

FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION
OF HIGHER EDUCATION
"ROSTOV STATE MEDICAL UNIVERSITY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

Faculty of Education of foreign students, residents and postgraduates

CONFIRM
Supervisor
educational program
(signature) *[Signature]* / E.S. Belousova /
(FULL NAME)

" 30 " *[Date]* 20 *[Year]*

DISCIPLINE WORKING PROGRAM

• **FUNCTIONAL DIAGNOSTIC METHODS IN CARDIOLOGY**

Speciality 31.05.01 General medicine

Form of education full-time

Rostov-on-Don
2022

I. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE

1.1. The goal of the elective course “Functional diagnostic methods in cardiology” is to develop an in-depth understanding of modern instrumental methods for studying the cardiovascular system.

1.2. Taskselective course:

1. Master the methods and techniques of traditional electrocardiography in standard and additional leads.
2. Learn the basic principles of clinical ECG analysis.
3. Study the most important diagnostic criteria electrocardiographic syndromes and heart diseases.

II. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

Studying disciplines sent on formation competencies
 Vin accordance with the Federal State Educational Standard of Higher Education and the EP of Higher Education in this specialty:

- 2.1. General cultural:
- 2.2. General professional: OPK-2.
- 2.3. Professional:

III. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF EP VO

3.1. The discipline “Functional diagnostic methods in cardiology” is an elective discipline.

IV. CONTENT AND STRUCTURE OF DISCIPLINE

Labor intensity of the discipline in 3 hours 108

4.1. Sections of the discipline studied in the 12th semester

Section number	Section name	Number of hours					SRO	
		Total	Contact work					
			L	WI TH	ET C	LR		
Semester 12								
1	Daily monitoring blood pressure	18	3	-	8	-	7	
2	Holter ECG monitoring	18	3	-	8	-	7	
3	Load tests	18	2	-	8	-	8	
4	Ultrasound echocardiographic examination	18	3	-	8	-	7	
5	Transesophageal cardiac stimulation	18	3	-	8	-	7	
6	Coronary angiography	18	2	-	8	-	8	
	Interim certification form	-	Test					
	<i>Total:</i>	108	16		48	-	44	

SRO- independent work of students

L- lectures

WITH- seminars

LR –laboratory works

ETC- practical lessons

4.2. Contact work

Lectures			
Section number	No. lectures	Lecture topics	Number of hours
Semester 12			
1	1	24-hour blood pressure monitoring A brief history of the development of the ABPM method. Indications for ABPM. Advantages and limitations of the ABPM method. Typical mistakes when carrying out ABPM. Methodological aspects of ABPM.	3
2	2	Holter ECG monitoring ECG for coronary heart disease. ECG for ACS. ECG for STEMI and STEMI ECG for heart diseases and syndromes: ECG at pericarditis. ECG at myocarditis. Acute pulmonary heart. Syndrome early ventricular repolarization.	3
3	3	Functional ECG stress tests. Bicycle ergometer test. Methodology for conducting an ECG stress test. Assessment Methodology stress test.	2
4	4	Ultrasound echocardiographic examination	3
5	5	Transesophageal pacing Indications for PTEX. Technique for conducting PTEX.	3
6	6	Coronary angiography	2
Total for the semester			16

Practical work

Section number	No. PR	Topics of practical work	Number of hours	Forms of current control
Semester 12				

1	1	24-hour blood pressure monitoring Assessment of ABPM results. Analysis of the effectiveness of the completed ABPM. At carrying out ABPMthe following quantitative indicators are analyzed: Average values of blood pressure and heart rate, Pulse HELL, Indicators "loads pressure",Blood pressure variability, circadian blood pressure rhythm indicators, 5. Morning rise in blood pressure. Formation of a conclusion.	8	Test control Interview Solutionclinical tasks
2	2	Holter ECG - monitoring: ECG for rhythm disturbances (sinus tachycardia, sinus bradycardia, sinus arrhythmia, extrasystole, paroxysmal tachycardia, atrial flutter and fibrillation, ventricular flutter and fibrillation)and conductivity (sinoatrial block, interatrial (intraatrial) blockade ,atrioventricular block, Frederick's syndrome, bundle branch block Gisa).	8	Test control Interview Solving clinical problems
2	3	Functional ECG stress tests. Bicycle ergometer test. Methodology for conducting an ECG stress test. Methodology stress test assessments.	8	control Interview Decision
4	4	Ultrasound echocardiographic examination	8	control Interview Decision
5	5	Transesophageal cardiac stimulation TEE in the diagnosis of coronary artery disease.	8	control Interview Decision
6	6	Coronary angiography	8	control Interview Decision
Total for the semester			48	

4.3. Independent work of students

Secti on number	Type of independent work of students	Numbe r of hours	Forms of current control
Semester 12			
1	24-hour blood pressure monitoring Usage smad For assessments	7	Oral questioning Test tasks Clinical objectives

	effectiveness of the therapy.		
Section number	Type of independent work of students	Number of hours	Forms of current control
2	Holter ECG - monitoring of premature excitement Ventricular: Syndrome Wolf-Parkinson-White (syndrome WPW); Short PQ(R) interval syndrome (CLC syndrome). Left atrial hypertrophy. Hypertrophy right atria. Acute overload atria. Hypertrophy left ventricle. Hypertrophy right ventricle (types: rSR, qR, S). Combined ventricular hypertrophy. Acute ventricular overload. ECG at hypertrophy atria and ventricles: Hypertrophy left atria. Hypertrophy of the right atria. Acute atrial overload. Hypertrophy left ventricle. Right ventricular hypertrophy (types: rSR, qR, S). Combined ventricular hypertrophy. Acute ventricular overload	7	Oral questioning Test tasks Clinical objectives
2	Functional ECG stress tests. Bicycle ergometer test. Methodology for conducting an ECG stress test. Methodology for assessing stress testing.	8	Oral questioning Test tasks Clinical objectives
4	Ultrasound echocardiographic examination	7	Oral questioning Test tasks Clinical objectives
5	Transesophageal cardiac pacing Assessment of the automatism function of the automatic control system. Definition SA conduction time. AV conduction study.	7	Oral questioning Test tasks Clinical objectives
6	Coronary angiography	8	Oral questioning Test tasks Clinical objectives
Total for the semester		44	

V. ASSESSMENT MATERIALS FOR CURRENT CONTROL AND INTERMEDIATE CERTIFICATION
(are an appendix to the work program).

VI. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF DISCIPLINE

6.1. Printed publications

1. Arkhipov M.V. Temporary transesophageal and endocardial electrical stimulation of the heart. // method. recommendations / M. V. Arkhipov, S. V. Molodykh; Federal State Budgetary Educational Institution of Higher Education

USMU of the Ministry of Health of Russia. - Ekaterinburg. - USMU Publishing House, 2017. - 88 p.

2. Beresten N.F. Functional diagnostics: national manual / ed. N.F. Beresten, V.A. Sandrikova, S.I. Fedorov. – M.: GEOTAR-Media, 2019. – 784 p.
3. Orlov V.N. Guide to electrocardiography / V.N. Orlov. – M.: MIA, 2017. – 580 p.
4. Rogoza A.N. 24-hour blood pressure monitoring. A manual for doctors. St. Petersburg, 2010. – 46 p.
5. Rogoza A.N., Agaltsov M.V., Sergeeva M.V. 24-hour blood pressure monitoring: options for medical opinions and comments. Nizhny Novgorod: DEKOM, 2005. – 64 p.

6.2. Internet resources

	ELECTRONIC EDUCATIONAL RESOURCES	Access to the resource
	Electronic library RostSMU. – URL: http://109.195.230.156:9080/opac/	Unlimited access
	Student Advisor [Kits: "Medicine. Healthcare. IN"; "Medicine. Healthcare. SPO"; "Psychological Sciences"]: Electronic library system. – Moscow: LLC "Polytekhresurs" - URL: https://www.studentlibrary.ru + opportunities for inclusive education	Unlimited access
	Doctor's consultant. Electronic medical library: Electronic library system. – Moscow: LLC "Higher School of Organization and Management of Healthcare. Comprehensive medical consulting." - URL: http://www.rosmedlib.ru + opportunities for inclusive education	Unlimited access
	Scientific electronic library eLIBRARY. - URL: http://elibrary.ru	Open access
	National Electronic Library. - URL: http://neb.rf/	Access from library computers
	Springer Nature database. - URL: https://link.springer.com/ By IP addresses of RostSMU and remotely after registration, remotely through KIAS RFBR https://kias.rfbr.ru/reg/index.php (National project)	Unlimited access
	Wiley Online Library / John Wiley & Sons. - URL: http://onlinelibrary.wiley.com via IP addresses of RostSMU and remotely after registration (National Project)	Access limited
	Wiley. Full-text collection of electronic journals Medical Sciences Journal Backfile: archive. – URL: https://onlinelibrary.wiley.com/ via IP addresses of RostSMU and remotely after registration (National Project)	Lifetime subscription
	Sage Publication: [full-text collection of electronic books eBook Collections]. – URL: https://sk.sagepub.com/books/discipline via IP addresses RostSMU (National Project)	Lifetime subscription

	Ovid Technologies: [Full-text archived collection of Lippincott Williams and Wilkins Archive Journals]. – URL: https://ovidsp.ovid.com/autologin.cgi by IP addresses of RostSMU (<i>National project</i>)	Lifetime subscription
	Questel database Orbit Premium edition : database patent search http://www.orbit.com/ by IP addresses of RostSMU (<i>National project</i>)	Access limited
	Wiley: official website; chapter "Open Access" / John Wiley & Sons. – URL: https://authorservices.wiley.com/open-research/open-access/browse-journals.html	Open access content
	Russian education. Single window of access: federal portal. - URL: http://www.edu.ru/ . – New educational environment.	Open access
	Federal Center for Electronic Educational Resources. - URL: http://srtv.fcior.edu.ru/	Open access
	Electronic Library of the Russian Foundation for Basic Research(RFBR). - URL: http://www.rfbr.ru/rffi/ru/library	Open access
	Federal Electronic Medical Library of the Russian Ministry of Health. - URL: https://femb.ru/femb/	Open access
	Cochrane Library: official website ; "Open Access" section. - URL: https://cochranelibrary.com/about/open-access	Open access content
	Cochrane Russia : Russian department Cochrane cooperation / RMANPO. – URL: https://russia.cochrane.org/	Content open access
	Webmedinfo.ru: website [open information and educational medical resource]. - Moscow. - URL: https://webmedinfo.ru/	Open access
	Univadis from Medscape: international honey. portal. - URL: https://www.univadis.com/ [Regularly updated base unique information and educational medical resources].	Free registration
	Med-Edu.ru: medical educational video portal. - URL: http://www.med-edu.ru/ . Free registration.	Open access
	Doctor's world: professional portal [information resource for doctors and students]. - URL: https://mirvracha.ru .	Free registration
	DoctorSPB.ru: information-reference portal about medicine [for students and doctors]. - URL: http://doctorspb.ru/	Open access
	BEARWEST : Russian doctor portal [library, knowledge base]. - URL: https://medvestnik.ru	Open access
	PubMed: electronic search engine [for biomedical research National center biotechnological information (NCBI, USA)]. - URL: https://pubmed.ncbi.nlm.nih.gov/	Open access
	<i>Cyberleninka Open Science Hub : open scientific electronic library publications on foreign languages.</i> – URL: https://cyberleninka.org/	Content open that access
	Scientific heritage of Russia: eelectronic library /MSC RAS.- URL: http://www.e-heritage.ru/	Open access
	KOOB.ru : electronic library books By medical psychology. - URL: http://www.koob.ru/medical_psychology/	Open access
	Presidential Library : website. - URL: https://www.prlib.ru/collections	Open access

	SAGE Openaccess: Open Access Resources / Sage Publications. – URL: https://uk.sagepub.com/en-gb/eur/open-access-at-sage	Open access content
	EBSCO & Open Access: open access resources. – URL: https://www.ebsco.com/open-access	Open access content
	Lvrach.ru: honey. scientific-practical portal [largest prof. resource for doctors and medical community, created on the basis of scientific and practical. magazine "Attending Physician"]. - URL: https://www.lvrach.ru/	Open access
	ScienceDirect: official website; section "Open Access" / Elsevier.-URL: https://www.elsevier.com/open-access/open-access-journals	Open access content
	Taylor & Francis. Dove Medical Press. Open access journals: magazines open access. – URL: https://www.tandfonline.com/openaccess/dove	Open access content
	Taylor & Francis. Open access books: open access books. – URL: https://www.routledge.com/our-products/open-access-books/taylor-francis-oa-books	Content open access
	Thieme. Open access journals: Open Access Journals / Thieme Medical Publishing Group. – URL: https://open.thieme.com/home	Open access content
	Karger Open Access: open access journals / S. Karger AG. – URL: https://www.karger.com/OpenAccess/AllJournals/Index	Open access content
	Archive scientific magazines / NP NEICON. - URL: https://arch.neicon.ru/xmlui/	Open access
	Russian doctor: website [news for doctors and medical archive. magazines] / Publishing House "Russian Doctor". - URL: https://rusvrach.ru/	Open access
	Directory of Open Access Journals: [full-text journals from 121 countries peace,V incl. in medicine, biology, chemistry]. -URL : http://www.doaj.org/	Open access
	Free Medical Journals. - URL: http://freemedicaljournals.com	Open access
	Free Medical Books. - URL: http://www.freebooks4doctors.com	Open access
	International Scientific Publications. – URL: http://www.scientific-publications.net/ru/	Open access
	Eco-Vector: portal of scientific journals/IT platform of the Russian group of companies "ECO-Vector". - URL: http://journals.eco-vector.com/	Open access
	Medline.Ru: scientific biomedical journal : online electronic publication. - URL: http://www.medline.ru	Open access
	Medical Bulletin of the South of Russia: electron. magazine / RostSMU. - URL: http://www.medicalherald.ru/jour	Open access
	Herald urology ("Urology Herald") : electron. magazine /RostSMU. – URL: https://www.urovest.ru/jour	Open access
	South Russian magazine therapeutic practices / RostSMU. – URL: http://www.therapeutic-j.ru/jour/index	Open access
	Categories clinical recommendations of the Russian Ministry of Health. - URL: https://cr.minzdrav.gov.ru/	Open access
	FBUZ "Information and Methodological Center" of Rospotrebnadzor: official website. – URL: https://www.crc.ru	Open access

	Ministry of Health of the Russian Federation: official website. - URL: https://minzdrav.gov.ru	Open access
	Federal Service for Supervision in the field of healthcare: official website. - URL: https://roszdravnadzor.gov.ru/	Open access
	World Health Organization: official website. - URL: http://who.int/ru/	Open access
	Ministry Sciences And higher education Russian Federation: official website. - URL: http://minobrnauki.gov.ru/ (search engine Yandex system)	Open access
	Modern problems of science and education: electron. magazine. Online publication. - URL: http://www.science-education.ru/ru/issue/index	Open access
	Dictionaries And encyclopedias on Academician. - URL: http://dic.academic.ru/	Open access
	Official Internet portal of legal information. - URL: http://pravo.gov.ru/	Open access
	Education in Russian: educational portal / State. Institute of Russian language them. A.S. Pushkin. - URL: http://pushkininstitute.ru/	Open access
	History.RF. [The main historical portal of the country]. - URL: https://histrf.ru/	Open access
	Other open resources You you can find By address: http://rostgmu.ru → Library → Electronic catalog → Open Internet resources → further by keyword...	

6.3. Guidelines for students on mastering the discipline

Planning and organizing the time needed to study the discipline. An important condition for successfully mastering the discipline of Immunology is the creation of a system of proper organization of work that allows you to distribute the educational load evenly in accordance with the schedule of the educational process. Drawing up a work plan can be of great help in this. Its presence will allow you to subordinate your free time to study purposes and work more successfully and efficiently. In the evening you should always distribute work for tomorrow. At the end of each day, it is advisable to summarize the work: carefully check whether everything was completed according to the plan, whether there were any deviations, and if there were, for what reason they occurred. It is necessary to exercise self-control, which is a necessary condition for successful study. If something is left undone, time must be found to complete that part of the work. It is recommended to complete all tasks for practical classes, as well as tasks assigned for independent work, immediately after the corresponding topic of the lecture course, which contributes to better assimilation of the material, allows you to promptly identify and eliminate “gaps” in knowledge, systematize previously covered material, and proceed on its basis to mastering new knowledge and skills.

Preparation for lectures. Acquaintance with the discipline occurs already at the first lecture, where the student is required not only to pay attention, but also to independently prepare notes. When working with lecture notes, it is necessary to take into account the fact that some lectures provide answers to specific questions on the topic, while others only reveal the relationships between phenomena, helping the student understand the deep processes of development of the subject being studied, both in history and at the present time.

Lecture note-taking is a complex type of university classroom work that involves intense mental activity of the student. A note is useful when the most essential things are written down and done by the student himself. There is no need to try to write down the entire lecture verbatim. This kind of “note-taking” does more harm than good. It is advisable to first understand the main idea

presented by the lecturer and then write it down. It is advisable to record on one page of the sheet or leave fields on which later, when working independently with notes, you can make additional notes and mark unclear places.

It is better to divide the lecture notes into points, observing the red line. This will be greatly facilitated by the lecture plan questions proposed to the teachers. You should pay attention to the emphasis and conclusions that the lecturer makes, marking the most important points in the lecture material with the remarks “important”, “well remember”, etc. You can also do this using colorful markers or pens, emphasizing terms and definitions.

It is advisable to develop your own system of abbreviations, abbreviations and symbols. However, when further working with notes, it is better to replace the symbols with ordinary words for quick visual perception of the text.

When working on lecture notes, it is always necessary to use not only the textbook, but also the literature that the lecturer additionally recommended. It is this kind of serious, painstaking work with the lecture material that will allow you to deeply master the theoretical material.

Preparation for practical classes. The student must begin preparing for each practical lesson by familiarizing himself with the practical lesson plan, which reflects the content of the proposed topic. Careful thinking through and study of the plan's issues is based on studying the current lecture material, and then studying the required and additional literature recommended for this topic. All new concepts on the topic being studied must be memorized and included in a glossary, which should be kept from the very beginning of the course.

The result of such work should be manifested in the student's ability to freely answer theoretical questions of the workshop, his speech and participation in a collective discussion of issues on the topic being studied, the correct completion of practical assignments and tests.

In the process of preparing for practical classes, students need to pay special attention to independent study of the recommended literature. Despite the completeness of the lecture notes, it is impossible to present all the material in it due to the limit of classroom hours. Therefore, independent work with textbooks, teaching aids, scientific and reference literature, materials from periodicals and the Internet is the most effective method of acquiring additional knowledge, allows you to significantly intensify the process of mastering information, promotes a deeper assimilation of the material being studied, and shapes students' attitude to a specific problem.

Recommendations for working with literature. It is advisable to start working with literature by studying general works on the topic, as well as textbooks and teaching aids. Next, it is recommended to move on to the analysis of monographs and articles that consider individual aspects of the problems studied in the course, as well as official materials and unpublished documents (research papers, dissertations), which may contain the main issues of the problem being studied.

Work with sources should begin with introductory reading, i.e. view the text, highlighting its structural units. During introductory reading, bookmarks mark those pages that require more careful study.

Depending on the results of the introductory reading, a further method of working with the source is chosen. If solving the problem requires studying certain fragments of the text, then the selective reading method is used. If the book does not have a detailed table of contents, the student should pay attention to the subject and name indexes.

Selected fragments or the entire text (if it is entirely related to the topic) require thoughtful, leisurely reading with "mental elaboration" of the material. Such reading involves highlighting: 1) the main thing in the text; 2) main arguments; 3) conclusions. Particular attention should be paid to whether the thesis follows from the arguments or not.

It is also necessary to analyze which of the author's statements are problematic, hypothetical in nature and to grasp hidden issues.

It is clear that the ability to work with text in this way does not come immediately. The best way to learn to highlight the main points in a text, to grasp the problematic nature of statements, and to evaluate the author's position is comparative reading, during which the student gets acquainted with different opinions on the same issue, compares the weight and evidence of the arguments of the parties and draws a conclusion about the greatest

the persuasiveness of a particular position.

If in the literature there are different points of view on a particular issue due to the complexity of past events and legal phenomena, they cannot be rejected without understanding them. If there are discrepancies between the authors, it is necessary to find a rational grain in each of them, which will allow a deeper understanding of the subject of study and a more critical assessment of the issues being studied. Getting acquainted with the special positions of the authors, you need to identify their similar judgments, arguments, conclusions, and then compare them with each other and apply the one that is more convincing.

The next stage of working with literary sources is the creation of notes that capture the main theses and arguments. You can make notes on separate sheets of paper, which can then be easily organized into individual topics of the course being studied. Another way is to keep thematic notebooks on one topic. It is advisable to take notes on large specialized works of a monographic nature in separate notebooks. Here it is important to remember that notes are written on one side of the sheet, with margins and sufficient line spacing for corrections and remarks (these rules are observed for ease of editing). If quotations are given in the notes, then an indication of the source (author, title, imprint, page number) must certainly be given. Subsequently, this information can be used when writing the text of an essay or other assignment.

Thus, when working with sources and literature, it is important to be able to:

compare, compare, classify, group, systematize information in accordance with a specific educational task;

summarize the information received, evaluate what you listened to and read;

record the main content of messages; formulate, orally and in writing, the main idea of the message; draw up a plan, formulate theses;

prepare and present detailed reports such as a report;

work in different modes (individually, in pairs, in groups), interacting with each other;

use abstracts and reference materials;

control your actions and the actions of your comrades, objectively evaluate your actions;

seek help and additional clarification from the teacher or other students.

use linguistic or contextual guesses, dictionaries of various kinds, various kinds of hints, supports in the text (keywords, text structure, preliminary information, etc.);

use periphrases, synonymous means, words that describe general concepts, explanations, examples, interpretations, "word creation" when speaking and writing;

repeat or paraphrase the interlocutor's remarks to confirm understanding of his statement or question;

ask your interlocutor for help (clarify the question, ask again, etc.); use facial expressions, gestures (in general and in cases where there are no linguistic means enough to express certain communicative intentions).

Preparation for intermediate certification. When preparing for intermediate certification, it is advisable to:

- carefully study the list of questions and determine which sources contain the information necessary to answer them;

- carefully read the recommended literature;

- make short notes of answers (answer plans).

VII. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

344090, Rostov region, Rostov-on-	Room	staffed
Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (1st floor, room 187)	specialized educational furniture: chairs, tables. Technical teaching aids used to provide educational information to a large audience: laptop, multimedia projector.	
Classroom for conducting lecture-type classes		

<p>344090, Rostov region, Rostov-on-Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (1st floor, room 49, 157)</p> <p>344090, Rostov region, Rostov-on-Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (2nd floor, room 36)</p> <p>344090, Rostov region, Rostov-on-Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (5th floor)</p> <p>344090, Rostov region, Rostov-on-Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (6th floor, room 61)</p> <p>344090, Rostov region, Rostov-on-Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (8th floor, room 27)</p> <p>344090, Rostov region, Rostov-on-Don, st. Gracious, 170. GBU RO "Rostovskaya regional clinicalhospital" (ground floor, room 56) Educational audience For carrying outseminar-type classes, group and individual consultations, ongoing monitoring and intermediate certification</p>	<p>The premises are equipped with educational furniture: chairs, tables, teaching boards, a computer, sets of clinical situational tasks for each topic of classes, sets of test tasks for each topic of classes, a set of radiographs, setelectr ocardiogram, stethophonendoscope, apparatus for measuring blood pressure.</p>
<p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214. Department and clinic of neurosurgery, therapy clinic (Liter A, 2nd floor, room 1, 2, 3, 4, 5, 6, 7, 8, 9, 10) Classrooms for conducting seminar-type classes, group and individual consultations, ongoing monitoring and intermediate certification</p>	<p>Room staffedspecialize d educational furniture: tables, chairs. Educational videos, sets of materials on topics (ECG, x-rays, laboratory tests, ultrasound data, etc.), a set of presentations for a multimedia projector for practical work. classes and lectures. Simulation technologies: role-playing games</p>

<p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-</p>	<p>Room staffedspecialize d educational furniture.</p>
<p>214. Department and Clinic of Neurosurgery, Therapy Clinic (Liter A, 2nd floor)</p> <p>Classroom for conducting lecture-type classes</p>	
<p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212- 214. Educational and laboratory building (2nd floor, 4th floor)</p> <p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38. Medical and diagnostic building (Liter: B-A, 6th floor)</p> <p>Premises for independent work of students - library, auditorium of the physics department, automation department and monitoring the quality of training</p>	<p>Computer equipment with the ability to connect to the Internet and provide access to the EIOS RostSMU</p>