Federal State Budget Educational Institution
of Higher Education
Pacific State Medical University
of the Ministry of Health of the Russian Federation

APPROVED BY
First Vice-Rector
_____ / Trankovskaya L.V./
"9" мая 2025

DISCIPLINE WORK PROGRAM

Б1.О.54 Digital health technologies

(name of discipline)

Specialty	**31.05.01 General Medicine for international students (in English)** (code, name)
Degree	Specialist's degree
Profile	02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system)
Mode of study	Full-time
Period of mastering the BEP	**6 years** (nominal length of study)
Institute	of E-Learning (Digital Department)

Vladivostok, 2025

Program of the discipline **Б1.О.54 Digital health technologies** is based on:
1) Federal State Educational Standard of Higher Education for the specialty approved by the Order No. 988 of Ministry of Science and Higher Education of the Russian Federation dated August 12, 2020.

2) Curriculum for the 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system), approved by the Academic Council of FSBEI HE PSMU of the Ministry of Health of Russia, Report No. 8/24-25 dated March 31, 2025.

Work program for the discipline was developed by the writing team of the Institute of Therapy (Internal Medicine) and Instrumental Diagnostics of the FSBEI HE PSMU of the Ministry of Health of Russia, under the guidance of the director of the Institute, Filatova D.S.

Developed by:

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1. GENERAL PROVISIONS

1.1. Purpose and Objectives of Mastering Б1.О.54 Digital health technologies

The purpose of mastering the discipline is developing a system of knowledge, skills, and abilities in the application of modern digital health technologies in the practice of a doctor, as well as their implementation in the activities of medical organizations.

Objectives of mastering the discipline:

1. Developing a system of concepts in the field of healthcare digitalization, as well as an understanding of the place, role, and operating principles of modern information technologies in healthcare and their use for solving professional tasks;
2. Developing the ability to correctly determine the applicability of telehealth methods and digital technologies, and to use information technologies to search for professional information and solve professional problems;
3. Developing the skills of working with medical information systems and an understanding of the role and place of medical workers in the electronic document flow of medical records.

2. DISCIPLINE AS PART OF THE BASIC EDUCATIONAL PROGRAM

Discipline **Б1.О.54 Digital health technologies** is included in the Mandatory part of the Unit 1 of the basic educational program for the specialty 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system), and is part of the 11th semester's curriculum

3. PLANNED LEARNING OUTCOMES OF THE DISCIPLINE

3.1. Mastering the discipline **Б1.О.54 Digital health technologies** is aimed at the development of students' competencies. The discipline facilitates the development of students' competencies corresponding to the types of professional activity.

Name of competency category (group)	**Code and Name of competency of the graduate**	**Competency Indicators**
General Professional Competencies		
Information literacy	GPC-10. Has a grasp of modern information technologies and is able to use them when working to achieve objectives of professional activity	CI.GPC-10_1- understands the principles of searching for and exchange of information using professional communication technologies CI.GPC-10_2- knows how to achieve objectives of professional activity using information technology; uses information technology when working to achieve objectives of professional activity CI.GPC-10_3- understands the information security policies and complies with them when working to achieve objectives of professional activity

3.2. Types of professional activity corresponding to competencies developed over the course of mastering **Б1.О.54 Digital health technologies**:

Types of professional activity objectives

1. *Medical*

Kinds of professional activity objectives

1. *Diagnostics*
2. *Treatment*
3. *Rehabilitation*
4. *Disease prevention*
5. *Administrative work*

3.3. Planned learning outcomes of mastering the discipline are represented by knowledge, skills, abilities and/or experience, characterize the stages of developing competencies and ensure achievement of the planned outcomes of mastering the basic educational program. Learning outcomes of a discipline are correlated with competency indicators.

4. SCOPE AND CONTENT OF THE DISCIPLINE

4.1. Scope of the Discipline and Types of Academic Work

Type of Academic Work		**Total Hours**	**Semesters**
			11
			hours
1		2	3
Classroom hours (total), including:		**36**	**36**
Lectures (L)		8	8
Practical classes (C)		28	28
Independent work of the student (IW), including:		**36**	**36**
Electronic educational resource (EER)		10	10
Preparing for classes (CP)		18	18
Preparing for continuous assessment (CAP)		4	4
Preparation for interim assessment (IAP)		4	4
Interim assessment			
Type of interim assessment	pass/fail test (T)	T	T
	exam (E)		
TOTAL: TOTAL credit value	hrs.	**72**	**72**
	credits	**2**	**2**

4.2. Contents of the Discipline

4.2.1. Topics of Discipline Lectures and Academic Hours per Semester

No.	**Lecture Topic**	**Hours**
1	2	3
	Semester No. 11	
1.	Digital transformation of healthcare	2
2.	Electronic medical document management systems and medical databases	2
3.	Telehealth and robotic automation	2
4.	Digital health technologies	2
	Hours per semester total	**8**

4.2.2. Topics of Discipline Practical Classes and Academic Hours per Semester

No.	**Practical Class Topic**	**Hours**
1	2	3
	Semester No. 11	
1	Digital transformation of healthcare	6
2	Electronic medical document management systems and medical databases	10

3	Telehealth and robotic automation	6
4	Digital health technologies	6
	Hours per semester total	**28**

4.2.3. Independent Work of the Student

No.	Name of the Discipline Section	Type of IW	Total Hours
1	3	4	5
	Semester No. 11		
1	Digital transformation of healthcare	Working with educational literature. Working with Electronic educational resource (EER). Preparing for interim assessment	10
2	Electronic medical document management systems and medical databases	Working with educational literature. Working with Electronic educational resource (EER). Preparing for interim assessment	8
3	Telehealth and robotic automation	Working with educational literature. Working with Electronic educational resource (EER). Preparing for interim assessment	10
4	Digital health technologies	Working with educational literature. Working with Electronic educational resource (EER). Preparing for interim assessment	8
	Hours per semester total		**36**

5. REQUIREMENTS FOR IMPLEMENTATION OF DISCIPLINE

5.1. Discipline Requirements for Educational Materials and Provided Information

Essential reading

No.	Name/Title, Resource Type	Author(s)/Editor	Publisher Imprint, Web Address	Number of Copies (accesses) in the Library and Information Center
1	**2**	**3**	**4**	**5**
1	Medical Electronics: Fundamentals of Biotelemetry: Textbook for Universities [Electronic resource]	V.P. Bakalov	2nd ed., corr. and add. - M.: Urait Publishing House, 2022. - 326 p.	Unlimited access
2	Medical Information Sys-tems: Textbook [Electronic resource]	T.G. Avacheva, M.N. Dmitrieva, N.V. Doroshina, O.A. Milovanova, E.A. Moiseeva	FSBEI HE RyazSMU of the Ministry of Health of Russia. - Ryazan: OOP UITT&OP, 2019. -- 132 p.	Unlimited access

Supplementary reading

No.	Name/Title, Resource Type	Author(s)/Editor	Publisher Imprint, Web Address	Number of Copies (accesses) in the Library

				and Information Center
1	**2**	**3**	**4**	**5**
1	Telemedicine [Electronic resource]	A.V. Vla-dzimirsky, G.S. Lebedev	M.: GEOTAR-Media, 2018. - 576 p.	Unlimited access
2	Intelligent hardware-software complexes for information transmission in telemedicine networks [Electronic re-source]	A.D. Korolev, N.A. Korenevsky, D.N. Kuznetsov, Nguyen The Cuong et al.; edit-ed by Yu.P. Mukha, V.I. Syryamkin	2nd ed., corr. and add. - Tomsk: Tomsk State University Publishing House, 2019. - 360 p.	Unlimited access

Online resources

1. Electronic library system "Student Consultant" http://studmedlib.ru/
2. Electronic library system "University Library Online" http://www.biblioclub.ru/
3. Electronic library system "Urait" https://urait.ru/
4. Electronic library system "BookUp" https://www.books-up.ru/
5. Resources owned by the Library and Information Center of FSBEI HE PSMU of the Ministry of Health of Russia https://tgmu.ru/university/bibliotechno-informacionnyj-centr/resursy-bic/sobstvennye/

Online resources and respective user guides are available on the Library and Information Center website Library and Information Center — PSMU (tgmu.ru)

5.2. Discipline Requirements for Facilities and Resources

Information on the facility and resource availability and requirements of the discipline is available on the Facility and resource availability and requirements. FSBEI HE PSMU of the Ministry of Health of Russia (tgmu.ru)" page of the official website of the university.

5.3. List of Information Technologies, Information and Reference Systems, Licensed and Free Software (Including Domestically-developed Software):

1. PolycomTelepresence M100 Desktop Conferencing Application (Videoconference system)
2. SunRav Software tTester
3. 7-PDF Split & Merge
4. ABBYYFineReader
5. Kaspersky Endpoint Security
6. INDIGO online testing system
7. Microsoft Windows 7
8. Microsoft Office Pro Plus 2013
9. 1C:University

10. GARANT system
11. MOODLE (Modular Object-Oriented Dynamic Learning Environment)

6. ASPECTS OF THE IMPLEMENTATION OF THE DISCIPLINE FOR STUDENTS WITH DISABILITIES AND SPECIAL NEEDS

6.1. Availability of Accessible Environment

For students with disabilities and special needs, if a written application is submitted, lectures and practical classes are carried out taking into account health limitations, individual capabilities and medical status (hereinafter referred to as individual characteristics) of the student. Compliance with the following general requirements is ensured: teaching aids for collective and individual use are provided, required technical assistance is provided by an assistant; buildings and premises where lectures and practical classes are taking place meet accessibility requirements, other arrangements lack of which makes it impossible or difficult to master the discipline are made.

6.2. Ensuring Compliance with General Requirements

When lectures and practical classes are carried out at the written application of the student, the following general requirements are met: lectures and practical classes for students with disabilities and special needs take place at the same location as for students who do not have disabilities, if this does not cause difficulties for students; an assistant (assistants), who provide(s) students with the necessary technical assistance taking into account individual characteristics of the student, is (are) provided; necessary teaching aids are provided, taking into account individual characteristics of the student.

6.3. Availability of the Internal Policies and Procedures of FSBEI HE PSMU of the Ministry of Health of Russia to Students with Disabilities in a Format Accessible to Them.

All internal policies and procedures of FSBEI HE PSMU of the Ministry of Health of Russia concerning the discipline are made available to students with disabilities in a format accessible to them.

6.4. Increase in the Time Limit of Interim Assessment for Students with Disabilities and Special Needs in Relation to the Established duration

Format of the interim assessment of academic performance within the scope of the discipline conducted for students with disabilities and special needs is selected taking into account individual characteristics of the students (orally, by writing on paper, by typing on a computer, as a test, etc.). The duration of the interim assessment in relation to the established duration is increased at the written application of the student with disabilities. Time limit for the student's preparation for the test is increased by at least 0.5 hours.

7. STAFFING REQUIREMENTS OF THE DISCIPLINE

Academic teaching personnel that ensure the implementation of the discipline education process meet the requirements of the Federal State Educational Standard of Higher Education for the 31.05.01 General Medicine for international students (in English) specialty; list of the aforementioned personnel is available on the website of the educational organization.

8. TUTORIAL WORK

Type of tutorial work	Forms and approaches to tutorial work	Assessment criteria
Assistance in personal growth	Overt Talks and problem-centric debates aimed at promotion of healthy lifestyle. Participation in interdepartmental conferences aimed at	Portfolio

	formation of healthy lifestyle and development of skills necessary to preserve and improve health.	
	Covert – creating atmosphere and infrastructure. Developing a culture of healthy lifestyle, the ability to preserve and improve health. Creating atmosphere of kindness and respect with a high level of communication during implementation of the discipline.	
Civic position and values	Overt Conducting events that facilitate development of civil culture (roundtable discussions, discussions/debates, and talks). Short discussions on current significant events in case the latter occur.	Portfolio
	Covert Focusing on civic values-oriented position and legal awareness. Cultivating mindful social position during professional activity.	
Social values	Overt Highlighting aspects of organization of healthy lifestyle based on health-preserving technologies. Highlighting ecology-related questions, environmental issues as a factor affecting population health and select population risks.	Portfolio
	Covert Identification in social structure during period of education and in professional activity.	