Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

APPROVED
Vice-Rector for Academic Affairs
E.S. Bogomolova
31 August 2021

WORKING PROGRAM

Name of the academic discipline: **EVIDENCE-BASED MEDICINE**

Specialty: **31.05.01 GENERAL MEDICINE**

Qualification: **GENERAL PRACTITIONER**

Department: **EPIDEMIOLOGY, MICROBIOLOGY AND**

EVIDENCE-BASED MEDICINE

Mode of study: **FULL-TIME**

Labor intensity of the academic discipline: **108 academic hours**

Nizhny Novgorod
2021

The working program has been developed in accordance with the Federal State Educational Standard for the specialty **31.05.01 GENERAL MEDICINE**, approved by Order Ministry of Education and Science of the Russian Federation No. 988 of August 12, 2020.

Developers of the working program:
Sergeeva A.V., Associate Professor, Department of Epidemiology, Microbiology and Evidence-Based Medicine

The program was reviewed and approved at a meeting of the Department of Epidemiology, Microbiology and Evidence-Based Medicine (protocol No. 12 of 15 April, 2021)

Head of the Department of Epidemiology,
microbiology and evidence-based medicine
Doctor of Medical Sciences, Associate Professor O.V. Kovalishena_____

AGREED
Deputy Head of EMA ph.d. of biology _____ Lovtsova L.V.
(signature)

April 15, 2021

1. The purpose and objectives of mastering the academic discipline mastering the theoretical and methodological foundations of the prevention of the most common infectious and non-communicable diseases.

1.1. The purpose of mastering the discipline: *participation in forming the relevant competencies of UC -1; UC - 3; UC -4; UC - 6; PC - 16; PC - 19; PC - 21*

1.2. Tasks of the discipline:

As a result of completing the discipline, the student should

Know:

• familiarization with the stages and methodology of scientific research, sources of scientific data;

• familiarization with various types of clinical trials, principles of their organization and conduct, requirements for describing the structure and presentation of trial results;

• formation of basic statistical knowledge necessary for the interpretation of medical research data.

Be able to:

• formation of skills necessary for solving individual research and scientific-applied problems using knowledge about the levels of evidence.

Possess:

• developing the skills of critical analysis of medical literature, presentation of information taking into account the impact of interventions on clinically important outcomes of the disease, calculation of parameters for presenting the effects of intervention.

2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization.

2.1. The discipline "Evidence-Based Medicine" refers to the part formed by the participants in the educational relations of the mandatory block 1. - B1.UOO.12 "Disciplines (modules)".

The discipline is taught in 11 semester/ 6 year of study.

2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:

philosophy, bioethics, jurisprudence, psychology and pedagogy, physics, mathematics, medical informatics, biochemistry, biology, normal physiology, microbiology, virology, immunology, pharmacology, pathophysiology, clinical pathophysiology, hygiene, public health and healthcare, health economics, dermatovenereology, safety vital activity, disaster medicine, propaedeutics of internal diseases, radiation diagnostics, infectious diseases, hospital surgery, pediatric surgery.

2.3. Mastering the discipline is required for forming the following knowledge, skills and abilities for subsequent academic disciplines:

phthisiology, polyclinic therapy; hospital surgery, oncology, organizational aspects of the district doctor's activity.

3. Deliverables of mastering the academic discipline and metrics of competence acquisition

Mastering the discipline aims at acquiring the following universal (UC) and professional (PC) competencies

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	possess
1.	UC-1.	Able to carry out a critical	1.1 Knows: methods of critical analysis and	-methods of formal logic	- apply the methods of	- methods for assessing the

		analysis of problem situations based on a systematic approach, develop an action strategy	evaluation of modern scientific achievements; basic principles of critical analysis 1.2 Able to: gain new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related to the professional field; search for information and solutions based on action, experiment and experience 1.3 Has practical experience: researching the problem of professional activity using analysis, synthesis and other methods of intellectual activity; developing an action strategy to solve professional problems	-methods for assessing the incidence of the population	formal logic to analyze the problem situation - calculate incidence rates and interpret socially significant sociological information on their basis	incidence of the population to develop measures to optimize the organization of medical care for the population and - a technique for interpreting socially significant sociological information based on incidence rates, the use of sociological knowledge in professional and social activities aimed at protecting and protecting the health of the population - the technique of putting forward a version of the solution to the problem, formulating a hypothesis, guessing the final result
2.	UC -3.	Able to organize and manage the work of the team, developing a team strategy to achieve the goal	3.1 Knows: the problems of selecting an effective team; basic conditions for effective teamwork; the basics of strategic human resource management, regulatory legal acts concerning the organization and implementation of professional activities; organizational behavior models, factors of formation of organizational relationships; strategies and principles of teamwork, the main characteristics of the organizational climate and interaction of people in the organization 3.2 Able to: determine the management style for the effective team work; develop a team strategy; apply the principles and methods of organizing	- anti-epidemic system - basics of population morbidity management - organization of epidemiological studies; - organization of preventive and anti-epidemic measures - planning activities for anti-epidemic provision of the population	- organize epidemiological studies - organize the application of preventive and anti-epidemic measures - plan activities for anti-epidemic provision of the population	- population morbidity management technologies - an algorithm for organizing epidemiological studies with the choice and justification of the goal, in coordination with the team with the manifestation of personal initiative - an algorithm for the organization and implementation of preventive and anti-epidemic measures - skills of effective interaction with other people, organization of professional cooperation - the skills of

			team activities 3.3 Has practical experience in: participation in the development of a team work strategy; participation in teamwork, role distribution in the team interaction			formulating a common solution and resolving conflicts based on the coordination of positions and taking into account interests - skills in planning activities for anti-epidemic provision of the population
3.	UC -4.	Able to apply modern communication technologies, including the use of a foreign language(s), for academic and professional interaction	4.1 Knows: the basics of oral and written communication in Russian and foreign languages, functional styles of the native language, requirements to business communication, modern means of information and communication technologies 4.2 Can: express thoughts in Russian and a foreign language in business communication 4.3 Has practical experience in: writing texts in Russian and foreign languages related to the professional activity; experience in translating medical texts from a foreign language into Russian; experience in speaking Russian and foreign languages.	- anti-epidemic system - basics of population morbidity management - organization of epidemiological studies; - organization of preventive and anti-epidemic measures - planning activities for anti-epidemic provision of the population	- organize epidemiological studies - organize the application of preventive and anti-epidemic measures - plan activities for anti-epidemic provision of the population	- population morbidity management technologies - an algorithm for organizing epidemiological studies with the choice and justification of the goal, in coordination with the team with the manifestation of personal initiative - an algorithm for the organization and implementation of preventive and anti-epidemic measures - skills of effective interaction with other people, organization of professional cooperation - the skills of formulating a common solution and resolving conflicts based on the coordination of positions and taking into account interests - skills in planning activities for anti-epidemic provision of the population
4.	UC -6.	Able to identify and implement the priorities of their own	6.1 Knows: the importance of planning long-term goals of activity taking into account conditions,	- anti-epidemic system - basics of population	- organize epidemiological studies - organize the application of	- population morbidity management technologies - an algorithm

		activities and ways to improve them based on self-assessment and lifelong learning	means, personal opportunities, stages of career growth, time perspective of development of activity and requirements of the labor market; technology and methodology of self-assessment; basic principles of self-education 6.2 Able to: determine the priorities of professional activity and ways to improve it on the basis of self-assessment; control and evaluate the components of professional activity; plan independent activities in solving professional problems 6.3 Has practical experience in: planning their own professional activities and self-development, studying additional educational programs	morbidity management - organization of epidemiological studies; - organization of preventive and anti-epidemic measures - planning activities for anti-epidemic provision of the population	preventive and anti-epidemic measures - plan activities for anti-epidemic provision of the population	for organizing epidemiological studies with the choice and justification of the goal, in coordination with the team with the manifestation of personal initiative - an algorithm for the organization and implementation of preventive and anti-epidemic measures - skills of effective interaction with other people, organization of professional cooperation - the skills of formulating a common solution and resolving conflicts based on the coordination of positions and taking into account interests - skills in planning activities for anti-epidemic provision of the population
5.	PC - 16	Able to: organize and monitor the immunoprophylaxis of infectious diseases in the adult population, prescribe preventive measures to patients taking into account risk factors in accordance with the current **procedures** for providing medical care, **clinical recommendations** (treatment protocols) on the provision of medical care taking into account the **standards** of medical care and monitor compliance with preventive measures	16.1 Knows:principles of application of specific and non-specific prevention of infectious diseases, the national calendar of preventive vaccinations and the calendar of preventive vaccinations for epidemic indications; legislation of the Russian Federation in the field of health protection, sanitary rules and regulations; preventive measures taking into account the diagnosis in accordance with the current procedures for medical care, clinical	- principles for the use of specific and non-specific prevention of infectious diseases, - the national calendar of preventive vaccinations and the calendar of preventive vaccinations according to epidemic indications; - Legislation of the Russian Federation in the field of health protection, sanitary rules and	- organize and conduct immunoprophylaxis of infectious diseases in the adult population 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	The algorithm for conducting and monitoring the effectiveness of measures for the prevention and promotion of a healthy lifestyle and sanitary and hygienic education

			recommendations (treatment protocols) about medical care delivery taking into account the standards of medical care 16.2 Able to: organize and carry out immunoprophylaxis of infectious diseases in the adult population 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 standards of medical care; prescribe preventive measures to patients taking into account risk factors for the prevention and early detection of diseases, including socially significant diseases	regulations; - preventive measures, taking into account the diagnosis in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols)	care; - prescribe preventive measures to patients, taking into account risk factors for the prevention and early detection of diseases, including socially significant diseases	
6.	PC - 19	Able to: form healthy lifestyle programs, including programs to reduce alcohol and tobacco consumption, prevent and combat non-medical use of narcotic drugs and psychotropic substances, and evaluate the effectiveness of preventive work with patients	19.1 Knows: forms and methods of sanitary and educational work on the formation of elements of the healthy lifestyle, including programs to reduce alcohol and tobacco consumption, prevention and control of non-medical use of narcotic drugs and psychotropic substances 19.2 Able to: develop and implement programs for the formation of the healthy lifestyle, including programs to reduce alcohol and tobacco consumption, prevention and control of non-medical use of narcotic drugs and psychotropic substances	- forms and methods of sanitary and educational work on the formation of elements of a healthy lifestyle, including programs to reduce alcohol and tobacco consumption, prevent and combat non-medical consumption of narcotic drugs and psychotropic substances	- develop and implement healthy lifestyle programs, including programs to reduce alcohol and tobacco consumption, prevent and combat non-medical	The algorithm for conducting and monitoring the effectiveness of measures for the prevention and promotion of a healthy lifestyle and sanitary and hygienic education
7.	PC- 21	Able to: analyze morbidity, disability and mortality indicators to characterize the	21.1 Knows: medical and statistical indicators of morbidity, disability and mortality	- medical and statistical indicators of morbidity,	- analyze data from official statistical reporting,	Maintaining medical records and organizing the activities of

		health of the assigned population of medical care and aimed at creating conditions for protecting the health of citizens	characterizing health of the assigned population, the order of their calculation and evaluation 21.2 Able to: analyze official statistical reporting data, including forms of federal and sectoral statistical observation; analyze medical and statistical indicators of morbidity, disability and mortality to assess the health of the assigned population	disability and mortality, characterizing the health of the attached population, the procedure for their calculation and evaluation	including forms of federal and sectoral statistical observation; analyze medical and statistical indicators of morbidity, disability and mortality to assess the health of the attached population	nursing staff at the disposal

4. Sections of the academic discipline and competencies that are formed when mastering them

№	Competence code	Section name of the discipline	The content of the section in teaching units
1	UC -1 UC – 3 UC – 4 UC – 6 PC -16 PC – 19 PC - 21	Fundamentals of evidence-based medicine and clinical epidemiology	Epidemiological approach in the study of human pathology. Fundamentals of evidence-based medicine Epidemiology in the system of medical education, the relationship of epidemiology with other medical sciences. Wide application of the epidemiological approach in the study of mass non-communicable diseases. Formation of the directions of clinical epidemiology and evidence-based medicine. Principles of evidence in the search for causal relationships. Epidemiology as the main preventive discipline. Clinical epidemiology. Definition of the concept, history of formation, purpose and objectives of clinical epidemiology. Clinical epidemiology as a branch of epidemiology, which includes a methodology for obtaining evidence-based evidence-based information in epidemiological studies about the patterns of clinical manifestations of a disease, methods of diagnosis, treatment and prevention, in order to make an optimal clinical decision in relation to a particular patient. Epidemiological research Epidemiological research as the basis of epidemiology. Types (options, characteristic features) of epidemiological studies. Continuous and selective, descriptive and analytical, observational and experimental, routine and special, one-stage (transverse) and longitudinal (long-term) retrospective, dynamic and mixed, field and clinical, indicative (trial), "case-control" and "cohort". Schematic diagram of the organization, the main stages of the study. Database. Search for evidence-based information Sources of evidence-based information. The general structure of scientific communication. Abstract. Introduction (history of the issue; rationale for the study). Research methods (study design; study sample; intervention; distribution of interventions; list of complications; statistical analysis of data). Research results. Discussion. Conclusions. Literature. Requirements for the compilation of these sections. Algorithm for evaluating a scientific publication. Information systems in medicine (IS). Models of information systems. medical servers. Examples of information systems in epidemiology (WHOSIS (WHOStatisticalInformationSystem),

			HealthMetricsNetwork, VAERS etc.) Databases (DB) definition, classification. Two types of databases: relational and postrelational (document-oriented). Information Technology. Data exchange. information flows. Information flow management. Electronic sources of evidence. Carriers. Networks. Access. Subscription. Update. Search for information. Search engines (OVID, SilverPlatter). Rubricators (MeSH). Strategies for generating a search query in various search engines and databases, depending on the type of clinical question. Strategies for finding randomized clinical trials, systematic reviews, diagnostic tests, etiological factors, disease prognosis, treatment outcomes, clinical guidelines, evidence-based prevention programs developed by evidence-based medicine centers in the UK, Canada, the USA and other countries. Content and characteristics of databases containing information on evidence-based medicine. Principles of the Cochrane Collaboration. Cochrane Library. Optimization of the process of diagnosis, treatment and prevention in relation to a particular patient based on the results of an assessment of the treatment and diagnostic process using data from epidemiological studies. The role of clinical epidemiology in developing the scientific foundations of medical practice - a set of rules for making clinical decisions. The main postulate of clinical epidemiology is "every clinical decision should be based on rigorously proven scientific facts." Development of epidemiologically substantiated clinical recommendations and diagnostic standards, development of the prognosis of the course of the disease, methods of treatment and prevention. Data obtained in clinical epidemiological studies necessary for the epidemiological substantiation of preventive programs in relation to the prevention of noncommunicable diseases
2	UC -1 UC – 3 UC – 4 UC – 6 PC -16 PC – 19 PC - 21	Medical Intervention Research	Evaluation of the potential effectiveness and safety of preventive measures and measures. Randomized and non-randomized studies, the possibility of use, advantages and disadvantages. Randomized controlled clinical and field trials (investigation of the effect of interventions) are a reliable "gold" standard of experimental studies to assess the potential effectiveness of proposed drugs, methods, treatment regimens and diagnostics. Purpose of clinical trials. Internal and external validity of RCTs. Sample formation. Randomization as a way to avoid errors in the formation of experimental and control groups, methods of randomization. Organization of controls - blind and double-blind experience (method). Features of observation. Test phases (KI). Features of conducting clinical trials of drugs, vaccines and other immunobiological preparations (sera, interferons, immunoglobulins). Randomized field controlled trials and their purpose. Evaluation of the potential effectiveness of diagnostic and screening tests. Definition of the concepts of diagnostic and screening test. The purpose of diagnostic (diagnosis and choice of therapy) and screening tests (early detection of cases and secondary prevention). The use of experimental studies for the evaluation of diagnostic and screening tests. Features of the organization of the study for the evaluation of diagnostic tests. The main scheme for testing a diagnostic test. The "gold standard" is the most accurate diagnostic test. Scheme for testing the effectiveness and safety of a screening program. Evaluation of the effectiveness and safety of screening programs. Sensitivity, specificity and validity of diagnostic criteria and their impact on the completeness of detection of patients with infectious and non-infectious diseases. Possible errors of analytical studies and their sources. Ethics of epidemiological research, its international principles.

3	UC -1 UC – 3 UC – 4 UC – 6 PC -16 PC – 19 PC - 21	Systematic review and meta-analysis	Systematic reviews. Meta-analysis. Systematic reviews. Definition**.** Purpose of compilation. Requirements for the preparation of systematic reviews. Use of data from systematic reviews in practical work. Meta-analysis. Definition. Purpose of the event. Requirements for conducting a meta-analysis.

5. Volume of the academic discipline and types of academic work

Type of educational work	Labor intensity		Labor intensity (AH) in semesters
	volume in credit units (CU)	volume in academic hours (AH)	11
Classroom work, including		**0,6**	**22**
Lectures (L)		-	4
Laboratory practicum (LP)*		-	-
Practicals (P)		-	18
Seminars (S)		-	-
Student's individual work (SIW)		**0,4**	**14**
Mid-term assessment			
credit/exam *(specify the type)*		c	c
TOTAL LABOR INTENSITY	**1**	**36**	**36**

6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

№	Name of the section of the academic discipline	Types of academic work* (in AH)					
		L	LP	P	S	SIW	total
11	Fundamentals of evidence-based medicine and clinical epidemiology	2	-	6	-	4	12
11	Medical Intervention Research	2	-	6	-	4	12
11	Systematic review and meta-analysis	-	-	6	-	6	12
	TOTAL	4	-	18	-	14	36

* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; SIW – student's individual work.

6.2. Thematic schedule of educational work types:

6.2.1 Thematic schedule of lectures

№	Name of lecture topics	Volume in AH
		Semester - 11
1	Fundamentals of evidence-based medicine and clinical epidemiology	2
2	Experimental epidemiological studies. Clinical drug trials	2
	TOTAL (total – 4 AH)	4

6.2.2. The thematic plan of laboratory practicums - not provided for by the FGOS.

6.2.3. Thematic plan of practicals

№	Name of the topics of practicals	Volume in AH
		semester -11
1	Clinical epidemiology and evidence-based medicine. Evaluation of the reliability and evidence of scientific research. Structure and content of the scientific and practical publication. Analysis of articles.	6
2	Information systems in medicine and databases. Search for evidence-based (evidence-based) medical information.	6
3	Algorithm for conducting a systematic review.	6
	TOTAL (total – 18 AH)	18

6.2.4. Thematic plan of seminars - not provided for by the FGOS.

6.2.5. Types and topics of student's individual work (SIW)

№	Types and topics of SIW	Volume in AH
		semester -11
1	*Preparation for classes: work with literary and other sources of information on the section under study, fulfillment of tasks provided for by the work program.*	4
2	*Preparation for current control: solving situational problems, performing typical calculation and graphic tasks*	4
3	*Preparation for intermediate control*	4
4	*Other types of independent work:* *Individual task - Analysis of a scientific publication on an epidemiological study (conduct and protection).*	2
	TOTAL (total - 14AH)	14

7. Types of assessment formats for ongoing monitoring and mid-term assessment

№	Semester No.	Types of control		Name of section of academic discipline	Competence codes	Assessment formats		
						types	number of test questions	number of test task options
1.	11	Current monitoring	Control of mastering the topic	Fundamentals of evidence-based medicine and clinical epidemiology	UC -1 UC – 3 UC – 4 UC – 6 PC -16 PC – 19 PC - 21	- Typical settlement and graphic works - Interview on situational tasks. - Written and computer testing	3 1-3 30	30 100 5
			Monitoring the student's individual work					
2	11	Current monitoring	Control of mastering the topic	Medical Intervention Research	UC -1 UC – 3 UC – 4 UC – 6	- Interview (on control questions)	1	20

			Monitoring the student's individual work		PC -16 PC – 19 PC - 21	- Written and computer testing	30	3
3	11	Current monitoring	Control of mastering the topic	Systematic review and meta-analysis	UC -1 UC – 3 UC – 4 UC – 6 PC -16 PC – 19 PC - 21	Written and computer testing, - Interviews on situational tasks	30 1-3	3 50
			Monitoring the student's individual work					
			Monitoring the student's individual work					

8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

8.1. Key literature references

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	General epidemiology with the foundations of evidence-based medicine. Guide to practical exercises: textbook / Ed. acad. RAMN, prof. Pokrovsky V.I., prof. Briko N.I - M.: GEOTAR-MED, 2012 (2010). – 400 s.	2	105 + access to the electronic resource http://www.studmedlib.ru
2	Epidemiology. textbook in 2 volumes. Ed. Briko N.I., Zueva L.P., Pokrovsky V.I., Shkarina V.V., Sergiev V.P. Moscow. MIA, 2013		160
3	Epidemiology: textbook / N. I. Briko, V. I. Pokrovsky. - M. : GEOTAR-Media, 2015. - 368 p.	2	1 (also available in the Student Advisor)

8.2. Further reading

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1	Terms and definitions in epidemiology: a dictionary / V. V. Shkarin, A. S. Blagonravova; Shkarin Vyache-Slav Vasilyevich; Blagonravova, Anna Sergeevna Nizhny Novgorod State Medical Academy. - 2nd ed., corrected. and additional - Nizhny Novgorod: NGMA, 2015. - Text: electronic.	8	60+ доступ http://nbk.pimunn.net/MegaPro/UserEntry?Action=Link_FindDoc&id=166147&idb=0
2	Clinical epidemiology and foundations of evidence-based medicine. Interdisciplinary textbook for physicians / Edited by Academician of the Russian Academy of Sciences, Professor N.I. Briko. - Moscow, 2019. - 288 p.		

8.3. Electronic educational resources for teaching academic subjects

8.3.1. Internal Electronic Library System of the University (IELSU)

№	*Name of the electronic resource*	*Brief description (content)*	*Access conditions*	*Number of users*
1	Internal electronic library system (VEBS)	Proceedings of the teaching staff of the academy: textbooks and manuals, monographs, collections of scientific papers, scientific articles, dissertations, abstracts of dissertations, patents.	From any computer on the Internet, using an individual login and password	Not limited

8.3.2. Electronic educational resources acquired by the University

№	*Name of the electronic resource*	*Brief description (content)*	*Access conditions*	*Number of users*
1	DB “Medicine. Healthcare (HPE)" (EBS "Student Consultant")	Educational literature + additional materials (audio, video, interactive materials, test tasks) for higher medical and pharmaceutical education	from any computer on the Internet using an individual login and password	Unlimited
2	Electronic library system "BookUp"	Educational and scientific medical literature of Russian publishers, incl. translations of foreign publications from the computers of the university;	from any computer on the Internet using an individual login and password Subscribed editions are available for reading.	Unlimited
3	Electronic medical library "Doctor's Consultant"	National guidelines in all areas of medicine, clinical guidelines, textbooks, monographs, atlases, pharmaceutical reference books, audio and video materials, ICD-10 and ATC, recent publications in foreign journals with brief annotations in Russian	from any computer located on the Internet, using an individual login and password	Limited
4	Electronic legal reference system "Consultant Plus"	Normative documents regulating the activities of medical and pharmaceutical institutions	from the computers of the scientific library	Unlimited
5	Domestic electronic periodicals	Medical periodicals	from the university computers on the platform of the SCIENTIFIC electronic library eLIBRARY.RU Subscribed editions are available for	Unlimited

			reading.	
6	DB Medline Complete	Foreign full-text database of articles from scientific periodicals and collections of medical and natural science topics from university computers;	from any computer on the Internet, using an individual login and password	Unlimited
7	Electronic collection of the Springer	publishing house Full-text scientific publications (journals, books, articles, scientific protocols, conference materials, etc.) in the natural sciences, medical and humanities	from the university computers	Unlimited
8	Electronic collection "Freedom"	on the platform Science Direct Books and periodicals of the publishing house "Elsevier"	from the university computers	Unlimited
9	Scopus database	International scientific citation abstract database	from the university computers	Unlimited
10	DB Web of Science Core Collection	International scientific citation abstract database	from the university computers	Unlimited
11	DB Questel Orbit	Questel Patent Database	from the university computers	Unlimited

8.3.3 Open access resources

№	*Name of the electronic resource*	*Brief description (content)*	*Access conditions*
1	Electronic catalog "Russian medicine" TsNMB of the First Moscow State Medical University. THEM. Sechenov http://www.scsml.rssi.ru/	Bibliographic descriptions of domestic and foreign books, collections of works, conference materials, articles from domestic journals and collections, dissertations, author's abstracts, deposited manuscripts. Thematically, the database covers all areas of medicine and related fields.	Unlimited
2	Federal electronic medical library of the Central Scientific Library of the First Moscow State Medical University. THEM. Sechenov http://feml.scsml.rssi.ru/feml	Full-text electronic copies of printed publications and independent original electronic publications that have no analogues recorded on traditional media.	Unlimited
3	Electronic library of dissertations of the RSL http://diss.rsl.ru/?menu=disscatalog/	Provides the ability to search for dissertations and abstracts of dissertations.	Unlimited
4	Scientific electronic library eLIBRARY.RU http://elibrary.ru/defaultx.asp	The largest Russian information and analytical portal in the field of science, technology, medicine and education,	Unlimited

		containing abstracts and full texts of more than 25 million scientific articles and publications, including electronic versions.	
5	http://www.dart-europe.eu/basic-search.php	Full texts of dissertations in English and other European languages	Unlimited
6	http://www.cochrane.org/ Evidence based medicine database.	Open access summaries of informational systematic reviews of medical materials.	Unlimited
7	http://www.ncbi.nlm.nih.gov/books	A library of medical and biological science books maintained by the National Center for Biotechnology Information (NCBI, USA).	Unlimited

9. Material and technical support for mastering an academic discipline

9.1. List of premises for classroom activities for the discipline

Lectures are available for:

- lecture hall equipped with presentation equipment, projector, screen, computer/laptop

- a set of films-slides for overhead to lectures in accordance with the plan of lectures

For practical training there is:

7 classrooms equipped with educational furniture, educational boards, stands, diagrams, and other demonstration materials.

The computer class (room 227) is equipped with 11 PCs, has a package of training programs, sets of test tasks (intermediate, final).

Premises and their functional purpose

№	Cabinet number	Name	Cabinet Area M^2	Quantity Workers places	Employment in hours
1	240	Study room	44,4 $м^2$	30	8
2	239	Study room	43 $м^2$	42	8
3	238	Teaching room	20,8 $м^2$	5	8
4	237	Teaching room	21,6 $м^2$	5	8
5	236	Teaching room	21,6 $м^2$	15	8
6	225	Teaching room	19,8 $м^2$	5	8
7	226	Study room	20,6 $м^2$	21	8
8	227	Teaching room (office of the head of the department)	25,9 $м^2$	22	8
9	228	eaching room (office of the head of the department)	21,9 $м^2$	8	8
10	229	Teaching room	21,9 $м^2$	3	8
11	230	Study room	24.3 $м^2$	27	8
12	231	Study room	26.5 $м^2$	22	8
13	233	Laboratory	29,8 $м^2$	2	8
14	234	Laboratory	39,3 $м^2$	20	8

9.2. List of equipment for classroom activities for the discipline

1. Multimedia complex - 3;
2. LCD TVs - 1;
3. Personal computers - 11;
4. First aid kit for medical care -1.

9.3. A set of licensed and freely distributed software, including domestic production

5.

Item no.	Software	number of licenses	Type of software	Manufacturer	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovich	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOLOGIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscription	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	170	Office Application	Microsoft		23618/HN10030 LLC "Softline Trade" from 04.12.2020

10. List of changes to the working program (to be filled out by the template)

№	Date of changes	No. of the minutes of the meeting of the department, date	Content of the change	Signature

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation
(FSBEI HE "PRMU" of the Ministry of Health of Russia)

Department of
Name of the department

CHANGE REGISTRATION SHEET

working program for the academic discipline
NAME OF THE ACADEMIC DISCIPLINE

Field of study / specialty / scientific specialty: _____
(code, name)

Training profile: _____
(*name) - for master's degree programs*

Mode of study: _____
full-time/mixed attendance mode/extramural

Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1				

Approved at the department meeting
Protocol No. _____of _____20__

Head of the Department
_____ _____/_____
department name, academic title signature print name