

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

THERAPEUTIC AND PROPHYLACTIC
Department

Supervisor
educational program

CONFIRM
E.S. Belousova /
(signature) (FULL NAME.)

" 30 " августа 2023 "

DISCIPLINE WORKING PROGRAM
Chemistry

Speciality 31.05.01 General medicine

Form of education full-time

Rostov-on-Don
2023

I. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE

I.1. The goal is to develop knowledge about the basic patterns of chemical processes that determine the state of human health and adaptation at the molecular, cellular and organ levels of the whole organism and the ability to apply the acquired basic knowledge to master clinical disciplines.

II.2. Tasks:

- students studying and acquiring knowledge about the chemical nature of substances, constituents of living organisms, their transformations, the connection of these transformations with the activity of organs and tissues, regulation of metabolic processes and the consequences of their violation;
- developing students' skills in using laboratory equipment and reagents in compliance with safety regulations, analyze the data obtained from biochemical studies and use the acquired knowledge to solve situational problems that simulate the functioning of the human body under normal conditions and pathology;
- developing skills of analytical work with information (educational, scientific, normative and reference literature and other sources), with information technologies, diagnostic research methods.

II. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

The study of the discipline is aimed at developing competencies in accordance with the Federal State Educational Standard of Higher Education and the EP of Higher Education in this specialty: defense industry-4.

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

3.1. Discipline is basic.

IV. CONTENT AND STRUCTURE OF THE DISCIPLINE

Discipline complexity: 4 ZET, 144 hours

4.1. The discipline is studied in the 1st semester

No. section	Section name	Number of hours				
		Total	Contact Job			SRO*
			L	LR	ETC	
1	Elements of general chemistry	47	6	3	18	20
2	Basics of bioorganic chemistry	61	10	3	24	24
	<i>Total:</i>	108	16	6	42	44
Interim certification form (exam)			36			
<i>Total</i>			144			

4.2. Contact work

No. section	No. busy and I	Topics of laboratory/practical classes	Qty hours		Forms control
			LR	ETC	
Semester 1					
1	1	Technique security at work V laboratories. Methods expressions concentrations of substances in solution.	3		survey
	2	Pairing, aromaticity. Acidity and basicity of organic compounds.		3	survey and testing
	3	Fundamentals of chemical thermodynamics. Biogenic elements.		3	survey and testing
	4	Fundamentals of chemical kinetics.		3	survey and testing
	5	Colligative properties of solutions. Osmosis. Osmotic pressure.		3	survey and testing
	6	Protolytic equilibrium V water solutions. Buffer systems.		3	survey and testing
	7	Redox complex compounds. processes.		3	survey and testing
	8	Physical chemistry of disperse systems and surface phenomena. Introduction to IUD solutions.		3	survey and testing
	9	Surface phenomena. Rating 1		3	colloquium
2	10	Classification of chemical reactions. Structure, functions, properties of biologically important alcohols, aldehydes, amines and carboxylic acids		3	survey and testing
	eleven	Structure, properties and biological role of natural lipids.		3	survey and testing
	12	Structure, functions and biologically important reactions of monosaccharides.		3	survey and testing
	13	Structure, functions and biologically important reactions of oligo- and polysaccharides.		3	survey and testing
	14	Nitrogen bases of nucleic acids, nucleosides, nucleotides, nucleic acids		3	survey and testing
	15	Structure and functions of amino acids, peptides. Simple proteins.	3		survey and testing
	16	Complex proteins. Rating2.		3	survey and testing colloquium
Total:			48		

SRO- independent work of students, **L**- lectures. **LR** -laboratory work, **ETC**- practical lessons.

Lectures

No. section	No. lectures	Lecture topics	Qty hours
Semester 1			
1	1	Fundamentals of chemical kinetics. Heterogeneous equilibria.	2
	2	Protolytic equilibria in aqueous solutions. Buffer systems.	2
	3	Human redox reactions V body	2
	4	Surface phenomena	2
2	5	Disaccharides and polysaccharides.	2
	6	Lipids: simple and complex	2
	7	Simple proteins	2
	8	Physico-chemical properties of IUD solutions.	2
Total hours discipline:			16

No. section la	No. LR	Laboratory topics	Qty hours	Forms current control
1	1	Safety precautions when working in the laboratory. Methods of expressing the concentration of substances in solution.	3	protection laboratory work
2	14	Structure and functions of amino acids and their biologically important reactions.	3	protection laboratory work
Total by discipline hours			6	

Practical work

No. section la	No. ETC	Topics of practical work	Number in hours	Shapes of the current control
1	2	Pairing, aromaticity. Acidity and basicity of organic compounds.	3	interview, solution situational tasks
	3	Basics chemical thermodynamics. Biogenic elements.	3	writing survey, oral survey
	4	Fundamentals of chemical kinetics.	3	writing survey, oral survey
	5	Colligative properties of solutions. Osmosis. Osmotic pressure.	3	writing survey, oral survey
	6	Protolytic equilibria in aqueous solutions. Buffer systems.	3	writing survey, oral survey

No. section Ia	No. ETC	Topics of practical work	Number in hours	Shapes of the current control
	7	Redox processes. Complex connections.	3	colloquium
2	8	Physical chemistry of disperse systems and surface phenomena. Introduction to IUD solutions.	3	written survey, oral survey
	8	Surface phenomena. Rating 1	3	written survey, oral survey
	10	Classification of chemical reactions. Structure, functions, properties of biologically important alcohols, aldehydes, amines and carboxylic acids.	3	written survey, oral survey
	eleven	Structure, properties and biological role of natural lipids.	3	written survey, oral survey
	12	Structure, functions and biologically important reactions of monosaccharides.	3	written, oral survey
	13	Structure, functions and biologically important reactions of oligo- and polysaccharides.	3	written, oral survey
	15	Nitrogen bases of nucleic acids, nucleosides, nucleotides, nucleic acids: structure, functions and properties.	3	written survey, oral survey
	16	Complex proteins. Rating2.	3	colloquium
Total hours discipline:			42	

4.3. Independent work of students

No. section	Type of independent work of students	Number in hours	Shapes of the current control
	Preparation for current and milestone control.	14	Report, colloquium,
	Preparation for current, midterm and intermediate control.	thirty	Colloquium, testing, solution situational
Total hours discipline:		44	

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

VI. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF DISCIPLINE

6.1. Printed publications

1. Babkov A.V., General, inorganic and organic chemistry / A.V. Babkov, V.A. Popkov - Moscow: GEOTAR-Media, 2014. - 576 p. – Access from the EBS “Student Consultant” – Test: electronic.
2. Organic chemistry: textbook / N. A. Tyukavkina [etc.]; edited by N. A. Tyukavkina. - Moscow: GEOTAR-Media, 2019. - 640 pp.: ill. – 640 s. - Access from the EBS “Student Consultant”. – 1, ER.
3. Popkov A.V., General chemistry / A.V. Popkov, S.A. Puzakov. - Moscow: GEOTAR-Media, 2010. – 976 p. – Access from the EBS “Student Consultant”. – 98, ER.
4. Zholnin A.V., General chemistry: textbook / A.V. Zholnin; edited by V.A. Popkova, A. V. Zholnina. - Moscow: GEOTAR-Media, 2014. – 400 p. – Access from the EBS “Student Consultant”. – Electronic text. ER.
5. Bioorganic chemistry: a guide to practical classes: textbook / ed. ON THE. Tyukavkina - Moscow: GEOTAR-Media, 2016. - 168 p. - Access from the EBS “Student Consultant”. - ER.

6.2. Internet resources

	ELECTRONIC EDUCATIONAL RESOURCES	Access to the resource
	Electronic library RostSMU. – URL: http://109.195.230.156:9080/opacq/	Access is not limited
	Consultant student [Sets: “Medicine. Healthcare. IN”; “Medicine. Healthcare. SPO”; “Psychological Sciences”]: Electronic library system. – Moscow: Politekhresurs LLC. - URL: https://www.studentlibrary.ru + opportunities for inclusive education	Access is not limited
	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	Access is not limited
	Scientific electronic library eLIBRARY. - URL: http://elibrary.ru	Open access
	National Electronic Library. - URL: http://neb.rf/	Access from computers libraries
	Springer Nature database. - URL: https://link.springer.com/ via IP addresses of RostSMU and remotely after registration, remotely through KIASRFFI https://kias.rfbr.ru/req/index.php(National project)	Access is not limited
	Wiley Online Library / JohnWiley&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 RostGMU and remotely after registration(National project)	Indefinite subscription

	Sage Publication: [full text collection of e-books eBookCollections]. – URL: https://sk.sagepub.com/books/discipline By IP addresses of RostSMU (<i>National project</i>)	Indefinite 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>)	Indefinite subscription
	Wiley: official website; chapter "Open Access"/John Wiley & Sons. – URL: https://authorservices.wiley.com/open-research/open-access/browse-journals.html	Content open access
	Russian education. One window access : federal portal.-URL: http://www.edu.ru/ .– New educational environment.	Open access
	Federal center electronic educational resources. - URL: http://srtv.fcior.edu.ru/	Open access
	Electronic library Russian fund fundamental research (RFBR). - URL: http://www.rfbr.ru/rffi/ru/library	Open access
	Federal electronic medical library Ministry of Health of Russia. - URL: https://femb.ru/femb/	Open access
	Cochrane Library: official website; "Open Access" section. - URL: https://cochranelibrary.com/about/open-access	Content open access
	Cochrane Russia: Russian branch of Cochrane cooperation/RMANPO. – URL: https://russia.cochrane.org/	Content open access
	Webmedinfo.ru: website [open information- educational medical resource]. - Moscow. - URL: https://webmedinfo.ru/	Open access
	UnivadisfromMedscape: international honey. portal. - URL: https://www.univadis.com/ [Regularly updated database of 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, database knowledge]. - URL: https://medvestnik.ru	Open access
	PubMed: electronic search system [on biomedical research of the National Center for Biotechnology Information (NCBI, USA)]. - URL: https://pubmed.ncbi.nlm.nih.gov/	Open access

	Cyberleninka Open Science Hub: open scientific electronic library of publications in foreign languages. – URL: https://cyberleninka.org/	Content open that access
	Scientific heritage of Russia: eelectronic library / MSC RAS.- URL: http://www.e-heritage.ru/	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	Content open that access
	EBSCO&OpenAccess: open access resources. –URL: https://www.ebsco.com/open-access	Content open that access
	Lvrach.ru: honey. scientific-practical portal [largest prof. resource for doctors and honey. community, created on the basis of scientific and practical. magazine "Attending Physician"]. - URL: https://www.lvrach.ru/	Open access
	ScienceDirect: official website; "Open Access" section/Elsevier. - URL: https://www.elsevier.com/open-access/open-access-journals	Content open access
	Taylor & Francis. Dove Medical Press. Openaccessjournals: open access journals – URL: https://www.tandfonline.com/openaccess/dove	Content open access
	Taylor & Francis. Open access books: open access books. – URL: https://www.routledge.com/our-products/open-accessbooks/taylor-francis-oa-books	Content open access
	Thieme. Open access journals: open access journals/ ThiemeMedicalPublishingGroup.–URL: https://open.thieme.com/home	Content open that access
	Karger Open Access: open access journals/S. Karger A.G. – URL: https://www.karger.com/OpenAccess/Alljournals/Index	Content open that access
	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, incl. in medicine, biology, chemistry]. - URL: http://www.doaj.org/	Open access
	Free Medical Journals . - URL: http://freemedicaljournals.com	Open access
	FreeMedical 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 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
	Categories clinical recommendations of the Russian Ministry of Health. - URL: https://cr.minzdrav.gov.ru/	Open access
	FBUZ "Information and methodological center» 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
	World Health Organization: official website.- URL: http://who.int/ru/	Open access
	Ministry of Science 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 Andencyclopedias on Academician. - URL: http://dic.academic.ru/	Open access
	Other open resources You you can find By address: http://rostgmu.ru →Library→Electronic catalogue→Open Internet resources→further by keyword...	

6.3. Guidelines for students to master the discipline An important condition for successful mastery of the Chemistry discipline 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. 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. Preferably

Recording should be done on one page of the sheet or leaving fields on which later, when working independently with notes, you can make additional notes and mark unclear places.

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 laboratory/practical classes.*

The student should begin preparing for each lesson by familiarizing himself with the 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.

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 clear that the ability to work with text in this way does not come immediately. The best way to learn to highlight the main thing 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 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. 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;
- apply for help, additional explanations To teacher, 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 linguistic there are not enough means 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 (table) *General educational and laboratory equipment, technical and electronic facilities*

Name of special premises and premises for study work	Equipment of special premises and rooms for independent work
<p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 29, Liter A-Ya, 1st floor) Lecture room No. 3 Study room for carrying out classes lecture type.</p>	<p>Room staffed specialized educational furniture (150 seats). Technical teaching aids used to present educational information to a large audience: a multimedia presentation complex.</p>
<p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 29, Liter A-Ya, 1st floor) Lecture room No. 4 Study room for carrying out classes lecture type.</p>	<p>Room staffed specialized educational furniture (150 seats). Technical teaching aids used to present educational information to a large audience: a multimedia presentation complex.</p>
<p>344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 29, Liter A-Ya, 2nd floor, 4th floor, Liter B-A, 6th floor) 344022, Rostov region, Rostov-on-Don, st. Adygei/ Pushkinskaya 12/191. Special rooms for independent work - library reading rooms, an auditorium of the Department of Physics, the Department of Automation and Monitoring of the Quality of Education.</p>	<p>Computer equipment with Internet connection and access to EIOS RostSMU</p>

Educational and laboratory equipment, technical and electronic facilities *Department of General and Clinical Biochemistry No. 1*

Name of special premises and premises for academic work	Equipping special rooms and premises for independent work
<p>344022, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 41, Liter A-Ya, 1st floor). Lecture audience no. 3. Educational audience For conducting lecture-type classes.</p>	<p>The premises are equipped with specialized educational furniture (100 seats). Technical teaching aids used to present educational information to a large audience: a multimedia presentation complex.</p>

<p>lane Nakhichevan, 38/57-59/212-214 (No. 41, Letter A-Ya, 4th floor). Auditoriums No. 406, 407, 408, 408, 409, 432</p> <p>room For carrying out classes practical like, group and individual consultations, ongoing monitoring, intermediate certification.</p>	<p>The premises are equipped with specialized furniture. Tables – 11 pcs., chairs – 21 pcs., thermostat – 1 pc. Colorimeter KFK-2 – 1 pc., drying cabinet – 2 pcs., thermostat – 1 pc., spectrophotometer SF-46 – 1 pc. centrifuge – 1. Typical sets professional models With results laboratory and instrumental research methods, sets of demonstration equipment and educational visual aids, providing thematic illustrations: demonstration material by topic - 8. Visual materials by topic - 4.</p>
<p>lane Nakhichevan, 38/57-59/212-214 (No. 41, Letter A-Ya, 4th floor). Laboratory No. 401</p>	<p>The premises are equipped with specialized furniture: 5 laboratory tables, 18 chairs, analytical balances ALC-110D2; apparatus for shaking liquids; apparatus for electrophoresis EPAU 20-50; technical scales VA-4M; homogenizer GGIN-302; spectrophotometer LOMO SF-46; colorimeter KFK-2MP; distiller D-25; surgical operating set; stopwatch; fluorimeter HITACHIF-3000; refrigerator "Dnepr"; drying cabinet – 4 pcs., fume hood – 1 pc. pH meter - 1 pc.</p>
<p>lane Nakhichevan, 38/57-59/212-214 (No. 41, Letter A-Ya, 4th floor) Room No. 434. Proom for storage and preventive service educational equipment</p>	<p>Furniture for storing educational equipment: shelving. Technical means for preventive maintenance of educational equipment.</p>