant Endocrine Diseases " module of the "General Medicine Practice" industrial practice course is part of the core component, Block 2. The total workload is 36 hours and is completed in the 11th semester of the 6th-year student. Assessment is by credit and grade in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, calendar schedule for completing the internship .

1.6. Requirements for students:

To master this module, you need knowledge, skills, and abilities developed by previous disciplines:
Latin
Knowledge: basic medical and pharmaceutical terminology in Latin.
Skills: be able to apply knowledge for communication and obtaining information from medical literature, medical documentation
Skills: applies medical and pharmaceutical terminology in Latin in professional activities
Professional foreign language
Knowledge: basic medical and pharmaceutical terminology in a foreign language
Skills **:** be able to apply knowledge for communication and obtaining information from foreign sources
Skills: applies medical and pharmaceutical terminology in a foreign language in professional activities
Skills: appliesmethods andmethods of philosophical analysis of problems; forms and methods of scientific knowledge, their evolution; the main patterns and trends of the development of the world historical process; the laws of dialectical materialism in medicine and therapy in their professional activities
Bioethics
Knowledge: moral and ethical standards, rules and principles of professional medical conduct, rights of the patient and the doctor, basic ethical documents regulating the activities of the doctor
Skills : build and maintain working relationships with patients and other team members.
Skills: applies moral and ethical standards, rules and principles of professional medical conduct, the rights of the patient and the doctor, the main ethical documents regulating the activities of the doctor in his professional activities
Skills:be able to use educational, scientific, popular science literature, the Internet for professional activities, and work with equipment taking into account safety regulations .
Skills: applies mathematical methods to solve intellectual problems and their application in medicine; theoretical foundations of computer science, collection, storage, search, processing, transformation, and distribution of information in medical and biological systems, the use of information computer systems in medicine and healthcare; principles of operation and design of equipment used in medicine, the basics of physical and mathematical laws that are reflected in

medicine in their professional activities
Biochemistry
Knowledge : blood composition, biochemical blood constants, hormones, buffer systems, hemoglobin oxygenation factors, erythrocyte metabolism
Skills: analyze the contribution of biochemical processes to the functioning of organs and the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems; interpret the results of the most common laboratory diagnostic methods to identify disorders in diseases of internal organs and occupational diseases.
Skills: applies knowledge of blood composition, blood biochemical constants, hormones, buffer systems, hemoglobin oxygenation factors, and red blood cell metabolism in their professional activities
Anatomy
Knowledge: anatomical and physiological features of the respiratory, cardiovascular, digestive, and hematopoietic systems
Skills : analyze age-gender characteristics of the structure of organs and systems.
Skills: applies knowledge of the anatomical and physiological characteristics of the respiratory, cardiovascular, digestive, and hematopoietic systems in their professional activities
Normal physiology
Knowledge : physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in normal conditions
Skills: analyze the importance of regulation of biological processes in the human body on the functioning of the cardiovascular, digestive, urinary, respiratory, and hematopoietic systems.
Skills: applies knowledge of the physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in their professional activities
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in body tissues in pathologies of the endocrine, cardiovascular, respiratory, digestive , urinary and blood systems
Skills: determine the contribution of pathophysiological processes to the development of diseases of internal organs.
Skills: applies knowledge of morphological changes in body tissues in pathologies of the endocrine, cardiovascular, respiratory, digestive , urinary and blood systems in their professional activities
Immunology
Knowledge : types of immunity, regulation of the immune response, causes of immunopathological conditions, clinical manifestations of immunopathology, basic methods for assessing immune status and principles of its assessment, indications for the use of immunotropic therapy
Skills: identify syndromes and symptoms of diseases associated with immune system disorders, prescribe a clinical and immunological examination, formulate an immunological diagnosis, prescribe immunocorrective therapy and preventive measures to prevent diseases of the immune system.
Skills: applies knowledge of the types of immunity, regulation of the immune response, causes of immunopathological conditions, clinical manifestations of immunopathology, basic methods for assessing immune status and principles of its assessment, indications for the use of immunotropic therapy in their professional activities
Pharmacology
Knowledge : pharmacokinetics, pharmacodynamics , side effects of various drugs on the body

Skills: write prescriptions for prescribed medications, know the indications and contraindications for their use.
Skills: applies knowledge of pharmacokinetics, pharmacodynamics , and side effects of various drugs on the body in his/her professional activities
Propaedeutics of internal diseases
Knowledge: collection of complaints, anamnesis **,** objective methods of examination of patients (palpation, percussion, auscultation
Skills : conduct anamnestic and physical examination, identify the main syndromes and symptoms of diseases of internal organs.
Skills: applies knowledge of collecting complaints, anamnesis, objective methods of examining patients (palpation, percussion, auscultation) in his professional activities
Pathological anatomy, clinical pathological anatomy
Knowledge: etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes.
Skills: visually assess and record changes in the organs and tissues of a corpse, substantiate the nature of the pathological process and its clinical manifestations; provide an opinion on the cause of death and formulate a pathological diagnosis;
Skills: applies knowledge of the etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes in their professional activities
Emergency conditions in therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in endocrinology
Skills: diagnose an urgent condition under the main therapeutic conditions, formulate and justify a clinical diagnosis, conduct a differential diagnosis and provide emergency care.
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in their professional activities

1.7 Interdisciplinary links with subsequent disciplines /practices"

tem No.	**Name of subsequent disciplines**	Module "Socially significant endocrine diseases"
1.	Outpatient therapy	+
2.	Clinical pharmacology	+
3.	Anesthesiology, resuscitation, intensive care	+
4.	Differential diagnostics in cardiology	+

1.8. Requirements for the results of the internship

Mastering the module "Socially significant endocrine diseases" is aimed at the formation and improvement of the following universal (**UC**), general cultural (GPC) and professional competencies (PC): **UC** -6; GPC-5,7,11; PC-1-8,12,14

No. p/p	Code and name of competence	Code and name of the competency achievement indicator	As a result of studying the academic discipline "Outpatient Therapy", the student must:		
			Know	**Be able to**	**To own**
Universal competencies					
	UC -6 . Capable of identifying and to implement priorities of one's own activities and ways of improving them based on self-assessment and lifelong learning	**AI UC-6.1.** Assesses personal, situational, and time resources and utilizes them optimally to complete assigned tasks. **AI UC-6.2** . Plans his/her activities within the framework of professional tasks. **AI UC-6.3** . Conducts critical self-analysis of the results of one's own activities. **AI UC-6.4** . Identifies priorities for professional growth and ways to improve one's own performance based on self-assessment against selected criteria.	Priorities for professional growth and ways to improve one's own performance based on self-assessment	Assess your capabilities and their limits for success completion of assigned tasks, systematize theoretical knowledge to solve practical problems	The ability to provide a detailed plan of one's professional activities
	General professional competencies				
	GPC-5 . Capable of assessing morphofunctional, physiological states and pathological processes in the human body to	**AI GPC -5.1.** Understands the functional systems of the human body, their regulation, and self-regulation in interaction with the external environment under normal and pathological conditions. **AI GPC-5.2** . Knowledge of etiology, pathogenesis, morphogenesis, pathomorphism of disease development, and basic concepts of nosology. **AI GPC-5.3** . Understands the morphofunctional and	Morphofunctional , physiological states and pathological processes in the human body for solving professional	Assess morphofunctional, physiological states and pathological processes in the human body to solve professional problems	The ability to assess the physical development of the body, data from medical examinations of various contingents and periodic

	solve professional problems	physiological state indicators of a healthy person and can measure/determine them. **AI GPC-5.4** . Uses indicators of morphofunctional, physiological state, and pathological processes to examine the human body to establish a diagnosis, prescribe treatment, and monitor its effectiveness and safety. **AI GPC-5.5** . Analyzes macroscopic and microscopic changes in normal and pathologically altered tissues and organs. **AI GPC-5.6.** Interprets biopsy and surgical specimen results to solve professional problems and formulate a diagnosis in accordance with the ICD.	problems		medical examinations to solve a professional problem
	GPC-7. Capable of prescribing treatment and monitoring its effectiveness and safety.	**AI GPC-7.1** . Selects medications based on their pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological entities in outpatient and inpatient settings. **AI GPC-7.2** . Selects the optimal minimum of the most effective medications, taking into account convenient methods of administration and the patient's financial ability to purchase medications. **AI GPC-7.3.** Explains the primary and secondary effects of medications, the effects of their combined use, and interactions with food, taking into account morphofunctional characteristics, physiological conditions, and pathological processes in the human body. **AI GPC-7.4** . Prescribes medications for the treatment of diseases and correction of pathological conditions, based on the pharmacokinetics and pharmacodynamics of the	Mechanisms of action of drugs based on their pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient settings.	Prescribe treatment to patients with various nosological forms in outpatient settings and monitor its effectiveness and safety	Ability selection of a drug based on a combination of the nature of its pharmacokinetics genetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient settings

		drugs. **AI GPC-7.5** takes into account morphofunctional characteristics, physiological states, and pathological processes in the human body when selecting over-the-counter medications and other pharmacy products. **AI GPC-7.6** . Analyzes the results of potential drug interactions when various medications are used in combination. **AI GPC-7.7** . Evaluates the efficacy and safety of drug therapy using a combination of clinical, laboratory, instrumental, and other diagnostic methods.			
	GPC- 11. Able to prepare and apply scientific, research and production, design, organizational and managerial, and regulatory documentation in the healthcare system.	**AI GPC 11.1** . Applies modern methods for collecting and processing information, conducts statistical analysis of obtained data in the professional field, and interprets the results to solve professional problems. **AI GPC 11.2** . Identifies and analyzes problematic situations, searches for and selects scientific, regulatory, and organizational documentation in accordance with established objectives. **AI GPC 11.3** . Interprets and applies data from physical, chemical, mathematical, and other natural science concepts and methods to solve professional problems. **AI GPC-11.4** . Conducts scientific and practical research, analyzes information using the historical method, and prepares publications based on research results. **AI GPC-11.5.** Analyzes and compiles medical records and calculates qualitative and quantitative indicators used in professional activities.	Scientific, research and production, design, organizational, managerial and regulatory documentation in the healthcare system	Prepare and apply scientific, scientific-industrial, design, organizational-managerial and regulatory documentation in the healthcare system, implement search and selection of scientific, regulatory, legal and organizational documentation in accordance with the specified objectives	Ability conduct scientific and practical research, analyze information using the historical method and prepare publications based on the research results

Professional competencies					
	PC-1 Able to provide medical care in urgent and emergency situations	**AI PC - 1.1.** Identifies clinical signs of conditions requiring emergency medical care. **AI PC - 1.2.** Provides emergency medical care to patients with sudden acute illnesses, conditions, and exacerbations of chronic diseases without obvious signs of a threat to the patient's life. **AI PC - 1.3.** Identifies conditions requiring emergency medical care. AI PC - 1.4. Provides emergency medical care to patients with life-threatening conditions. **AI PC -1.5.** Detects signs of sudden cessation of blood circulation and breathing. **AI PC - 1.6.** Performs basic cardiopulmonary resuscitation in combination with electrical impulse therapy (defibrillation) in the event of clinical death of a patient (in case of sudden cessation of blood circulation and/or breathing) .	Clinical signs of conditions requiring emergency medical care	Identify and provide emergency medical care to patients with sudden acute illnesses, conditions, and exacerbations of chronic diseases without obvious signs of a threat to the patient's life.	Skills in providing medical care in emergency and urgent situations to patients with sudden acute illnesses, conditions, and exacerbation of chronic diseases without obvious signs of a threat to the patient's life
	PC-2. Capable of collecting and analyzing complaints, life history and medical history of the patient in order to establish a diagnosis	**AI PC -2 .1.** Establishes contact with the patient. **AI PC -2 .2.**Collects complaints, specifies them, highlighting the main and secondary ones. **AI PC -2.3 .** Collects and analyzes information about the onset of the disease, the presence of risk factors, the dynamics of symptom development, and the course of the disease. **AI PC -2.4 .** Analyzes the timing of the first and repeated requests for medical care, the volume of therapy administered, and its effectiveness. **AI PC -2.5 .** Collects and evaluates information about the	Algorithms for collecting complaints, life history and medical history of the patient for the purpose of establishing a diagnosis	Collect and analyze information about the onset of the disease, the presence of risk factors, the dynamics of the development of symptoms and the course of the disease	Skills in collecting complaints, life history and medical history of the patient in order to establish a diagnosis

		medical history, including data on past illnesses, injuries and surgical interventions, hereditary, professional			
	PC-3. Able to conduct a physical examination of a patient and analyze the results of additional examination methods in order to establish a diagnosis	**AI PC -3.1.**Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets the results **AI PC-3.2.**Justifies the necessity, scope, sequence of diagnostic measures (laboratory, instrumental) and referral of the patient to specialist doctors for consultations **AI PC-3.3.** Analyzes the patient examination results and, if necessary, justifies and plans the scope of additional research. **AI PC-3.4.** Interprets and analyzes the results of collecting information about the patient's disease, data obtained during laboratory and instrumental examinations and during consultations with specialist doctors, and, if necessary, justifies and plans the scope of additional research. **AI PC-3.5.**Provides early diagnosis of internal organ diseases. Diagnosis is based on the current International	Methodology for conducting a complete physical examination of the patient and the International Statistical Classification of Diseases and Related Health Problems (ICD)	Analyze the obtained results of the patient's examination	Skills for early diagnosis of diseases of internal organs and

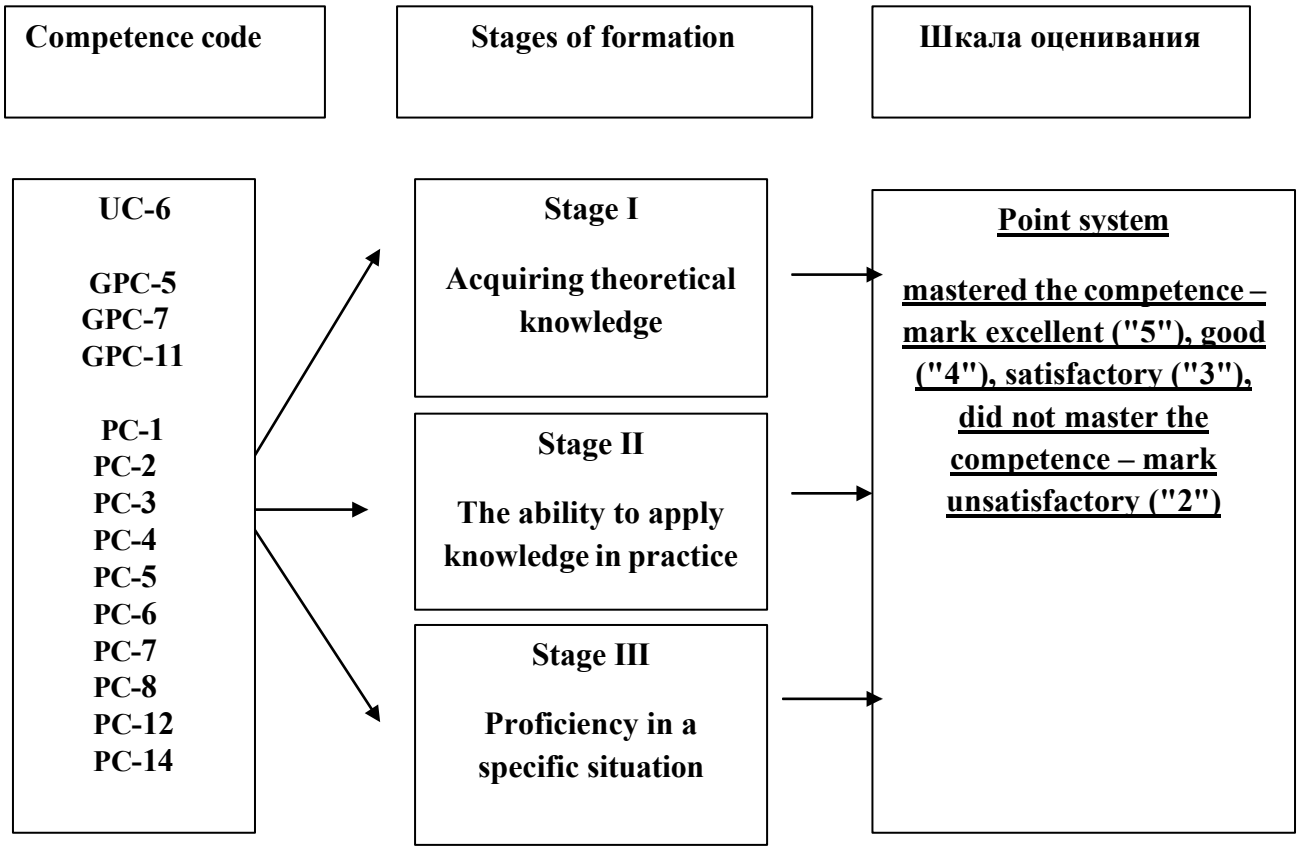
		Statistical Classification of Diseases and Related Health Problems (ICD). **AI PC-3.6.**Conducts differential diagnostics of internal organ diseases from other diseases			
	PC-4. Capable of determining indications for hospitalization, indications for emergency, including specialized emergency, medical care	**AI PC -4.1.**Determines medical indications for the provision of emergency, including specialized emergency, medical care **AI PC-4.2.**Refer the patient for specialized medical care in an inpatient setting or in a day hospital setting if there are medical indications in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC-4.3.**Uses medical devices in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, care taking into account the standards of medical care	Indications for hospitalization, indications forprovision of emergency, including specialized emergency , medical care	Determine medical indications for the provision of emergency, including emergency specialized, medical care and refer the patient for specialized medical care in an inpatient setting or in a day hospital setting	Skills in using medical devices in accordance with current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, and care taking into account medical care standards
	PC-5. Able to prescribe treatment to patients	**AI PC -5.** 1. **Develops** a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC -5. 2.** Prescribes medications, medical devices, and therapeutic nutrition taking into account the diagnosis, age, and clinical picture of the disease in	Clinical guidelines (treatment protocols) for the provision of medical care, taking into account the standards of medical care	Prepares a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with	Skills in providing palliative care in collaboration with specialist doctors and other healthcare workers

		accordance with current procedures for the provision of medical care, clinical guidelines, and standards of medical care. **AI PC -5. 3.** Prescribes non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical guidelines, and standards of medical care. **AI PC -5.4 .** Provides palliative care in collaboration with specialist doctors and other healthcare workers. **AI PC -5. 5.** Organizes personalized treatment for patients, including pregnant women, elderly and senile patients.		current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care	
	PC-6. Capable of monitoring the effectiveness and safety of the therapy being administered	**AI PC-6.1.** Evaluates the efficacy and safety of drugs, medical devices, nutritional supplements, and other treatment methods. **AI PC-6.2.** Takes into account the pharmacodynamics and pharmacokinetics of key drug groups, prevents the development of adverse drug reactions, and corrects them if they occur.	Pharmacodynamics and pharmacokinetics of the main groups of drugs	To evaluate the effectiveness and safety of the use of drugs, medical devices, therapeutic nutrition and other treatment methods	Skills in monitoring the effectiveness and safety of the therapy
	PC-7. Capable of referring a patient with a persistent impairment of bodily functions caused by diseases,	**AI PC -7.1.** Identifies signs of temporary disability and signs of persistent impairment of body functions caused by diseases, consequences of injuries, or defects. **AI PC-7.2.** Participates in the examination of temporary disability and works as part of the medical commission conducting the examination of temporary disability. **AI PC-7.3.** Prepares the necessary medical	Signs of temporary disability and signs of persistent impairment of body functions caused by	Conduct an examination of temporary disability and prepare the necessary medical documentation for the implementation	Skills in conducting an examination of temporary disability and preparing the necessary medical

	consequences of injuries or defects for medical and social examination	documentation for medical and social assessments in federal government institutions for medical and social assessments. **AI PC-7.4.** Refer a patient with a persistent impairment of bodily functions caused by illness, consequences of injury, or defects for medical and social examination.	diseases, consequences of injuries or	of medical and social examination in federal state institutions of medical and social examination	documentation for the implementation of medical and social examination in federal state institutions of medical and social examination
	PC-8. Capable of implementing and monitoring the effectiveness of individual patient rehabilitation programs	**AI PC-8.1.** Determines medical indications for medical rehabilitation or habilitation of persons with disabilities, in accordance with current procedures for the provision of medical care, clinical guidelines for the provision of medical care, and taking into account standards of medical care. **AI PC-8.2. Performs** medical rehabilitation activities for the patient, in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC-8.3.** Determines medical specialists to carry out rehabilitation measures for the patient, taking into account the diagnosis and in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC 8.4.** Monitors and evaluates the effectiveness and safety	Medical indications for carrying out medical rehabilitation or habilitation measures for disabled people, in accordance with the current procedures for the provision of medical care, clinical guidelines for the provision of medical care, taking into account the standards of medical care	Determine medical indications for carrying out medical rehabilitation or habilitation measures for disabled people, in accordance with current procedures for the provision of medical care, clinical guidelines for the provision of medical care, taking into account the standards of medical care	Skills implementation and monitoring of the effectiveness of individual patient rehabilitation programs

		rehabilitation measures, taking into account the diagnosis and in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the standards of medical care			
	PC-12. Ready to maintain medical records, including in electronic form	**AI PC -12.1 .**Completes medical documentation, including electronically **AI PC -12.2 .**Works with personal data of patients and information constituting a medical secret **AI12.3.** Prepares documents for referring patients for hospitalization, consultation, spa treatment, and medical and social assessment.	The main one medical documentation and how to fill it out	Fill out medical documentation, including in electronic form	Skills working with personal data of patients and information constituting a medical secret
	PC-14. Capable of participating in research activities	**AI PC -14. 1.** Participates in scientific research **AI PC -14. 2.** Analyzes medical information based on evidence-based medicine **AI PC -14. 3.** Introduces new methods and techniques into practical healthcare aimed at protecting the health of the adult population.	Evidence-based medical information	Analyze medical information based on evidence-based medicine	Skills in introducing new methods and techniques into practical healthcare aimed at protecting the health of the adult population

1.9. Stages of competence developmentand description of rating scales



2. Structure and content of practice

2.1. Scope of practice

Scope of practice	
Total labor intensity in hours, total	432
Labor intensity in hours of the Module "Socially significant endocrine diseases"	36
Total workload in credit units, total	12
Type of intermediate assessment	credit wi grade

2.2. Type of practice

Type of practice: industrial
Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge .

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

“3” – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

“5” - when testing, up to 10% of incorrect answers are allowed.

“4” - allows up to 20% of incorrect answers during testing.

“3” - allows up to 30% of incorrect answers during testing.

“2” - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

“5” – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

“4” – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

“3” – the student has only some practical skills and abilities.

“2” - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.

"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.

"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.

"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.

"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Educational, methodological, logistical and informational support of the discipline

3.1 . Main literature

No.	Name	
1	Dedov, I. I. Endocrinology: textbook / I. I. Dedov, G. A. Melnichenko, V. V. Fadeev - Moscow:Litterra , 2015. - 416 p. - ISBN 978-5-4235-0159-4. - Text: electronic (accessed: 06.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/ru/book/ISBN9785423501594.html
2	Endocrinology: national guidelines / edited by I. I. Dedov, G. A. Melnichenko. - 2nd ed., revised and enlarged. - Moscow: GEOTAR-Media, 2018. - 1112 p.: ill. - 1112 p. - ISBN 978-5-9704-4604-1. - Text: electronic (accessed: 05.05.2021). - Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970446041.html

3	Ameto, A. S. Endocrinology / A. S. Ametov, S. B. Shustov, Yu. Sh. Khalimov, - Moscow : GEOTAR-Media, 2016. - 352 p. - ISBN 978-5-9704-3613-4. - Text : electronic (date of receipt: 06.05.2021). - Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970436134.html

3.2. Additional References:

1	1. Murtazin, A. I. Endocrinology. Standards of medical care. Quality assessment criteria. Pharmacological reference book / compiled by A. I. Murtazin. - Moscow: GEOTAR-Media, 2021 .-- 560 p. (Series "Standards of Medical Care") - ISBN 978-5-9704-6065-8. - Text: electronic (date accessed: 05/06/2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970460658.html
2	2. Mkrtumyan, A. M. Emergency endocrinology / Mkrtumyan A. M.,Nelaeva A. A. - Moscow: GEOTAR-Media, 2019. - 128 p. - ISBN 978-5-9704-5147-2. - Text: electronic (accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970451472.html
3	3. Dedov, I. I. Personalized endocrinology in clinical examples / Dedova I. I. - Moscow: GEOTAR-Media, 2018. - 440 p. - ISBN 978-5-9704-4617-1. - Text: electronic (date accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970446171.html

3.3. Educational and methodological support for practice, prepared by the department staff

1. Naryshkina S.V., Shtilerman A.L., Tanchenko O.A. Diabetic retinopathy. Study guide. - Blagoveshchensk, 2014. - 115 p. (UMO stamp + CD)

2. Naryshkina S.V., Olifirova O.S., Tanchenko O.A. Diagnostics and treatment of nodular diseases of the thyroid gland. Study guide. - Blagoveshchensk, 2015. - 110 p. (UMO stamp + CD)
3. Naryshkina S.V., Shtilerman A.L., Tanchenko O.A. Endocrine ophthalmopathy . Study guide. - Blagoveshchensk, 2018. - 120 p. (UMO stamp + CD)

Multimedia materials, electronic library, electronic library systems (ELS)
Multimedia materials on electronic media (CD, DVD)
Videos and photographs used in teaching students (prepared by department staff)
Videos :
1. Genetics of diabetes
2. Diabetic nephropathy
3. Diabetic foot syndrome
4. Hypothalamic syndrome
5. Treatment of complications of diabetes
6. Acromegaly
7. Pathogenesis of diabetes mellitus
8. Modern approaches to the treatment of diabetes mellitus

Photo materials:
1. Photo album on diabetic foot syndrome
2. Photo demonstration of patients with acromegaly
3. Photo demonstration of patients with thyrotoxicosis
4. Photo album on hypothyroidism
5. Photo demonstration of patients with Cushing's disease
6. Photo album of the diabetes school

List of albums, stands, tables, tablets, handouts used in training (prepared by department staff)
Electronic materials
1. High blood pressure. Patient education program.
2. Correction of dyslipidemia. Interactive clinical situations
3. Endocrinology "National Guide"
4. Type 1 diabetes
5. Type 2 diabetes
6. School of Diabetes

3.4. Material and technical base for conducting internship

- Pedometer
- Pulse oximeter
- Glucometer
- Dummy - structure of the heart
- 12-channel electrocardiograph ECG 9110k
- Ultrasound device " Aloka " 3500 (Japan)
- X-ray tomography scanner CT GEBRIGHTSPEED 16 SLICE (Germany)
- X-ray machine "Electron" (Russia)
- Magnetic resonance imaging scanner TOSHIBA VantageElan 1.5T (Japan)
- Electrolyte analyzer " Cibacorning " (UK)
- Biochemical analyzer "VTS-370" (Spain)

3. 5. Professional databases, information and reference systems, electronic

educational resources

Item No.	Resource name	Resource Description	Access	Resource address
Electronic library systems				
1.	Student Consultant. Medical University Electronic Library	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/
2.	"Doctor's Consultant" Electronic Medical Library.	The materials posted in the library have been developed leading Russian experts on the basis of modern scientific knowledge (evidence-based medicine). The information has been prepared taking into account the position of scientific practical medical society (world, European and Russian) according to the relevant specialties. All materials have passed mandatory independent review	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3.	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological	library, free access	http:// www. ncbi.nlm.nih . gov/ pubmed /

		articles from specialized literature and provides links to full-text articles.		
4 .	Oxford Medicine Online	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are continually updated.	library, free access	http://www.oxfordmedici ne.com
5.	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of Molecular Genetics, Russian Academy of Sciences .)	library, free access	http://humbio.ru/
6.	Medical online library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/

Information systems				
7.	Russian Medical Association	A professional online resource. Purpose: to facilitate the effective professional activities of medical personnel. Contains the charter, personnel, structure, membership rules, and information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
8.	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases				
9.	World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO	library, free access	http://www.who.int/ru/

		publications, and much more.		
10.	Ministry of Science and higher education Russian Federation	Website of the Ministry of Science and Higher Education The Russian Federation contains news, newsletters, reports, publications and much more	library, free access	http://www.minobrnauki.gov.ru
11.	Ministry of Education Russian Federation	Website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more	library, free access	https://edu.gov.ru/
12.	Federal Portal "Russian Education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?p rubr =2.2.81.1
Bibliographicbasesdata				
13.	Database "Russian Medicine"	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their	library, free access	http://www.scsml.rssi.ru/

		abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.		
14.	eLIBRARY.RU	A Russian information portal in the fields of science, technology, medicine, and education, containing abstracts and full texts of more than 13 million scientific articles and publications. eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals.	library, free access	http://elibrary.ru/defaultx.asp
15.	Portal Electronic Library of Dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
16.	Medline.ru	Biomedical portal for	library, free access	http://www.medline.ru

		specialists. Biomedical journal. Last updated February 7, 2021.		

3.6. Licensed and freely distributed software used in the educational process

I. Commercial software products		
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system MS Windows 10 Pro , MSOffice	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers : 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II . Freely distributed software		
1.	Google Chrome	Freely distributed Distribution Terms : https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https :// yandex . ru / legal / browser_agreement /
3.	Dr.WebCureIt !	Freely distributed License Agreement: https :// st . drweb . com / static / new - www / files / license _ CureIt _ ru . pdf
4.	OpenOffice	Freely distributed License: http :// www . gnu . org / copyleft / lesser . html
5.	LibreOffice	Freely distributed License: https :// ru . libreoffice . org / about - us / license /

3.7. Resources of the information and telecommunications network "Internet"

Interregional public organization "Society for Pharmacoeconomic Research" Standards of medical care (diseases of the endocrine system): http://www.rspor.ru/index.php?mod1=standarts3&mod2=db1

Journal of the Attending Physician: https://www.lvrach.ru
Federal Electronic Medical Library of the Ministry of Health of the Russian Federation: http://www.femb.ru Federal State Budgetary Institution "National Medical Research Center of Endocrinology" of the Ministry of Health of the Russian Federation: https://www.endocrincentr.ru
Website of the Russian Society of Cardiology: http://scardio.ru Standards of primary health care: https://minzdrav.gov.ru/ministry/61/22/stranitsa-979/stranitsa-983/1-standarty-pervichnoy - medikosanitarnoy-pomosch i
Standards of specialized medical care: https://minzdrav.gov.ru/ministry/61/22/stranitsa-979/stranitsa-983/2-standarty-spetsializirovannoymeditsinskoy-pomoschi
Procedures for providing medical care to the population of the Russian Federation: https://minzdrav.gov.ru/ministry/61/4/stranitsa-857/poryadki-okazaniya-meditsinskoy-pomoschinaseleniyu-rossiyskoy-federatsii

4. Evaluation Fund

4.1. Examples of test tasks for intermediate knowledge assessment

Test assignments for intermediate knowledge assessment (with sample answers) are conducted in the Moodle system.
Access mode: https://educ-amursma.ru/mod/quiz/view.php?id=5209

The total number of test tasks is 100.
Please select one of the suggested answers.

1. NORMAL SIZE OF THE THYROID GLAND

A) less than 30 ml
B) in women less than 25 ml, in men less than 18 ml
B) in women less than 18 ml, in men less than 25 ml
D) the calculation of standards is carried out individually

2. FOR THE DIAGNOSIS OF THYROTOXICOSIS, BLOOD DETERMINATION IS OF PRIOR IMPORTANCE

A) total and free T4
B) free fractions T3 and T4
B) free T3 and thyroid-stimulating hormone
C) thyroid-stimulating hormone and free T4

4. THE DURATION OF TREATMENT OF DIFFUSE TOXIC GOITER WITH THYREOSTATICS IS NOT LESS THAN

A) 12-18 months
B) 1-2 months
B) 3-4 months
D) 6-9 months

The correct answer is: 3, 4, 1

4.2. List of practical skills that a student should possess after completing the internship

1	Collect anamnesis and interview a patient with endocrine pathology
2	Properly conduct a physical examination of the patient (inspection, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.) and identify the main objective data
3	Assess the patient's condition to decide whether medical care is needed
4	Determine the minimum laboratory and instrumental studies necessary to establish a diagnosis
5	Establish priorities for solving the patient's health problems: critical (terminal) condition, condition with pain syndrome, condition with a chronic disease, condition with an infectious disease, disability, condition of mentally ill patients
6	Interpret the obtained research results
7	To make a preliminary diagnosis is to synthesize information about the patient in order to determine the pathology and the causes that cause it
8	Outline the scope of additional research in accordance with the disease prognosis, to clarify the diagnosis and obtain a reliable result
9	Assess the severity of the patient's condition (mild, moderate, severe).
10	Formulate a clinical diagnosis
11	Use diagnostic algorithms (primary, concomitant, complications) taking into account the International Statistical Classification of Diseases and Related Health Problems (ICD)
12	Formulate indications for the selected treatment method taking into account etiotropic and pathogenetic agents, justify pharmacotherapy in a specific patient with the main pathological syndromes and emergency conditions, determine the route of administration, regimen and dose of drugs, evaluate the effectiveness and safety of the treatment
13	Determine indications for outpatient treatment of the patient
14	Create a treatment plan for a specific patient
15	Be able to explain the mechanism of action of drugs
16	Use different methods of drug administration
17	Write out prescriptions (taking into account social rights to subsidized drugs) and drugs that are on the subject-quantity register
18	Provide emergency assistance before the ambulance arrives
19	Analyze and interpret the results of modern diagnostic technologies
20	Apply basic methods of clinical and immunological examination and assessment of the functional state of the patient's body
21	Perform basic medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions
22	Conduct resuscitation measures in the event of clinical death
23	Timely identification of life-threatening disorders (acute blood loss, respiratory failure, pulmonary edema, hypertensive crisis, myocardial infarction, cardiac asthma, cardiac arrest, paroxysmal tachycardia, coma, anaphylactic shock), use methods for their immediate elimination, and carry out anti-shock measures
24	Determine indications for hospitalization of patients with endocrine pathology
25	Determine the patient's ability to work at the time of the initial examination and after completion of treatment
26	Use legislative acts on the examination of temporary and permanent disability; establish the cause of temporary disability and the criteria for recovery and discharge to work
27	Correctly prepare documents certifying temporary disability
28	Timely identification of signs of disability, prediction of disability group, preparation of documents for referral to the Medical and Social Expertise (MSE)
29	Timely identification of indications for rational employment and its proper implementation

30 Draw up an Individual Plan of Action for a disabled person
31 Conduct medical examinations, draw up a medical examination plan, a plan for health measures; evaluate the quality and effectiveness of medical examinations
32 Provide the patient with recommendations on primary prevention and a healthy lifestyle
33 Select individuals for BCG vaccination and revaccination based on the results of mass tuberculin testing , evaluate the nature of the local vaccination reaction and possible post-vaccination complications; form high-risk groups for tuberculosis; and evaluate the effectiveness of patient follow-up.
34 Correctly maintain and fill out medical documentation: outpatient card of the patient (form No. 025u-04), certificate of incapacity for work, control card of the patient registered with the dispensary (No. 095/u), referral to the Medical and Social Expertise (No. 088/u-97), referral for hospitalization (No. 070/u-04), registration card of the medical examination of the employee (No. 131 / u-DD), emergency notification of an acutely contagious patient (No. 058-u), passport of the medical station (No. 030/u-ter), doctor's diary (No. 039-u), sanatorium and resort card (No. 072/u-04), etc.
35 Be able to draw up annual medical reports and plans for clinical examination of patients

4.3. List of questions for the test:

1. Functions and tasks of an endocrinologist
2. Organization of the activities of an endocrinologist
3. Accounting and reporting documentation of an endocrinologist
4. Criteria for the effectiveness of an endocrinologist
5. Oncological alertness in the work of an endocrinologist. A program for screening patients with suspected cancer in an outpatient setting.
6. Clinical examination. Criteria for the effectiveness of clinical examination of patients with endocrine pathology
7. Preventive counseling as part of a medical examination of the adult population with endocrine pathology (brief and in-depth preventive counseling)
8. Deontological principles in the work of an endocrinologist
9. Outpatient examination options for diagnosis verification. Endocrinologist's approach
10. A framework for establishing a preliminary and detailed clinical diagnosis for diabetes mellitus, metabolic syndrome, and thyroid disease. Indications for hospitalization.
11. Methodology for writing an annual medical report and observation plan for a dispensary patient
12. Spa Treatment. General Indications and Contraindications for Spa Treatment
13. Primary prevention of socially significant diseases (diabetes mellitus, etc.).

MODULE 8 "CARDIOPULMONARY RESUSCITATION"

13.2. Objectives and tasks of the practice module.

The objective of the internship is to develop a concept of "cardiopulmonary resuscitation," an understanding of the mechanisms of development of critical conditions, methods of their diagnosis and correction; to teach the provision of resuscitation care in case of cardiac arrest; and to provide first aid in emergency situations.

The objectives of the practical training are to master the modern algorithm for conducting cardiopulmonary resuscitation at the stages of patient evacuation, ensuring and maintaining airway patency, ensuring vascular access, and methods for ensuring patient safety using vital function monitoring.

13.3. The place of practice in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education (2020), the "Cardiopulmonary Resuscitation" module of the "General Medical Practice" industrial practice course for the specialty 31.05.01 General Medicine (2020) is part of the core component , Block 2. The total workload is 18 hours and is conducted in the 11th semester of the 6th year student. The assessment form is a credit test with an assessment in the 11th semester .

13.4. Forms of practice control.

Current monitoring of students' implementation of the internship program is carried out daily by internship supervisors in the form of monitoring the completion of individual internship assignments, keeping internship diaries, and mastering practical skills.

The midterm assessment (test with assessment) consists of a theoretical part - an interview on theoretical questions, testing in the Moodle system, and a practical part - testing the acquisition of practical skills and abilities, and assessment of reporting forms.

13.5. Indication of forms of reporting on practice.

Before the internship, the student receives the following reporting documents: ―Internship schedule‖, ―Individual assignment for internship‖.

During the internship, the student maintains a ―Internship Diary‖ in accordance with established requirements and provides a properly completed ―Student Characteristic‖.

The teacher responsible for conducting the internship provides the Internship Department with the ―Certification Sheet for Students' Internship‖, ― Industrial Internship Diary ‖, ―Individual Assignment for Internship‖, and ―Internship Schedule‖.

13.6. Requirements for students.

Physics, Mathematics, Anatomy, Biochemistry, Pathophysiology, Clinical Pathophysiology, Topographic Anatomy and Operative Surgery, Pharmacology

Knowledge **:**

- knows the basic laws of physics, physical phenomena and patterns underlying the processes occurring in the human body;
- knows the physical principles of the functioning of medical equipment, the structure and purpose of medical equipment;
- knows the physical and chemical essence of the processes occurring in a living organism at the molecular, cellular, tissue and organ levels;
- knows the classification and main characteristics of drugs, pharmacodynamics and pharmacokinetics, indications and contraindications for the use of drugs, side effects;
- knows the basic patterns of development and vital activity of the organism based on the structural organization of cells, tissues and organs;
- knows the anatomical and physiological, age-related, gender-related and individual characteristics of the structure and development of a healthy and sick organism;

Skills:

- uses physical, chemical and biological equipment;
- uses various dosage forms in the treatment of certain pathological conditions, based onBased on their characteristics, assess possible manifestations of drug overdose and ways to eliminate them;
- determines and evaluates the results of electrocardiography, spirography, thermometry; hematological parameters; distinguishes normal values of metabolite levels (glucose, urea, bilirubin, uric acid, lactic and pyruvic acids, etc.) in blood serum from pathologically altered ones, reads a proteinogram and explains the reasons for the differences;

Skills:

- has a command of medical and anatomical concepts;
- has the skills to use drugs in the treatment, rehabilitation and prevention of various diseases and pathological conditions.

Propaedeutics of internal diseases, Hospital therapy, Hospital surgery, pediatric surgery, Clinical pharmacology, Outpatient therapy, Emergency conditions in therapy

Knowledge:

- knows the clinical picture, features of the course and possible complications of the most common diseases that occur in a typical form in different age groups;
- knows the methods of diagnostics, the diagnostic capabilities of methods of direct examination of patients with therapeutic, surgical and infectious profiles, modern methods of clinical, laboratory, instrumental examination of patients (including endoscopic, radiological methods, ultrasound diagnostics);
- Knows the specifics of providing first aid and resuscitation measures to victims of road traffic injuries, drowning, electrical injury, strangulation asphyxia, methods for restoring the patency of the upper respiratory tract, clinical symptoms of injuries to the musculoskeletal system, chest, abdominal cavity, pelvic cavity, head and cranial cavity.

***Skills* :**

- determines the patient's status: collect anamnesis, interview the patient and/or his relatives, conduct a physical examination of the patient (inspection, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.);
- assesses the patient's condition to decide on the need for medical care, conducts a primary examination of systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joint, eyes, ear, throat, nose;
- sets priorities for solving the patient's health problems: critical (terminal) condition, condition with pain syndrome, condition with a chronic disease, condition with an infectious disease, disability,

geriatric problems, condition of mentally ill patients;

- uses various methods of administering medications;
- knows how to outline the scope of additional research in accordance with the disease prognosis, to clarify the diagnosis and obtain a reliable result;
- monitors hemodynamic and respiratory parameters;
- carries out resuscitation measures in the event of clinical death;

Skills:

- has experience in interpreting laboratory and diagnostic methods;
- ownsalgorithmclinicaldiagnosis ;
- has mastered the basic medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.

1.7 Interdisciplinary links with subsequent disciplines/practices

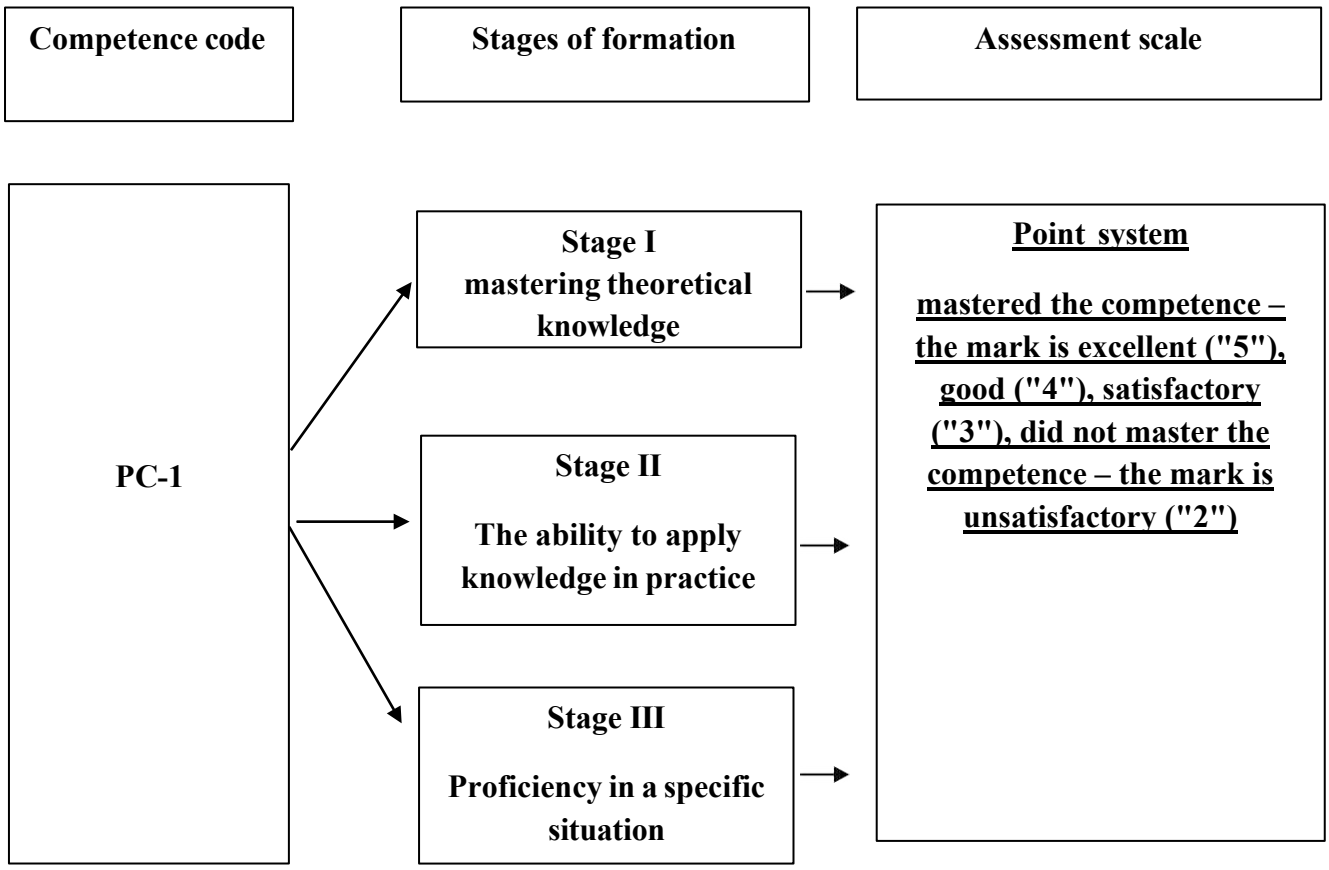
tem No.	**Name of subsequent disciplines**	Module "Socially significant endocrine diseases"
1.	Outpatient therapy	+
2.	Clinical pharmacology	+
3.	Anesthesiology, resuscitation, intensive care	+
4.	Differential diagnostics in cardiology	+

1.8. Requirements for the results of the internship.

During the course of mastering the practical training "Cardiopulmonary Resuscitation", the student develops and improves the following competencies: Mastering the module "Cardiopulmonary Resuscitation" is aimed at improving the following competencies: professional (PC) PC-1.

No. p/p	Code and name of competence	As a result of mastering the practice of "Cardiopulmonary Resuscitation", the student should:			Indicator of achievement of competence
		Know	**Be able to**	**To own**	
Universal competencies					
Professional competencies					
	PC-1 Able to provide medical care in urgent and emergency situations	− Features of providing medical care in emergency situations. − methodsconductingurgentevents.	− carry out a full range of resuscitation measures in case of circulatory arrest	− algorithm for performing basic medical diagnostic and therapeutic measures to perform CPR.	**AI PC -1.5.** Reveals signs of sudden cessation of blood circulation and breathing **AI PC - 1.6.** Performs basic cardiopulmonary resuscitation in combination with electrical impulse therapy (defibrillation) in the event of clinical death of a patient (in case of sudden cessation of blood circulation and/or breathing) . –

1.9. Stages of competence development and descriptions of assessment scales.



Forms of training organization and types of control.

Forms of practical training organization: Module 8 "Cardiopulmonary Resuscitation" involves work in the Accreditation and Simulation Center of the Academy (hereinafter ASC), where students practice practical cardiopulmonary resuscitation skills on simulators and robotic simulators.

Sections of work in the ASC:

1) Basic cardiopulmonary resuscitation complex
2) Advanced cardiopulmonary resuscitation complex

Current monitoring of students' implementation of the internship program is carried out daily by internship supervisors in the form of monitoring the completion of individual internship assignments, keeping internship diaries, and mastering practical skills.

The midterm assessment (test with assessment) consists of a theoretical part - an interview on theoretical questions, testing in the Moodle system, and a practical part - testing the acquisition of practical skills and abilities, and assessment of reporting forms.

The student's final credit grade is made up of the grade obtained as a result of mastering two modules based on the criteria for assessing learning outcomes: the student must receive positive grades for passing the midterm test, for work in departments, and for the oral answer at the test.

2. The structure and content of the practice .

2.1. Scope of practice.

Scope of practice	
Total labor intensity in hours, total	432
Labor intensity in hours of the Cardiopulmonary Resuscitation Module	18
Total workload in credit units, total	12
Type of intermediate assessment	Credit with grade

2.2. Type of practice.

Type of practice: industrial.

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

“3” – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining

concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

"5" - when testing, up to 10% of incorrect answers are allowed.
"4" - allows up to 20% of incorrect answers during testing.
"3" - allows up to 30% of incorrect answers during testing.
"2" - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

"5" – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.
"4" – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.
"3" – the student has only some practical skills and abilities.
"2" - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.
"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.

"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.

"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.

"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Material, technical and educational support for the internship work program

3.1. Basic literature.

No.	Name	Access mode
1.	Sumin S.A. Emergency conditions: textbook . 7th edition , revised and enlarged. – M.: OOO MIA, 2010. – 960 p.	Printed
2.	Sumin S.A. Anesthesiology and resuscitation: in 2 volumes - M.: MIA LLC, 2010. - T.1. – 928 pp., T. 2. – 872s.	Printed
3.	Emergency medical aid [Electronic resource] / Vertkin A.L. - M.: GEOTAR-Media, 2007. - 368 p.: ill. – ISBN 978-5-9704-0522-2 . –	http://www.studmedlib.ru/book/ISBN9785970405222.html
4.	Fundamentals of resuscitation [Electronic resource]: textbook / Sumin S.A., Okunskaya T.V. - M.: GEOTAR-Media, 2013. - 688 p. – ISBN 978-5-9704-2424-7.	http://www.studmedlib.ru/book/ISBN9785970424247.html
5.	Anesthesiology and Intensive Care: A Practical Guide [Electronic resource] / Edited by Corresponding Member of the Russian Academy of Medical Sciences, Professor B.R. Gelfand . – 2nd ed., corrected and enlarged. – Moscow: Litterra , 2012. – 640 p. –	http://www.studmedlib.ru/book/ISBN9785423500467.html

3.2. Further reading.

No.	Name	Access mode
1.	Intensive care: national guidelines: in 2 volumes/edited by B.R. Gelfand, A.I. Saltanov. – M.: GEOTAR-Media, 2011. – Vol.2. – 784 p. – (Series ―National Guidelines‖).	Printed
2.	Anesthesiology: national guidelines/edited by A.A. Bunyatyan , V.M. Mizikov . – M.: GEOTAR-Media, 2011. – 1104 p. – (Series ―National Guidelines‖).	Printed
3.	Emergency care for diseases of internal organs at the pre-hospital stage: a guide for doctors / edited by V.A. Galkin. - M .: OOO "MIA", 2009. - 200 p.	Printed
4.	Anesthesiology and Intensive CareTherapy : Practicalmanual [Electronicresource] / Undered . by Corresponding Member of the Russian Academy of Medical Sciences prof . B.R. Gelfand . – 2nd ed ., corrected and enlarged . – M.: Litterra , 2012. – 640 p. – Modeaccess :	http://www.studmedlib.ru/book/ISBN9785423500467.html
5.	Modernapproaches to solutionproblemssuddencardiacdeath [Electronicresource] / V.V. Rezvan , N.V. Strizhova , A.V. Tarasov ; undered . L. I. Dvoretsky . – M.: GEOTAR-Media , 2015. – 96 p. – ISBN 978-5-9704-2534-3. – Modeaccess :	http://www.studmedlib.ru/book/ISBN9785970425343.html

3.3. Educational and methodological support for practice, prepared by the department staff

No.	Name	Access mode
1.	Video lecture "Modern approaches to CPR" - Khodus S.V.	https://educ-amursma.ru/course/view.php?id=53

3.4. Material and technical base for conducting internship.

Educationstudentsis being carried outonASC base usingnextequipment :

Name of premises	**Equipmentpremises**
Debriefing Room No. 3, Accreditation and Simulation Center (Room No. 5, 3rd floor), 675006, Blagoveshchensk, Gorky St., Bldg. 101	Teacher's desk - 1 pc., study table - 8 pcs., chair - 18 pcs., video monitoring and recording system for the simulation training process - 1 pc.
Intensive care unit, Accreditation and simulation center (room 2, 3rd floor) 675006, Blagoveshchensk, Gorky st., bldg. 101	Table - 1 pc., system for video monitoring and recording of the simulation training process - 1 pc., medical bed - 1 pc., bedside table - 1 pc., medical table - 1 pc., procedure table - 1 pc., changing table - 2 pcs., patient simulator simulating an adult man for training ECG skills - 1 pc., robot simulator for training advanced cardiopulmonary resuscitation skills - 1 pc., CPR mannequins - 3 pcs., pulse oximeter - 1 pc., airway management simulator - 1 pc., Heimlich maneuver training simulator - 1 pc., adult resuscitation simulator - 1 pc., training defibrillator - 1 pc., resuscitation phantom - 1 pc., defibrillator - monitor DKI-N-10 "Axion" - 1 pc., Defibrillator TES-7511k. - 1 pc., Airway Management Simulator - 1 pc., Ozhivlennaya Anna Simulator - 3 pcs., Powerheart G5 Automatic External Defibrillation Simulator - 1 pc., Cardia International Training Defibrillator - 1 pc., Ambu Bag - 3 pcs., Electrically Powered Ventilator - 1 pc., Laryngoscope with Blade Set - 1 pc., Resuscitation Phantom - 1 pc., YX300 Pulse Oximeter - 1 pc., Glucometer - 1 pc., Steel IV Infusion Stand - 3 pcs.

3.5. Professional databases, information and reference systems, electronic educational resources.

No. p/p	Resource name	Resource Description	Access	Resource address
Electronic library systems				
1	"Student Consultant" Electronic Library of the	For students and faculty of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids, and periodicals.	library, individual access	http: // www . studmedlib.ru/

	Medical University.			
2	"Doctor's Consultant" Electronic Medical Library.	The materials in the library were developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information was prepared taking into account the position of the scientific and practical medical community (global, European, and Russian) in the relevant specialty. All materials have undergone mandatory independent peer review.	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	http:// www.ncbi.nlm.nih . gov/ pubmed /
4	OxfordMedicine Online.	A collection of Oxford Medical Press publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include TheOxfordHandbookofClinicalMedicine and TheOxfordTextbookofMedicine , the electronic versions of which are constantly updated.	library, free access	http://www.oxfordmedicine.com
5	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of Molecular Genetics, Russian Academy of Sciences .)	library, free access	http://humbio.ru/
6	Online Medical Library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems				
7	Russian Medical Association	A professional internet resource. Purpose: to facilitate the effective professional activities of medical personnel. Contains the charter, personnel, structure, membership rules, and information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
8	Web medicine.	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases				

9	World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications, and much more.	library, free access	http://www.who.int/ru/
10	Ministry of Science and Higher Education of the Russian Federation.	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	http://www.minobrnauki.gov.ru
11	Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications, and much more.	library, free access	https://edu.gov.ru/
12	Federal Portal "Russian Education"	A single point of access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www. edu.ru/ http://window.edu.ru/catalog/?p rubr=2.2.81.1
Bibliographic databases				
13	Database "Russian Medicine"	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
14	eLIBRARY.RU	A Russian information portal in science, technology, medicine, and education, containing abstracts and full texts of over 13 million scientific articles and publications. The eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over 1,000 open-access journals.	library, free access	http://elibrary.ru/defaultx.asp
15	Portal Electronic Library of Dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/

16	Medline.ru	Biomedical portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process.

I. Commercial software products		
1	MS operating systemWindows 7 Pro	License number 48381779
2	Operating system: MS Windows 10 Pro , MS Office	AGREEMENT R No. 142 A dated December 25, 2019
3	MS Office	NumberLicenses : 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4	Kaspersky Endpoint Security forbusinessExtended	Agreement No. 977/20 dated 12/24/2020
5	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II . Freely distributed software		
1	Google Chrome	Freely distributed Distribution Terms : https://play.google.com/about/play-terms/index.html
2	Yandex Browser	For freedistributed LicensedagreementonusageprogramsYandex Browser https://yandex.ru/legal/browser_agreement/
3	Dr.WebCureIt !	Freely distributed LicensedAgreement : https :// st . drweb . com / static / new - www / files / license _ CureIt _ ru . pdf
4	OpenOffice	Freely distributed License: http :// www . gnu . org / copyleft / lesser . html
5	LibreOffice	Freely distributed License: https :// ru . libreoffice . org / about - us / license /

3.7. Resources of the information and telecommunications network "Internet"

1. Ministry of Health of the Russian Federation. Standards of primary health care – https :// www . rosminzdrav . ru / ministry /61/22/ page -979/ page -983/1- standards - pervichnoy - mediko - sanitarnoy - pomoschi
2. Ministry of Health of the Russian Federation. Standards of specialized medical care – https :// www . rosminzdrav . ru / ministry /61/22/ page -979/ page -983/2- standarty - spetsializirovannoy - meditsinskoy - pomoschi
3. Ministry of Health of the Russian Federation. Procedures for providing medical care to the population of the Russian Federation - https :// www . rosminzdrav . ru / ministry /61/4/ stranitsa -857/ poryadki - okazaniya - meditsinskoy - pomoschi - naseleniyu - rossiyskoy - federatsii
4. Federal Electronic Medical Library (Ministry of Health of the Russian Federation) – http :// www . femb . ru
5. Student consultant (Electronic library of a higher educational institution) – http : // old . studmedlib . ru / ru / index . html
6. Electronic library system — Medical library — MEDLIB.RU ‖ – http : // www.medlib.ru/
7. Amur State Medical Academy (Electronic educational resources) – http : // www . amursma . ru / obuchenie / biblioteki / elektronnye - obrazovatelnye - resursy /

4. Assessment Fund

4.1. Examples of test tasks for intermediate knowledge assessment.

Test control is carried out on a single information and educational portal in the Moodle system.https://educ-amursma.ru , by randomly generating an individual version containing 50 questions from the question bank (100 questions).

EXAMPLES OF TEST TASKS:
Choose one correct answer

1. FOR NON-INSTRUMENTAL AIRWAY PATENANCE USED

A) tracheal intubation
B) naso- and oropharyngeal airways
B) bending the head and opening the mouth
D) Safar's triple technique or throwing back the head and opening the mouth

2. CONICOTOMY IS PERFORMED

A) between the first semicircle of the trachea and the cricoid cartilage
B) between the cricoid and thyroid cartilages
B) between the first and second semirings of the trachea
C) below the hyoid bone

3. THE HEIMLICH MANEUVER IS USED IN

A) aspiration of a foreign body
B) drowning
B) strangulation
D) asystole

Correct answers: G, B, A.

4.2. List of practical skills that a student should possess after completing the internship.

1. Perform basic cardiopulmonary resuscitation (CPR) on an adult using an AED.
2. Perform basic cardiopulmonary resuscitation (CPR) on an adult without an AED.
3. Perform advanced cardiopulmonary resuscitation on an adult with rhythms that are not amenable to electrical defibrillation .
4. Perform advanced cardiopulmonary resuscitation (CPR) on an adult with rhythms requiring defibrillation .
5. Perform basic cardiopulmonary resuscitation (CPR) on a child under 8 years of age using an AED.
6. Perform basic cardiopulmonary resuscitation on a child under 8 years of age without an AED.
7. Perform advanced cardiopulmonary resuscitation on a child under 8 years of age with rhythms that are not amenable to electrical defibrillation .
8. Perform advanced cardiopulmonary resuscitation on a child under 8 years of age with rhythms requiring electrical defibrillation.

4.3. List of questionsfor credit

1. Basic CPR Algorithm for Adults Using an AED
2. Basic Cardiopulmonary Resuscitation Algorithm for an Adult Without an AED
3. Algorithm for advanced cardiopulmonary resuscitation in adults with rhythms not amenable to electrical defibrillation .
4. Advanced Cardiopulmonary Resuscitation Algorithm for Adults with Rhythms Requiring Electrodefibrillation
5. Basic cardiopulmonary resuscitation algorithm for a child under 8 years of age using an AED
6. Basic cardiopulmonary resuscitation algorithm for a child under 8 years of age without an AED
7. Algorithm for advanced cardiopulmonary resuscitation for a child under 8 years of age with rhythms that are not amenable to electrical defibrillation .
8. Algorithm for advanced cardiopulmonary resuscitation for a child under 8 years of age with rhythms subject to electrical defibrillation

MODULE 9 " FUNDAMENTALS OF PRACTICAL TRAINING OF A DISTRICT PHYSICIAN"

1.2. Purpose and objectives of the practice

The purpose of the Module ―Fundamentals of Practical Training for the Professional Activities of a District Therapist‖ is to deepen basic knowledge and develop skills in generalizing and applying the acquired knowledge in the practical activities of a district therapist.

Module objectives:

1. Students will master the basic principles of outpatient clinics.

2. To consolidate the knowledge acquired in the Department of Health, Safety and Social Hygiene, to expand understanding of the structure and functional purpose of various departments of the clinic, to master the principles of work of a district physician-therapist, general practitioner.

3. Under the supervision of a local general practitioner, taking into account previously acquired knowledge, learn how to diagnose and provide emergency care for the most common emergency conditions.

4. Under the supervision of a local physician, taking into account the clinical experience acquired in the departments, learn to carry out early diagnosis, treatment, prevention, EVI, and medical examination of the most common diseases in an outpatient setting.

5. Strengthen communication skills with patients, taking into account ethics and deontology depending on the identified pathology.

6. To deepen skills in primary and secondary prevention of the main forms of therapeutic diseases.

7. To deepen skills in health education work.

8. To consolidate skills in preparing medical documentation, working with educational, scientific, reference, medical literature and official statistical reviews.

1.3. The place of practice in the structure of the main professional educational program of higher education.

In accordance with the Federal State Educational Standard of Higher Education (FSES VO) – specialty 31.05.01 General Medicine (2020). The module " Fundamentals of Practical Training for the Professional Activities of a District Therapist " of the industrial practice "General Medical Practice" is part of the core part, Block 2. The total workload is 180 hours and is conducted in the 11th semester of the 6th year. The assessment form is a credit test with an assessment in the 11th semester .

1.4. Forms of practice control.

Intermediate control is used as a form of monitoring the completion of practical training, including testing, control of theoretical knowledge, and control of the acquisition of practical skills.

1.5. Internship reporting forms.

Industrial practice diary, individual assignment for industrial practice, calendar schedule for completing the practice **.**

1.6. Requirements for students

To master the practice, knowledge, skills and abilities formed by previous disciplines are necessary:
Latin
Knowledge: basic medical and pharmaceutical terminology in Latin.
Skills: be able to apply knowledge for communication and obtaining information from medical literature, medical documentation
Skills: applies medical and pharmaceutical terminology in Latin in professional activities
Professional foreign language

Knowledge: basic medical and pharmaceutical terminology in a foreign language
Skills **:** be able to apply knowledge for communication and obtaining information from foreign sources
Skills: applies medical and pharmaceutical terminology in a foreign language in professional activities
Bioethics
Knowledge: moral and ethical standards, rules and principles of professional medical conduct, rights of the patient and the doctor, basic ethical documents regulating the activities of the doctor
Skills : build and maintain working relationships with patients and other team members.
Skills: applies moral and ethical standards, rules and principles of professional medical conduct, the rights of the patient and the doctor, the main ethical documents regulating the activities of the doctor in his professional activities
Biochemistry
Knowledge : blood composition, biochemical blood constants, hormones, buffer systems, hemoglobin oxygenation factors, erythrocyte metabolism
Skills: analyze the contribution of biochemical processes to the functioning of organs and the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems; interpret the results of the most common laboratory diagnostic methods to identify disorders in diseases of internal organs and occupational diseases.
Skills: applies knowledge of blood composition, blood biochemical constants, hormones, buffer systems, hemoglobin oxygenation factors, and red blood cell metabolism in their professional activities
Biology
Knowledge: the laws of genetics and its importance for medicine; the patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases; the biosphere and ecology, the phenomenon of parasitism and bioecological diseases
Skills: analyze patterns of heredity and variability in the development of diseases of internal organs and occupational diseases.
Skills: applies knowledge of the laws of genetics and its importance for medicine; the patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases in their professional activities
Normal physiology
Knowledge : physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in normal conditions
Skills: analyze the importance of regulation of biological processes in the human body on the functioning of the cardiovascular, digestive, urinary, respiratory, and hematopoietic systems.
Skills: applies knowledge of the physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in their professional activities
Topographic anatomy, operative surgery
Knowledge : structure, topography of cells , tissues, organs and systems of the body in interaction with their function in normal and pathological conditions
Skills : analyze the functional features of the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems in normal and pathological conditions.
Skills: applies knowledge about the structure, topography of cells , tissues, organs and systems of the body in interaction with their function in norm and pathology in their

professional activities
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in body tissues in pathologies of the cardiovascular, respiratory, digestive , urinary and blood systems
Skills: determine the contribution of pathophysiological processes to the development of diseases of internal organs.
Skills: applies knowledge of morphological changes in body tissues in pathologies of the cardiovascular, respiratory, digestive , urinary and blood systems in their professional activities
Pharmacology
Knowledge : pharmacokinetics, pharmacodynamics , side effects of various drugs on the body
Skills: write prescriptions for prescribed medications, know the indications and contraindications for their use.
Skills: applies knowledge of pharmacokinetics, pharmacodynamics , and side effects of various drugs on the body in his/her professional activities
Propaedeutics of internal diseases
Knowledge: collection of complaints, anamnesis **,** objective methods of examination of patients (palpation, percussion, auscultation
Skills : conduct anamnestic and physical examination, identify the main syndromes and symptoms of diseases of internal organs.
Skills: applies knowledge of collecting complaints, anamnesis, objective methods of examining patients (palpation, percussion, auscultation**in my professional activities**
Public health and healthcare, health economics
Knowledge: Fundamentals of the Russian Federation legislation on public health protection, key regulatory and technical documents; population health indicators, factors shaping human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional , professional, genetic)
Skills: plan, analyze, and evaluate the quality of medical care, the health status of the population, and the impact of environmental and occupational factors; calculate medical statistics.
Skills: applies knowledge of the fundamentals of the Russian Federation legislation on public health protection, the main regulatory and technical documents; population health indicators, factors that shape human health (environmental, professional, natural and climatic, endemic, social, epidemiological, psycho-emotional , professional, genetic) in their professional activities
Pathological anatomy, clinical pathological anatomy
Knowledge: etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes.
Skills: visually assess and record changes in the organs and tissues of a corpse, substantiate the nature of the pathological process and its clinical manifestations; provide an opinion on the cause of death and formulate a pathological diagnosis;
Skills: applies knowledge of the etiology, pathogenesis, morphogenesis, pathomorphosis of disease, principles of disease classification; structural and functional bases of diseases and pathological processes; causes, mechanisms of development and outcomes of typical pathological processes in their professional activities
Emergency conditions in therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in therapy).

Skills: diagnose an urgent condition under the main therapeutic conditions, formulate and justify a clinical diagnosis, conduct a differential diagnosis and provide emergency care.
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of emergency conditions in their professional activities
Faculty therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems.
Skills: formulate and justify a clinical diagnosis, prescribe an examination and treatment plan for the main therapeutic diseases, diagnose an urgent condition and provide emergency care.
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems **in their professional activities**
Hospital therapy
Knowledge: etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems.
Skills: formulate and justify a clinical diagnosis, prescribe a plan of examination and treatment for the main therapeutic diseases .
Skills: applies knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory, cardiovascular, digestive, urinary and hematopoietic systems in their professional activities

1.7. Interdisciplinary connections of practice

Knowledge and skills acquired during the internship "Fundamentals of practical training for the professional activities of a district therapist ." Necessary for studying subsequent disciplines and practices

Item No.	Name of subsequent disciplines	Module "Fundamentals of practical training for the professional activities of a district therapist."
1	Clinical pharmacology	+
2	Hospital therapy	+
3	Hospital surgery	+
4	Infectious diseases, epidemiology	+
5	Public health and healthcare organization, healthcare economics	+
6	Anesthesiology, resuscitation, intensive care	+
7	Organization of medical and preventive care for the adult population in a polyclinic setting	+

1.8. Requirements for the results of the internship

Mastering the practice of "Fundamentals of practical training for the professional activity of a district therapist" is aimed at the formation and improvement of the following universal (**UC**), general cultural (GPC) and professional competencies (PC): **UC** -3, 6; GPC -2,4,5,7,8,11; PC-1-14

No. p/p	Code and name of competence	Code and name of the competency achievement indicator	As a result of studying the academic discipline "Outpatient Therapy", the student must:		
			Know	**Be able to**	**To own**
Universal competencies					
	UC -3 . Able to organize and manage teamwork, developing a team strategy to achieve the set goal.	**AI UC-3.1.** Works in a team, is tolerant but perceives social, ethnic, religious and cultural differences. **AI UC 3.2** . Plans and adjusts team work based on the collaboration strategy; assigns tasks and delegates authority to team members. **AI UC-3.3** . Selects constructive ways to resolve conflicts and contradictions in business communication. **AI UC-3.4** . Organizes discussions on a given topic and discusses the team's work results with the involvement of opponents and developed ideas.	Key legislative acts, methods for resolving conflicts and contradictions in business communication	Work within the framework of set goals and objectives, achieve their implementation, resolve conflicts and contradictions in business communication	The basic principles of professional work qualities , the ability to carry out organizational but – managed ecological activities, resolve contradictions in business communication
	UC -6 . Capable of identifying and to implement priorities of one's own activities and ways of improving them based on self-assessment and lifelong learning	**AI UC -6.1.** Assesses personal, situational, and time resources and uses them optimally to complete assigned tasks. **AI UC-6.2** . Plans his/her activities within the framework of professional tasks. **AI UC-6.3** . Conducts critical self-analysis of the results of one's own activities. **AI UC -6.4** . Identifies priorities for professional growth and ways to improve one's own performance based on self-assessment according to selected criteria.	Priorities for professional growth and ways to improve one's own performance based on self-assessment	Assess your capabilities nost and their limits for success completion of assigned tasks, systematize theoretical knowledge to solve practical problems	The ability to provide a detailed plan of one's professional activities

General professional competencies					
	GPC-2 . Capable of conducting and monitoring the effectiveness of measures to prevent and promote healthy lifestyle and sanitation educational education of the population	**AI GPC-2.1** . Uses preventive medicine methods aimed at improving public health. **AI GPC-2.2.** Promotes a healthy lifestyle aimed at improving sanitary culture and disease prevention among patients (the population). **AI GPC-2.3** . Develops a plan to promote healthy lifestyles for various groups (medical staff and patients, various professional and social groups), taking into account the sanitary and epidemiological situation. **AI GPC-2.4** ranks public health risk factors and selects and justifies optimal measures to minimize and eliminate health risks. **AI GPC-2.5** . Assesses population health characteristics and environmental factors that impact the body, and understands the biophysical mechanisms of such impacts. **AI GPC-2.6** . Assesses the need for drug and non-drug prophylaxis, natural healing factors, and other methods aimed at preventing the occurrence of diseases and eliminating risk factors for their development. **AI GPC-2.7** . Examines the effects of drugs and biologically active substances, their combinations, taking into account the morphofunctional characteristics and physiological state of the human body.	Methods and measures for prevention tike, formi vaniyazdoro lifestyle and sanitation Czech education of the population	Conduct discussions about a healthy lifestyle with interested groups, monitor the effectiveness of preventive measures, and the formation of healthy lifestyles. lifestyle and sanitary and hygienic to whom the education of the population	The ability to develop a work plan to promote a healthy lifestyle and sanitary and hygienic to educate the population
	GPC- 4. Capable of using medical devices as provided for by the procedure for providing medical care, as well as conducting patient	**AI GPC-4.1** . Utilizes modern medical technologies, specialized equipment and medical devices, disinfectants, and medications, including immunobiological and other substances and their combinations, to solve professional problems using evidence-based medicine. **AI GPC-4.2.** Understands the indications and contraindications for instrumental, functional, and laboratory examination methods, potential complications	Essential medical products, specialized equipment, technologies, and medications required by the procedure for	Justify the choice of essential medical products, specialized equipment, technology, and medications provided for by the procedure for	The ability to conduct a patient examination to establish a diagnosis and interpretation results of the most common methods

	examinations to establish a diagnosis	during examinations, emergency care, and their prevention. **AI GPC-4.3** . Interprets the results of the most common instrumental, laboratory, and functional diagnostic methods, including thermometry, to identify pathological processes. **AI GPC-4.4.** Proficient in methods of general clinical examination of patients of various ages. **AI GPC-4.5.** Formulates a preliminary diagnosis and a clinical diagnosis according to the ICD.	providing medical care	providing medical care,	of instrumental, laboratory rnoy and funktio diagnostics , thermometry to identify pathological processes
	GPC-5 . Capable of assessing morphofunctional, physiological states, and pathological processes in the human body to solve professional problems.	**AI GPC -5.1.** Understands the functional systems of the human body, their regulation, and self-regulation in interaction with the external environment under normal and pathological conditions. **AI GPC-5.2** . Knowledge of etiology, pathogenesis, morphogenesis, pathomorphism of disease development, and basic concepts of nosology. **AI GPC-5.3** . Understands the morphofunctional and physiological state indicators of a healthy person and can measure/determine them. **AI GPC-5.4** . Uses indicators of morphofunctional, physiological state, and pathological processes to examine the human body to establish a diagnosis, prescribe treatment, and monitor its effectiveness and safety. **AI GPC-5.5** . Analyzes macroscopic and microscopic changes in normal and pathologically altered tissues and organs. **AI GPC-5.6.** Interprets biopsy and surgical specimen results to solve professional problems and formulate a diagnosis in accordance with the ICD.	Morphofunctional , physiological states and pathological processes in the human body for solving professional problems	Assess morphofunctional, physiological states and pathological processes in the human body to solve professional problems	The ability to assess the physical development of the body, data from medical examinations of various contingents and periodic medical examinations to solve a professional problem
	GPC-7. Capable of	**AI GPC-7.1** . Selects medications based on their	Mechanisms of	Prescribe treatment	Ability

	prescribing treatment and monitoring its effectiveness and safety.	pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological entities in outpatient and inpatient settings. **AI GPC-7.2** . Selects the optimal minimum of the most effective medications, taking into account convenient methods of administration and the patient's financial ability to purchase medications. **AI GPC-7.3.** Explains the primary and secondary effects of medications, the effects of their combined use, and interactions with food, taking into account morphofunctional characteristics, physiological conditions, and pathological processes in the human body. **AI GPC-7.4** . Prescribes medications for the treatment of diseases and correction of pathological conditions, based on the pharmacokinetics and pharmacodynamics of the drugs. **AI GPC-7.5** takes into account morphofunctional characteristics, physiological states, and pathological processes in the human body when selecting over-the-counter medications and other pharmacy products. **AI GPC-7.6** . Analyzes the results of potential drug interactions when various medications are used in combination. **AI GPC-7.7** . Evaluates the efficacy and safety of drug therapy using a combination of clinical, laboratory, instrumental, and other diagnostic methods.	action of drugs based on their pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient settings.	to patients with various nosological forms in outpatient settings and monitor its effectiveness and safety	selection of a drug based on a combination of the nature of its pharmacokinetics genetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient settings
	GPC-8. Capable of implementing and monitoring the effectiveness the necessity of	**AI GPC -8.1.** Assesses a person's functional reserves and adaptive abilities, reduced by adverse environmental factors and activities or as a result of illness. **AI GPC-8.2.** Identifies risk groups for the purpose of improving health and determining rehabilitation potential	Basic principles of monitoring the effectiveness of medical rehabilitation of a	Carry out activities to identify risk groups for the purpose of improving health	Ability monitor the effectiveness of the patient's medical rehabilitation,

	medical rehabilitation of the patient, including in the implementation of individual rehabilitation and habilitation programs for people with disabilities, to assess the patient's ability to carry out work activities	for subsequent restorative treatment and rehabilitation of patients. **AI GPC-8.3** . Develops and organizes a plan of medical rehabilitation for patients, including non-drug treatment methods (natural healing factors, physical and reflexology, exercise therapy). **AI GPC-8.4** . Interprets the results of clinical, laboratory, instrumental, and neuropsychological diagnostic methods to monitor the effectiveness of medical rehabilitation programs and assess the patient's ability to perform work activities.	patient, including when implementing tsiindividual rehabilitation and habilitation programs for people with disabilities, to assess the patient's ability to perform work activities	and determining the rehabilitation potential for subsequent restorative treatment and rehabilitation of patients	including the implementation of individual rehabilitation and habilitation programs for people with disabilities, and assess the patient's ability to perform work
	GPC- 11. Able to prepare and apply scientific, research and production, design, organizational and managerial, and regulatory documentation in the healthcare system.	**AI GPC 11.1** . Applies modern methods for collecting and processing information, conducts statistical analysis of obtained data in the professional field, and interprets the results to solve professional problems. **AI GPC 11.2** . Identifies and analyzes problematic situations, searches for and selects scientific, regulatory, and organizational documentation in accordance with established objectives. **AI GPC 11.3** . Interprets and applies data from physical, chemical, mathematical, and other natural science concepts and methods to solve professional problems. **AI GPC-11.4** . Conducts scientific and practical research, analyzes information using the historical method, and prepares publications based on research results. **AI GPC-11.5.** Analyzes and compiles medical records and calculates qualitative and quantitative indicators used in professional activities.	Scientific, research and production, design, organizational, managerial and regulatory documentation in the healthcare system	Prepare and apply scientific, scientific-industrial, design, organizational-managerial and regulatory documentation in the healthcare system, implement search and selection of scientific, regulatory, legal and organizational documentation in accordance with the specified objectives	Ability conduct scientific and practical research, analyze information using the historical method and prepare publications based on the research results
Professional competencies					

	PC-1 Capable of providing medical assistance in urgent and emergency situations	AI PC - 1.1. Identifies clinical signs of conditions requiring emergency medical care. AI PC -1.2. Provides emergency medical care to patients with sudden acute illnesses, conditions, and exacerbations of chronic diseases without obvious signs of a threat to the patient's life. AI PC -1.3. Identifies conditions requiring emergency medical care. AI PC - 1.4. Provides emergency medical care to patients with life-threatening conditions. AI PC -1.5. Detects signs of sudden cessation of blood circulation and breathing. AI PC - 1. 6. Performs basic cardiopulmonary resuscitation in combination with electrical impulse therapy (defibrillation) in the event of clinical death of the patient (in case of sudden cessation of blood circulation and/or breathing) .	Clinical signs of conditions requiring emergency medical care	Identify and provide emergency medical care to patients with sudden acute illnesses, conditions, and exacerbations of chronic diseases without obvious signs of a threat to the patient's life.	Skills in providing medical care in emergency and urgent situations to patients with sudden acute illnesses, conditions, and exacerbation of chronic diseases without obvious signs of a threat to the patient's life
	PC-2. Capable of collecting and analyzing complaints, life history and medical history of the patient in order to establish a diagnosis	**AI PC -2 .1.** Establishes contact with the patient. **AI PC -2 .2.**Collects complaints, specifies them, highlighting the main and secondary ones. **AI PC -2.3 .** Collects and analyzes information about the onset of the disease, the presence of risk factors, the dynamics of symptom development, and the course of the disease. **AI PC -2.4 .** Analyzes the timing of the first and repeated requests for medical care, the volume of therapy administered, and its effectiveness. **AI PC -2.5 .** Collects and evaluates information about the medical history, including data on past illnesses, injuries and surgical interventions, hereditary, professional	Algorithms for collecting complaints, life history and medical history of the patient for the purpose of establishing a diagnosis	Collect and analyze information about the onset of the disease, the presence of risk factors, the dynamics of the development of symptoms and the course of the disease	Skills in collecting complaints, life history and medical history of the patient in order to establish a diagnosis
	PC-3.	**AI PC-3.1.**Conducts a complete physical examination	Methodology for	Analyze the	Skills for early

	Able to conduct a physical examination of a patient and analyze the results of additional examination methods in order to establish a diagnosis	of the patient (inspection, palpation, percussion, auscultation) and interprets the results **AI PC-3.2.**Justifies the necessity, scope, sequence of diagnostic measures (laboratory, instrumental) and referral of the patient to specialist doctors for consultations **AI PC-3.3.** Analyzes the patient examination results and, if necessary, justifies and plans the scope of additional research. **AI PC-3.4.** Interprets and analyzes the results of collecting information about the patient's disease, data obtained during laboratory and instrumental examinations and during consultations with specialist doctors, and, if necessary, justifies and plans the scope of additional research. **AI PC-3.5.**Provides early diagnosis of internal organ diseases. Diagnosis is based on the current International Statistical Classification of Diseases and Related Health Problems (ICD). **AI PC-3.6.**Conducts differential diagnostics of internal organ diseases from other diseases	conducting a complete physical examination of the patient and international statistics -10 classification of diseases and related health problems	obtained results of the patient's examination	diagnosis of diseases of internal organs and
	PC-4 . Capable of determining indications for hospitalization, indications for emergency, including specialized emergency, medical care	**AI PC-4.1.**Determines medical indications for the provision of emergency, including specialized emergency, medical care **AI PC-4.2.**Refer the patient for specialized medical care in an inpatient setting or in a day hospital setting if there are medical indications in accordance with the current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care **AI PC-4.3.**Uses medical devices in accordance with	Indications for hospitalization, indications for emergency, including specialized emergency, medical care	Determine medical indications for the provision of emergency, including emergency specialized, medical care and refer the patient for specialized medical care in an inpatient	Skills in using medical devices in accordance with current procedures for providing medical care, clinical guidelines (treatment protocols) on issues of providing medical care, and care taking into account medical

		current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, care taking into account the standards of medical care		setting or in a day hospital setting	care standards
	PC-5. Able to prescribe treatment to patients	**AI PC -5. 1.** Draws up a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC -5. 2.** Prescribes medications, medical devices, and therapeutic nutrition taking into account the diagnosis, age, and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical guidelines, and standards of medical care. **AI PC -5. 3.** Prescribes non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with current procedures for the provision of medical care, clinical guidelines, and standards of medical care. **AI PC -5.4 .** Provides palliative care in collaboration with specialist doctors and other healthcare workers. **AI PC -5. 5.** Organizes personalized treatment for patients, including pregnant women, elderly and senile patients.	Clinical guidelines (treatment protocols) for the provision of medical care, taking into account the standards of medical care	Prepares a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care	Skills in providing palliative care in collaboration with specialist doctors and other healthcare workers

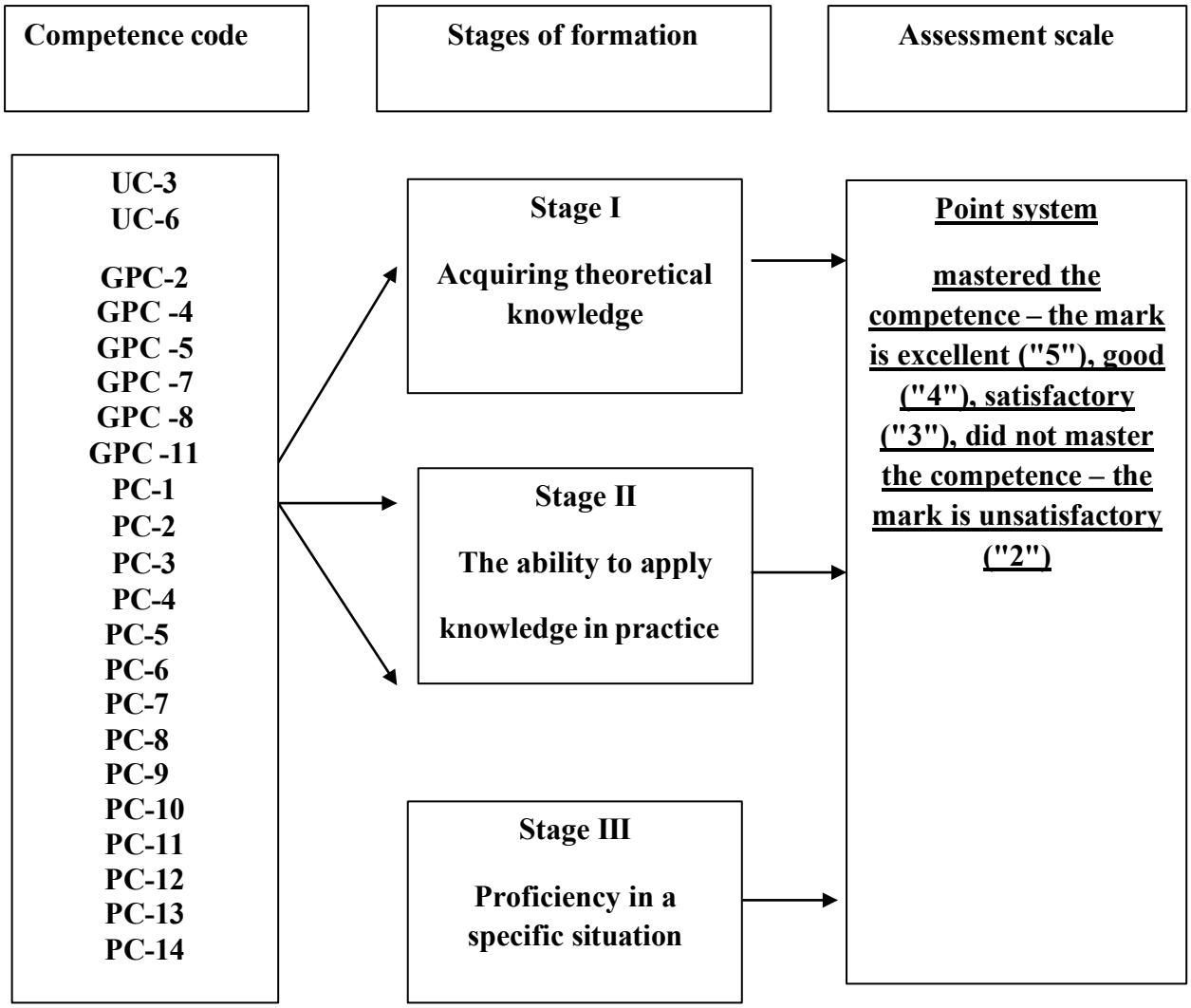
	PC-6. Capable of monitoring the effectiveness and safety of the therapy being administered	**AI PC-6.1.** Evaluates the efficacy and safety of drugs, medical devices, nutritional supplements, and other treatment methods. **AI PC-6.2.** Takes into account the pharmacodynamics and pharmacokinetics of key drug groups, prevents the development of adverse drug reactions, and corrects them if they occur.	Pharmacodynamics and pharmacokinetics of the main groups of drugs	Evaluate the effectiveness efficacy and safety of drug use drugs, medical devices, therapeutic nutrition and other treatment methods	Skills in monitoring the effectiveness and safety of the therapy
	PC-7 . Able to guide a patient with persistent impairment of body functions caused by a disease we, last injuries or defects for medical and social examination	**AI PC-7.1.** Identifies signs of temporary disability and signs of persistent impairment of body functions caused by diseases, consequences of injuries, or defects. **AI PC-7.2.** Participates in the examination of temporary disability and works as part of the medical commission conducting the examination of temporary disability. **AI PC-7.3.** Prepares the necessary medical documentation for medical and social assessments in federal government institutions for medical and social assessments. **AI PC-7.4.** Refer a patient with a persistent impairment of bodily functions caused by illness, consequences of injury, or defects for medical and social examination.	Signs of temporary disability and signs of persistent impairment of body functions caused by diseases, consequences of injuries or	Conduct an examination of temporary disability and prepare the necessary medical documentation for the implementation of medical and social examination in federal state institutions of medical and social examination	Skills in conducting an examination of temporary disability and preparing the necessary medical documentation for the implementation of medical and social examination in federal state institutions of medical and social examination
	PC-8. Capable of implementing and monitoring the effectiveness of individual patient rehabilitation programs	**AI PC-8. 1.** Determines medical indications for medical rehabilitation or habilitation of disabled persons, in accordance with current procedures for the provision of medical care, clinical guidelines for the provision of medical care, taking into account the standards of medical care. **AI PC-8.2. Performs** medical rehabilitation activities for the patient, in accordance with current procedures for the provision of medical care, clinical guidelines	Medical indications for carrying out medical rehabilitation or habilitation measures for disabled people, in accordance with the current	Determine medical indications for carrying out medical rehabilitation or habilitation measures for disabled people, in accordance with	Skills implementation and monitoring of the effectiveness of individual patient rehabilitation programs

		(treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC-8.3.** Determines medical specialists to carry out rehabilitation measures for the patient, taking into account the diagnosis and in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on issues of providing medical care, taking into account the standards of medical care. **AI PC 8.4.** Monitors and evaluates the effectiveness and safety rehabilitation measures, taking into account the diagnosis and in accordance with current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the standards of medical care	procedures for the provision of medical care, clinical guidelines for the provision of medical care, taking into account the standards of medical care	current procedures for the provision of medical care, clinical guidelines for the provision of medical care, taking into account the standards of medical care	
	PC-9. A method for conducting preventive medical examinations , clinical examinations , and implementing clinical observation patientschronic diseases	**AI PC 9.1.** Organizes and conducts medical examinations taking into account age, health status, and profession in accordance with current regulatory legal acts and other documents. **AI PC 9.2.** Conducts medical examination of the adult population for the purpose of early identification of chronic non-communicable diseases and the main risk factors for their development **AI PC 9.3.** Conducts outpatient monitoring of patients with identified chronic non-communicable diseases **AI PC 9.4.** Determines medical indications for referral to specialist doctors and additional research methods based on the results of a medical examination.	The main current regulatory legal acts and other documents	Conduct medical examinations taking into account age, health status, profession in accordance with current regulatory legal acts and other documents	Skills for conducting dispensary observation of patients with identified chronic non-communicable diseases
	PC -10. Capable of conducting and	**AI PC 10.1.** Prescribes preventive measures to patients taking into account risk factors for the prevention and early detection of diseases, including socially significant	Formation programs promotion ,	Conduct and monitor the effectiveness of	Conducting skills activities for preventive work and

	monitoring the effectiveness of preventive measures and promoting a healthy lifestyle	diseases. **AI PC 10.2.** Develops and implements healthy lifestyle programs, including programs to reduce alcohol and tobacco consumption, and prevent and combat the non-medicinal use of narcotic drugs and psychotropic substances. **AI PC 10.3.** Conducts sanitary and anti-epidemic measures in the event of an outbreak of infection.	including programs to reduce consumption alcohol and tobacco use ka, prevention and control of non-medicinal substances non-toxic consumption I eat drugs drugs and psychotropics substances	preventive measures and the promotion of a healthy lifestyle	the formation of a healthy lifestyle
	PC-11. M a n tapplication of the basic principles of organizing the management of the attached population in the health care sector , in medical and structural organizations divisions x	**AI PC 11.1.** Organizes medical care in medical organizations providing outpatient medical care, including at home when a medical worker is called. **AI PC 11.2.**Monitors the performance of job responsibilities by the district nurse and other available medical workers **AI PC 11.3.** Uses methods and means of visual presentation of activity results **AI PC 11.4.** Prepares a work plan and a report on the work of the district physician in accordance with established requirements **AI PC 11.5.** Ensures internal quality control and safety of medical activities within the scope of job responsibilities. **AI PC 11.6.**Uses information systems and information and telecommunications in professional activities	The main principles of organizing the management of the attached population in the health care sphere , in medical and structural organizations divisions x	Ensure internal control of the quality and safety of medical activities within the scope of job responsibilities	Skills in drawing up a work plan and report on the work of a district physician in accordance with established requirements
	PC-12.	**AI PC -12.1 .**Completes medical documentation,	The main one	Fill out medical	Skills

	Ready to maintain medical records, including in electronic form	including electronically **AI PC -12.2 .**Works with personal data of patients and information constituting a medical secret **AI12.3.** Prepares documents for referring patients for hospitalization, consultation, spa treatment, and medical and social assessment.	medical documentation and how to fill it out	documentation, including in electronic form	working with personal data of patients and information constituting a medical secret
	PC-13. Ready to participate in assessing the quality of medical care provided to patients using medical statistics some indicators	**AI PC -13.1 .**Conducts an analysis of medical and statistical indicators of morbidity, disability and mortality to assess the health of the assigned population **AI PC 13. 2.**Analyzes official statistical reporting data, including federal and industry statistical monitoring forms	Statistical reporting, including federal and industry statistical monitoring forms	Conduct medical and statistical analysis indicators of morbidity, disability lead and death for assessing the health of the attached population	Skills in conducting statistical reporting
	PC-14. Capable of participating in research activities	**AI PC -14. 1.** Participates in scientific research **AI PC -14. 2.** Analyzes medical information based on evidence-based medicine **AI PC -14. 3.** Introduces new methods and techniques into practical healthcare aimed at protecting the health of the adult population.	Evidence-based medical information	Analyze medical information based on evidence-based medicine	Skills in introducing new methods and techniques into practical healthcare aimed at protecting the health of the adult population

1.9 . Stages of developing competencies and descriptions of assessment scales



2. Structure and content of practice

2.1. Scope of practice

Scope of practice	
Total labor intensity in hours, total	432
Labor intensity in hours of the Module " Fundamentals of practical training for the professional activities of a district therapist "	180
Total workload in credit units, total	12
Type of intermediate assessment	Credit with grade

2.2. Type of practice, method and form of its implementation

Type of practice: industrial

Industrial internship is a mandatory part of the curriculum, directly focused on students' professional and practical training. During the program, students are encouraged to master a set of required practical skills.

2.3. Criteria for assessing students' knowledge .

The assessment of learning outcomes is carried out in accordance with the ―Regulations on the system for assessing the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of the Russian Federation‖.

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria

- completeness and correctness:
- correct, precise answer;
- correct, but incomplete or inaccurate answer;
- incorrect answer;
- no answer.

When assigning marks, the classification of errors and their quality are taken into account:

-gross errors;
- similar errors;
- minor errors;
- shortcomings.

Criteria for assessing the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student can easily navigate, for the ability to connect theoretical questions with practical ones, express and justify their judgments, and present their answer competently and logically.

"4" - the student has fully mastered the educational material, is oriented in it, and expresses his answer competently, but the content and form contain some inaccuracies.

“3” – the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, and does not know how to express and justify his judgments.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, and presents the material in a disorderly and uncertain manner.

Test control evaluation criteria

“5” - when testing, up to 10% of incorrect answers are allowed.

“4” - allows up to 20% of incorrect answers during testing.

“3” - allows up to 30% of incorrect answers during testing.

“2” - during testing, more than 30% of incorrect answers are allowed.

Criteria for assessing the practical part

“5” – the student has fully mastered the practical skills and abilities provided for in the work program of industrial practice.

“4” – the student has mastered the practical skills and abilities provided for in the work program of industrial practice, but allows for some inaccuracies.

“3” – the student has only some practical skills and abilities.

“2” - the student has only some practical skills and abilities and performs them with gross errors.

Interim assessment (test lesson) on a five-point scale

The midterm assessment is conducted by a practice commission consisting of a course supervisor from the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy and a practice supervisor from a medical organization.
"5" (excellent) – for the depth and completeness of the student's understanding of the course material, which the student navigates easily, for their ability to connect theoretical and practical questions, express and justify their judgments, and present their answers clearly and logically; Allows up to 10% incorrect answers during testing. The practical skills and abilities required by the internship program have been fully mastered.

"4" good - the student has fully mastered the course material, is familiar with it, and presents answers clearly, but the content and format contain some inaccuracies; during testing, the student makes up to 20% incorrect answers. The student has fully mastered the practical skills and abilities required for the course, but makes some inaccuracies.

"3" (satisfactory) – the student has mastered the knowledge and understanding of the main concepts of the course material, but presents it incompletely and inconsistently, and is unable to express and justify their judgments; during testing, the student makes up to 30% incorrect answers. The student possesses only some practical skills and abilities.

"2" (unsatisfactory) – the student has a fragmented and unsystematic knowledge of the course material, is unable to distinguish between essential and non-essential concepts, makes errors in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% incorrect answers during testing. The student performs practical skills and abilities with significant errors.

3. Educational, methodological, logistical and informational support of the discipline:

3.1. Primary Literature

	Name of textbooks, teaching aids, methodological manuals, developments and recommendations	**Links**
1	1. Storozhakov , G. I. Polyclinic therapy : textbook / Storozhakov G. I. ,Chukaeva I. I. , Aleksandrov A. A. - 2nd ed. , processor . and additional. - Moscow : GEOTAR-Media, 2013. - 640 p. - ISBN 978-5-9704-2501-5. - Text : electronic (date of receipt: 06.05.2021). - Access mode : by subscription.	http://www.studmedlib.ru/en/book/ISBN9785970425015.html
2	2. Davydkin, I. L. Outpatient therapy: textbook / edited by Davydkin I. L., Shchukin Yu. V. - 2nd ed., revised . and additional. - Moscow: GEOTAR-Media, 2020. - 840 p. - ISBN 978-5-9704-5545-6. - Text: electronic (date accessed: 05.05.2021). - Access mode: by subscription.	http://www.studmedlib.ru/book/ISBN9785970455456.html

3.2. Further reading

1	Outpatient therapy. Standards of medical care. Quality assessment criteria. Pharmacological reference book / compiled by A. I. Murtazin - Moscow: GEOTAR-Media, 2019. - 624 p. - ISBN 978-5-9704-5087-1. - Text: electronic (date accessed: 05.05.2021). - Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970450871.html
2	Kuznetsova, O. Yu. Palliative care in outpatient settings: a guide for doctors / edited by O. Yu. Kuznetsova. - Moscow: GEOTAR-Media, 2021. - 336 p. - ISBN 978-5-9704-5948-5. - Text: electronic (date accessed: 05.05.2021). - Access mode : by subscription.	http://www.studmedlib.ru/book/ISBN9785970459485.html

3. 3. Educational and methodological support for the discipline, prepared by the department staff:

Textbooks:

1. Pavlenko V.I., Goncharova O.M. Key aspects of organizing outpatient care for the adult population. Study guide - Blagoveshchensk, 2018., 158 p .
2. Pavlenko V.I., Goncharova O.M., Soluyanova I.P. Acid-dependent and HELICOBACTER PYLORI- associated diseases in the practice of a local general practitioner. Study guide - Blagoveshchensk, 2020., 166 p.

Educational videos (DVDs) prepared by the department:

1) Video tutorial "Collecting complaints and anamnesis during an outpatient appointment"
2) Video tutorial: "Errors in collecting complaints and anamnesis during an outpatient appointment"
3) Educational video tutorial "Medical Examination"

3.4. Equipment used for the practice

Item No.	**Name of equipped classrooms, facilities for practical classes (quantity, pcs.)**
1	Educational and methodological office Basic equipment: table-4 and chairs-9; bookcase.
2	Department's classroom Basic equipment: Board-1; tables-9 and chairs-23; cabinet -1, visual aids-21; stands-3.
3	Basic equipment: tables-1 and chairs -3; bookcase-1.
4	Basic equipment: computer-1, tables - 2 and chairs - 3, bookcase - 2, visual aids - 23.
5	Department's classroom Basic equipment: tables-2 and chairs-10; couch-1.

6	The department's classroom. Basic equipment: tables - 7 and chairs - 22; visual aids - 14; stands - 4.
7	The department's classroom. Basic equipment: tables - 6 and chairs - 12; visual aids - 16; stands - 4.
8	Clinic equipment used by students during their internships

3.5. Professional databases, information and reference systems, electronic educational resources.

No. p.p.	Resource name	Resource Description	Access	Resource address
Electronic library systems				
1.	Student Consultant. Medical University Electronic Library	For students and teachers students of medical and pharmaceutical universities Provides access to electronic versions of textbooks kov, textbooks and periodicals.	library, individual access	http: // www . studmedlib.ru/
2.	"Doctor's Consultant" Electronic Medical Library.	Materials, sizes The library's curriculum is developed by leading by Russian specialists based on modern scientific knowledge (evidence-based medicine). The information was prepared taking into account the position of the scientific and practical medical community (world, European and Russian) according to the relevant specialization ality . All materials have undergone mandatory independent review.	library, individual access	http://www.rosmedlib.ru/cgi-bin/mb4x
3.	PubMed	MedLine , the largest medical bibliographic database . It documents medical and biological articles from specialized literature and provides links to full-text articles.	library, free access	http:// www. ncbi.nlm.nih . gov/ pubmed /

4.	Oxford Medicine Online	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , the electronic versions of which are continually updated.	library, free access	http://www.oxfordmedicine.com
5.	Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , and pathology . (Source: Institute of Molecular Genetics, Russian Academy of Sciences .)	library, free access	http://humbio.ru/
6.	Medical online library	Free reference books, encyclopedias, books, monographs, essays, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems				
7.	Russian Medical Association	A professional internet resource. Objective: to promote effective professional activity. of medical personnel. Contains the charter, personnel, structure, rules of entry, and information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
8.	Web medicine	The website provides a directory of professional medical resources, including links to the most authoritative specialized websites, journals, societies, as well as useful documents and programs. It is intended for physicians, students, and staff of medical universities and research institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases				
9.	World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact	library, free access	http://www.who.int/ru/

		sheets, reports, WHO publications, and much more.		
10.	Ministry of Science and higher education Russian Federation	Website of the Ministry of Science and Higher Education The Russian Federation contains news, newsletters, reports, publications and much more	library, free access	http://www.minobrnauki.gov.ru
11.	Ministry of Education Russian Federation	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and more	library, free access	https://edu.gov.ru/
12.	Federal Portal "Russian Education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and healthcare.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?p rubr =2.2.81.1
Bibliographic databases				
13.	Database "Russian Medicine"	Created at the Central Scientific and Methodological Library, it covers the entire collection since 1988. The database contains bibliographic descriptions of articles from Russian journals and collections, dissertations and their abstracts, as well as Russian and foreign books, institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related fields of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
14.	eLIBRARY.RU	A Russian information portal in the fields of science, technology, medicine, and education, containing abstracts and full texts of more than 13 million scientific articles and publications. eLIBRARY.RU platform offers electronic versions of over 2,000 Russian scientific and technical journals, including over	library, free access	http://elibrary.ru/defaultx.asp

		1,000 open-access journals .		
15.	Portal Electronic Library of Dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
16.	Medline.ru	Biomedical portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6. Licensed and freely distributed software used in the educational process

II. Commercial software products		
1.	MS Windows 7 Pro operating system	License number 48381779
2.	Operating system MS Windows 10 Pro , MSOffice	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License numbers : 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated October 15, 2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated November 11, 2020
II . Freely distributed software		
1.	Google Chrome	Freely distributed Distribution Terms : https://play.google.com/about/play-terms/index.html
2.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Software https :// yandex . ru / legal / browser_agreement /
3.	Dr.WebCureIt !	Freely distributed License Agreement: https :// st . drweb . com / static / new - www / files / license _ CureIt _ ru . pdf
4.	OpenOffice	Freely distributed License: http :// www . gnu . org / copyleft / lesser . html
5.	LibreOffice	Freely distributed License: https :// ru . libreoffice . org / about - us / license /

3.7 Resources of the information and telecommunications network "Internet"

1. https://www.rosminzdrav.ru/ - website of the Russian Ministry of Health
2. www . emergeneyrus . ru
3. http :// www . goldcopd . org/
4. http:// www . ginasthma . com /
5. http://www.videotest.ru/ru/app/179/
6. http://asmok.ru/ ,
7. http://www.teva.ru/
8. http://www.lvrach.ru/
9. http://www.medicina-journal.ru/
10. http://www.medscape.com/
11. http://www.medline.ru/
12. http://www.rmj.ru/
13. http://www.medmir.com/
    www . nemb . ru

4. Fund of assessment tools for conducting interim assessment

4.1. Examples of test tasks for intermediate control

Access mode: https://educ-amursma.ru/mod/quiz/view.php?id=5209

1. **THE** FUNCTIONAL RESPONSIBILITIES OF THE REGISTRATION OFFICE INCLUDE:

   A) distribution of patient flow in the clinic
   B) providing emergency care
   B) issuing referrals for examination
   D) registration of documents for medical examination

2. THE DUTIES OF THE DISTRICT PHYSICIAN DO NOT INCLUDE:

   A) determination of the disability group
   B) provision of medical care
   B) referral for spa treatment
   D) issuance of a certificate of incapacity for work

3. STAGES OF MEDICAL EXAMINATION ACCORDING TO NEW LEGISLATIVE DOCUMENTS:

   A) two stages
   B) four stages
   B) three stages
   D) one stage

4.2. List of practical skills that a student should possess after completing the internship

The student must be able to

1 Collect anamnesis, interview the patient
2 Properly conduct a physical examination of the patient (inspection, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.) and identify the main objective data
3 Assess the patient's condition to decide whether medical care is needed
4 Determine the minimum laboratory and instrumental studies necessary to establish a diagnosis
5 Establish priorities for solving the patient's health problems: critical (terminal) condition, condition with pain syndrome, condition with a chronic disease, condition with an infectious disease, disability, condition of mentally ill patients
6 Interpret the obtained research results
7 To make a preliminary diagnosis is to synthesize information about the patient in order to determine the pathology and the causes that cause it
8 Outline the scope of additional research in accordance with the disease prognosis, to clarify the diagnosis and obtain a reliable result
9 Assess the severity of the patient's condition (mild, moderate, severe).
10 Formulate a clinical diagnosis
11 Use diagnostic algorithms (primary, concomitant, complications) taking into account the International Statistical Classification of Diseases and Related Health Problems (ICD)
12 Formulate indications for the selected treatment method taking into account etiotropic and pathogenetic agents, justify pharmacotherapy in a specific patient with the main pathological syndromes and emergency conditions, determine the route of administration, regimen and dose of drugs, evaluate the effectiveness and safety of the treatment
13 Determine indications for outpatient treatment of the patient
14 Create a treatment plan for a specific patient
15 Be able to explain the mechanism of action of drugs
16 Use different methods of drug administration
17 Write out prescriptions (taking into account social rights to subsidized drugs) and drugs that are on the subject-quantity register
18 Provide emergency assistance before the ambulance arrives
19 Analyze and interpret the results of modern diagnostic technologies
20 Apply basic methods of clinical and immunological examination and assessment of the functional state of the patient's body
21 Perform basic medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions
22 Conduct resuscitation measures in the event of clinical death
23 Timely identification of life-threatening disorders (acute blood loss, respiratory failure, pulmonary edema, hypertensive crisis, myocardial infarction, cardiac asthma, cardiac arrest, paroxysmal tachycardia, coma, anaphylactic shock), use methods for their immediate elimination, and carry out anti-shock measures
24 Determine the indications for hospitalization of medical patients
25 Determine the patient's ability to work at the time of the initial examination and after completion of treatment
26 Use legislative acts on the examination of temporary and permanent disability; establish the cause of temporary disability and the criteria for recovery and discharge to work
27 Correctly prepare documents certifying temporary disability
28 Timely identification of signs of disability, prediction of disability group, preparation of documents for referral to the Medical and Social Expertise (MSE)
29 Timely identification of indications for rational employment and its proper implementation
30 Draw up an Individual Plan of Action for a disabled person

31 Conduct medical examinations, draw up a medical examination plan, a plan for health measures; evaluate the quality and effectiveness of medical examinations
32 Provide the patient with recommendations on primary prevention and a healthy lifestyle
33 Select individuals for BCG vaccination and revaccination based on the results of mass tuberculin testing , evaluate the nature of the local vaccination reaction and possible post-vaccination complications; form high-risk groups for tuberculosis; and evaluate the effectiveness of patient follow-up.
34 Correctly maintain and fill out medical documentation: outpatient card of the patient (form No. 025u-04), certificate of incapacity for work, control card of the patient registered with the dispensary (No. 095/u), referral to the Medical and Social Expertise (No. 088/u-97), referral for hospitalization (No. 070/u-04), registration card of the medical examination of the employee (No. 131 / u-DD), emergency notification of an acutely contagious patient (No. 058-u), passport of the medical station (No. 030/u-ter), doctor's diary (No. 039-u), sanatorium and resort card (No. 072/u-04), etc.
35 Be able to draw up annual medical reports and plans for clinical examination of patients

4.3. List of questions for the test

1. Clinic management. Functions of the chief physician of the clinic.
2. Structure of the city municipal polyclinic.
3. Clinic registration. Tasks and functions of the registry
4. Auxiliary diagnostic departments of the polyclinic. Department tasks.
5. Functions of a general practitioner (family doctor).
6. Accounting and reporting documentation of a district general practitioner, general practitioner (family doctor).
7. Organization of the activities of the local general practitioner.
8. Tasks and functions of the district general practitioner
9. Rights and responsibilities of specialist doctors at the clinic (cardiologist, pulmonologist, gastroenterologist, endocrinologist, etc.).
10. Functions of the Deputy Chief Physician for the examination of temporary disability
11. Deontological principles in the work of a district physician, general practitioner
12. Department **of** Prevention. Structure and tasks of the department.
13. Basic medical documentation of the therapeutic service in the clinic **.** 14. Criteria for the effectiveness of the activities of the district general practitioner.
15. Procedure for issuing prescriptions to outpatients. Specifics of issuing prescriptions for narcotic drugs.
16. Organization of preventive work in the clinic. Organization of preliminary and periodic medical examinations.
17. The procedure for issuing prescriptions and dispensing medications to persons entitled to a preferential set of social services
18. Health centers. Main tasks of the health center **.**
19. Oncological alertness in the work of a district physician. A program for examining patients with suspected oncological disease in a polyclinic setting,
20. Electronic outpatient card. Pros and cons of an electronic card
21. Medical examination. Health status groups. Criteria for the effectiveness of medical examination.
22. Medical examination of the adult population. Objectives of medical examination **.** Groups for medical registration.
23 Preventive counseling as part of medical examination of the adult population. Definition. Objectives.
24. Brief preventive counseling. Purpose. Algorithm of brief preventive counseling
25. In-depth preventive counseling. Purpose. Algorithm of in-depth preventive counseling.

26. Primary prevention of socially significant diseases (cardiovascular, tuberculosis, cancer, diabetes, etc.).
27. Possibilities of examination in a clinic to verify a diagnosis. Tactics of a district physician and general practitioner
28. Methodology for writing an annual medical report and observation plan for a dispensary patient
29. Algorithm for establishing a preliminary and detailed clinical diagnosis for abdominal pain syndrome. Indications for hospitalization.
30. Sanatorium-resort treatment. Definition. Objectives. General indications and contraindications for referral to sanatorium-resort treatment.
31. Procedure for issuing documents certifying temporary disability Procedure for filling out a temporary disability certificate
32. Advantages and disadvantages of spa treatment. Rules for obtaining a certificate for obtaining a spa treatment voucher (Form No. 070/u) and a spa card (Form No. 072/u).
33. Indications for referring patients for inpatient treatment
34. Functions and composition of the VK
35. Organization of provision of primary health care to persons entitled to a set of social services
36. Organization of the work of a general practitioner
37. Principles of lean manufacturing
38. Clinical and diagnostic criteria. Basic principles of outpatient treatment of diseases of the bronchopulmonary system, cardiovascular diseases, diseases of the digestive system, biliary and urinary systems, and joint diseases.

APPROVED
at the department of Faculty and Outpatient Therapy
Protocol No. 6 of May 14, 2026

Head of the Department
_____Pavlenko V. I.

ADDITIONS AND CHANGES TO THE PRACTICE WORK PROGRAM
" GENERAL MEDICAL PRACTICE "
SPECIALTY 31.05.01 GENERAL MEDICINE
FOR THE 2026-2027 ACADEMIC YEAR

Tables in section 3.5. "Licensed and freely distributed software used in the educational process", "Professional databases, information and reference systems, electronic educational resources" should read as follows:

List of software (commercial software products)

No.	List of software (commercial software products)	Detailsofsupportingdocuments
1.	Operating system MSWindows 7 Pro	Licensenumber 48381779
2.	Operating system MSWindows 10 Pro	CONTRACT NO. UT-368 dated 21.09.2021
3.	MS Office	License Number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for business-Standard Russian Edi-tion. 50-99 Node 1-year Educational Renewal License	Agreement No. 7 AA dated 07.02.2025
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612 / L from 02.02.2022 (additional licenses)
6.1	C:UniversityPROF University	LICENSE AGREEMENT No. KRTSB-004537 dated 19.12.2023
7.1	C: PROF Library	LICENSE AGREEMENT NO. 2281 dated 11.11.2020
8.	Consultant Plus	Contract No. 41AA dated 27.12.2024
9.	Contour.Yandex. Tolk	Agreement no. K213753 / 24 dated 13.08.2024
10.	3KL e-learning Environment (RussianMoodle)	Agreement No. 1362.5 of 20.11.2024
11.	Astra Linux Common Edition	Agreement No. 142 A of 21.09.2021
12.	Information system "Plans"	Contract No. 2873-24 of 28.06.2024
13.1	C: Document	management Contract No. 2191 of 15.10.2020
14.	R7-Office	Contract No. 2 of the COP of 18.12.2020
15.	License "OS ROSA CHROME workstation"	Contract No. 88A dated 22.08.2024
16.	Alt Virtualization Server 10 (for secondary special and higher professional education)	Agreement No. 14AK of 27.09.2024
17.	Dr.Web Desktop Security Suite Comprehensive protection + Control Center for 12 months.	Agreement No. 8 dated 21.10.2024
18.	Schedule for Educational Institutions software	Agreement No. 82A of 30.07.2024

List of freely distributed software

No.	List of freely distributed software	References to the license agreement
1.	Yandex Browser	A free-to-use License Agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2.	Yandex.Teleconference A	Free-to-distribute License Agreement https://yandex.ru/legal/telemost_mobile_agreement/3.Dr.Web
3.	Dr.WebCureIt!	Free-to-distribute License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Free Redistributable License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Free Redistributable License: https://ru.libreoffice.org/about-us/license/6.VK
6.	VK Calls	Free Redistributable https://vk.com/licence
7.	Kaspersky Free Antivirus	Free Redistributable https://products.s.kaspersky-labs.com/homeuser/Kaspersky4Win2021/21.16.6.467/english-0.207.0/3830343439337c44454c7c4e554c4c/kis_eula_en-in.txt

Professional databases, information and reference systems, electronic educational resources

Nameresource	Description	Access	Resource address
Electronic Library systems			
"Student's consultant. Electronic library of a medical university"	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, manuals, and periodicals.	Remote access, after registering under the university profile	https://www.studentlibrary.ru /
MedBaseGeotar reference and information system«MedBaseGeotar.	The MedBaseGeotar reference and information systemisdesigned for practicing medical professionals, researchers, teachers, postgraduates, residents, senior students, managers in the healthcare sector to quickly search, select and read medical literature necessary for work in a single data source.	Remote access, after registering under the university profile	https://mbasegeotar.ru/pages/index.html
EBC "Bookup"	Big Medical Library-an information and educational platform for sharing electronic educational and methodical	Remote access, after	https://www.books-up.ru/ЭБС

	publications of medical universities in Russia and the CIS countries	registration under the university profile	
"Lan"	Online electronic library of medical universities - an electronic database of educational and scientific works on medical topics created for the purpose of implementing online forms of professional educational programs, open access to educational materials for partner universities	Remote access, after registration under the profile of the university	https://e.lanbook.com/
Scientific electronic library "https://e.lanbook.com/НаучнаяCyberLeninka electronic library"	CyberLeninka is a scientific electronic library based on the following paradigm: Open Science, the main objectives of which are to popularize science and scientific activities, public quality control of scientific publications, development of interdisciplinary research, a modern institute for scientific review, increasing the citation of Russian science and building a knowledge infrastructure. It containsmorethan 2.3 million scientific articles.	free access	https://cyberleninka.ru/База
Human Biology Knowledge Base	Background information onphysiology,cellbiology,genetics,biochemistry,immunology,and pathology. (Resourceof the Institute of Molecular Genetics of the Russian Academy of Sciences.)	free access	http://humbio.ru/
State Register of Medicinal Products	The GRLS website contains information about medicines: indications, contraindications, mechanism of action, side effects, dosages and methods of use of the drug.	freeaccess	https://grls.rosminzdrav.ru/GRLS.aspx
Information systems			
Rubricator of clinical recommendations	is a resource of the Ministry of Health of the Russian Federation that contains clinical recommendations developed and approved by medical professional non-profit organizations of the Russian Federation, as well as methodological guidelines, nomenclatures, and other reference materials.	Link to download the app	https://cr.minzdrav.gov.ru/#!/

Federal Electronic Medical Library (FEMB)	The Federal Electronic Medical Library is a part of the unified state information system in the field of healthcare as a reference system. FEMB was created on the basis of the funds of the I. M. Sechenov Central Scientific Medical Library.	freeaccess	https://femb.ru/
Russian State Library (RSL)	Fund size: about 3 million titles Coverage period: from the XI century to the present, the Electronic Library of the Russian State Library is a collection of electronic copies of valuable and most sought-after publications from the collections of the Russian State Library, from external sources, as well as documents originally created in electronic form.	Registrationonthesite	https://www.rsl.ru/
Russian Medical Association	Professional Internet resource. Objective: to promote effective professional activity of medical personnel. It contains the charter, personnel, structure, membership rules, and information about the Russian Medical Union.	freeaccess	http://www.rmass.ru/Web-медицина
Web-based medicine	The site provides a catalog of professional medical resources, including links to the most authoritative thematic sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, and employees of medical universities and research institutions.	freeaccess	http: //webmed.irkutsk.ru/Базы
Databases			
World Health Organization data	The site contains news, statistics on countries that are members of the World Health Organization, newsletters, reports, WHO publications and much more.	freeaccess	http://www.who.int/ru/Министерство
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more	freeaccess	http://www.minobrnauki.gov.ru
Ministry of Education of	The website of the Ministry of Education of the Russian Federation	freeaccess	https://edu.gov.ru/Polpred.com

the Russian Federation	contains news, newsletters, reports, publications and much more		
Polpred.com	Electronic library system Business mass media. Media review	free access	https://polpred.com/news
Bibliographic databases			
of the Russian Medicine Database	It is created in the CNMB and covers the entire fund, starting in 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of proceedings of institutes, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc	freeacces s	. https://rucml.ru/PubMed
PubMed	Text-based database of medical and biological publications in English. The PubMed database is an electronic search engine with free access to 30 million publications from 4,800 indexed medical journals. The database contains articles published from 1960 to the present day, including information from MEDLINE, PreMEDLINE, and NLM. Every year, the portal is updated with more than 500 thousand new works.	free access	https://pubmed.ncbi.nlm.nih.gov:// pubmed.ncbi.nlm.nih.gov/
eLibrary.RU	Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. On the eLibrary platform.RU electronic versions of more than 2000 Russian scientific and technical journals are available, including more than 1000 open access journals.	The full functiona lity of the site is available after registrati on	http://elibrary.ru/defaultx.asp
Electronic Library of Dissertations (RSL)	Currently, the Electronic Library of Dissertations of the RSL contains more than 919,000 complete texts of dissertations and abstracts.	freeacces s	http://diss.rsl.ru/?menu=disscatalog /Медлайн
.<	url> Medical and biological portal for	free	https://journal.scbmt.ru/jour/index

	specialists. Biomedical Journal.	access	
Official Internet portal of legal information	Unified Official State information and legal resource in Russia	freeaccess	http://pravo.gov.ru/