

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) / E.S. Belousova /  
(FULL NAME.)  
20\_20



**DISCIPLINE WORKING PROGRAM**

**Biology**

Speciality 31.05.01 General medicine

Form of education full-time

Rostov-on-Don  
2020

## I. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE

**Goals** mastering the discipline: developing in students a natural science worldview on the basis of general theoretical knowledge in the field of biology, necessary for the formation of a natural science worldview in the practical activities of a general practitioner.

**Tasks:**

- students acquire knowledge about the multi-level organization of biological systems, the laws of evolution of the organic world, the functioning of biological systems;
- developing in students an idea of man as the central object of study in medical biology;
- students' study of the biosocial nature of man, his subordination to general biological laws of development, the unity of man with his environment;
- students study the idea of the modern ecosystem, the action of anthropogenic factors in it, human adaptation to the environment;
- developing skills in studying scientific literature and official statistical reviews;
- developing student communication skills with the team.

## II. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

The process of studying the discipline is aimed at developing the following competencies in accordance with the Federal State Educational Standard of Higher Education and the EP of Higher Education in this specialty:

**A) general cultural (OK)**

OK-1 - ability for abstract thinking, analysis, synthesis;

**b) general professional (OPK)**

GPC-7 - readiness to use basic physical-chemical, mathematical and other natural science concepts and methods when solving professional problems.

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

3.1. The discipline "Biology" is compulsory.

## IV. CONTENT AND STRUCTURE OF DISCIPLINE

**Labor intensity of the discipline in 3\_7\_ hours 252**

### 4.1. Sections of the discipline studied in \_1,2\_ semesters

Section number	Name section	Number of hours					SRO
		Total	Contact work under the supervision of a teacher				
			L	WITH	ET C	LR	
Semester 1							
1	Cytology With basics of molecular biology	33	6	-	10	-	17

2	General medical genetics	53	8	-	18	-	27
3	Onto-phylogenesis	22	4	-	8	-	10
	Total by semester	108	18	-	36	-	54
	Intermediate form certification	test					
Semester 2							
3	Onto- and phylogenesis	26	4	-	12	-	10
4	Medical parasitology	71	10	-	33	-	28
5	General ecology. Ecology person And medical ecology.	eleven	2	-	3	-	6
	Total semester	108	16	-	48	-	44
	Intermediate form certification	36	exam				
	<i>Total:</i>	252	34	-	84	-	98

#### 4.2. Contact work under the supervision of a teacher

##### Lectures

Secti on number	No. lectures	Lecture topics	Numbe r of hours
Semester 1			
1	1	Biology and medicine.	2
	2	Molecular genetic level of life organization.	2
	3	Molecular mechanisms of transcription and translation.	2
2	4	Cellular level of life organization. Chromosomal and genomic levels of organization of hereditary material.	2
	5	Variability and its forms.	2
	6	Mutational variability.	2
	7	Medical genetics.	2
3	8	Ontogenesis. General patterns. Progenesis. Characteristics of the embryonic period.	2

	9	Patterns of ontogenesis. Principles and mechanisms of ontogenesis. Genetic control of individual development.	2
Total hours per semester			18
<b>Semester 2</b>			
3	1	Basic patterns of phylogenetic transformations.	2
	2	Phylogeny of organs and organ systems.	2
4	3	Ecological basis of parasitism	2
	4	Fundamentals of medical parasitology. The doctrine of natural focal diseases.	2
	5	General and medical protozoology.	2
	6	General and medical helminthology. Type of flatworms.	2
	7	General and medical helminthology. Type roundworms. General and medical arachnoentomology.	2
5	8	Man and the environment. Ecological foundations of human health.	2
Total hours per semester			16
<i>Total hours discipline:</i>			<b>34</b>

### Practical work

No. section a	No . PR	Topics of practical work	Number of hours	Forms of current control
<b>Semester 1</b>				
1	1	The device of a light microscope and microscopy techniques. Cellular level of organization biological systems.	2	Testing and/or oral questioning, solving situational problems
1	2	Intravital methods for studying normal and damaged cells. Transport of substances into the cell.	2	Testing and/or oral questioning, solving situational problems
1	3	Organization of hereditary material in pro- and eukaryotes. Play on Cellular level.	2	Testing and/or oral questioning, solving situational problems

<b>No. section a</b>	<b>No . PR</b>	<b>Topics of practical work</b>	<b>Num ber of hours</b>	<b>Forms of current control</b>
1	4	The structure of eukaryotic and prokaryotic genes. Protein biosynthesis.	2	Testing and/or oral questioning, solving situational problems
1	5	Milestone rating No. 1 “Cytology with the basics of molecular biology.”	2	Testing, colloquium, practical exam skill
2	6	Patterns of inheritance at the organismal level. Interaction of allelic and nonallelic genes.	2	Testing and/or oral questioning, solving situational problems
2	7	Chained inheritance. Genetics of sex. Sex-linked inheritance.	2	Testing and/or oral questioning, solving situational problems
2	8	Variability, its forms.	2	Testing and/or oral questioning, solving situational problems
2	9	Methods for studying human genetics: genealogical, twin.	2	Testing and/or oral questioning, solving situational problems
2	10	Methods for studying human genetics: biochemical, population-statistical.	2	Testing and/or oral questioning, decision situational tasks
2	ele ven	Cytogenetic method for studying human genetics. Skill.	2	Testing and/or oral questioning, solving situational problems, passing a practical skill
2	12	Modern methods of genetics and working with gene databases.	2	Testing and/or oral questioning, solving situational problems
2	13	Medical genetic counseling. Hereditary diseases. Skill.	2	Testing and/or oral questioning, solving situational problems, passing a practical skill

<b>No. section a</b>	<b>No . PR</b>	<b>Topics of practical work</b>	<b>Number of hours</b>	<b>Forms of current control</b>
2	14	Milestone rating No. 2. "General and medical genetics."	2	Testing, colloquium, practical skills testing
3	15	Reproduction at the organismal level. Asexual and sexual reproduction, their biological essence and cytological basis.	2	Testing and/or oral questioning, solving situational problems
3	16	General patterns of embryonic development.	2	Testing and/or oral questioning, solving situational problems
3	17	Regulation of ontogeny. Molecular genetic mechanisms of differentiation. Critical periods. The role of the environment in the development of the organism.	2	Testing and/or oral questioning, solving situational problems, passing practical skills
3	18	Test lesson. Practical skills.	2	Solving situational problems, oral questioning, passing practical skills.
Total for the semester hours			36	
<b>Semester 2</b>				
3	1	Evolution of body integument and musculoskeletal systems of vertebrates.	3	Testing and/or oral questioning, solving situational problems
3	2	Evolution of the digestive, respiratory and circulatory systems of vertebrates.	3	Testing and/or oral questioning, solving situational problems
3	3	Evolution of the integrative and genitourinary systems of vertebrates.	3	Testing and/or oral questioning, decision situational tasks
3	4	Milestone rating No. 3 "Onto-and phylogeny".	3	Testing, colloquium
4	5	General and medical protozoology. Sarcodaceae, Flagellates.	3	Testing and/or oral questioning, solving situational problems

<b>No. section a</b>	<b>No . PR</b>	<b>Topics of practical work</b>	<b>Number of hours</b>	<b>Forms of current control</b>
4	6	General and medical protozoology. Sporozoans, Ciliates.	3	Testing and/or oral questioning, decision situational tasks
4	7	Milestone rating No. 4 “General and medical protozoology”.	3	Testing,colloquium
4	8	General and medical helminthology. Type Flatworms. Class Flukes.	3	Testing and/or oral questioning, solving situational problems
4	9	General and medical helminthology. Type Flatworms. Class Tapeworms.	3	Testing and/or oral questioning, solving situational problems
4	10	General and medical helminthology. Type Roundworms. Class Actually roundworms. Geohelminths. Biohelminths.	3	Testing and/or oral questioning, solving situational problems
4	eleven	Milestone rating No. 5 “General and medical helminthology”. Colloquium. Passing the skill.	3	Testing, colloquium, practical exam skill
4	12	Phylum Arthropods. Subtype Cheliceraceae. Class Arachnids. Squad Ticks.	3	Testing and/or oral questioning, solving situational problems
4	13	Phylum Arthropods. Subtype Tracheine-breathing. Class Insects. Squads: cockroaches, bedbugs, lice, fleas, dipterans.	3	Testing and/or oral questioning, solving situational problems
4	14	Parasitic diseases of the South of Russia. Skill.	3	Testing and/or oral questioning, solving situational problems, passing a practical skill
4	15	Milestone rating No. 6 “General and medical arachnoentomology”.	3	Testing,colloquium
5	16	Human adaptation to the environment.	3	Testing and/or oral questioning, solving situational problems
Total hours per semester			48	
<i>Total hours discipline:</i>			84	

### 4.3. Independent work of students

Section number	Type of independent work of students	Number of hours	Forms of current control
Semester 1			
1	Preparation for practical classes	4	Oral survey, testing, solution situational tasks, passing the practical skill
	Completing tasks	3	Oral survey, testing, solution situational tasks
	Solving test tasks	3	Testing
	Solving situational problems	4	Oral survey, solving situational problems
	Preparation for current control	3	Testing, oral examination, practical test
2	Preparation for practical classes	7	Oral survey, testing, solution situational tasks, passing practical skills
	Completing tasks	3	Oral survey, testing, solution situational tasks
	Solving test tasks	3	Testing
	Solving situational problems	6	Oral survey, solving situational problems
	Compilation of pedigrees	2	Passing the practical skill
	Preparation for current control	6	Testing, oral examination, delivery practical skills



<b>Section number</b>	<b>Type of independent work of students</b>	<b>Number of hours</b>	<b>Forms of current control</b>
3	Preparation for practical classes	3	Oral survey, testing, solution situational tasks, passing practical skills
	Completing tasks	2	Oral survey, testing, solution situational tasks
	Solving test tasks	3	Testing
	Solving situational problems	2	Oral survey, solving situational problems
Total hours per semester		54	
<b>Semester 2</b>			
3	Preparation for practical classes	2	Oral survey, testing, solution situational tasks
	Completing tasks	2	Oral survey, testing, solution situational tasks
	Solving test tasks	2	Testing
	Solving situational problems	2	Oral survey, solving situational problems
	Preparation for current control	2	Testing, oral survey
4	Preparation for practical classes	8	Oral survey, testing, solution situational tasks, passing the practical skill
	Completing tasks	4	Oral survey, testing, solution situational tasks
	Solving test tasks	5	Testing

<b>Section number</b>	<b>Type of independent work of students</b>	<b>Number of hours</b>	<b>Forms of current control</b>
	Solving situational problems	5	Oral questioning, solving situational problems
	Preparation for current control	6	Testing, oral examination, practical test
5	Preparation for practical training	2	Oral survey, testing
	Preparation for intermediate control	4	Testing, delivery of drugs
Total hours per semester		44	
<i>Total hours discipline:</i>		98	

## **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. Yarygin V.N. Biology: textbook. T1: in 2 volumes [rec. GOU VPO "First Moscow State Medical University"] / V.N. Yarygin. – M.: GEOTAR-Media, 2011. – 725 p.
2. Yarygin V.N. Biology: textbook. T2: in 2 volumes [rec. GOU VPO "First Moscow State Medical University"] / V.N. Yarygin. – M.: GEOTAR-Media, 2014. – 553 p.
3. Yarygin V.N. Biology: textbook. T1: in 2 volumes [rec. GOU VPO "First Moscow State Medical University"] / V.N. Yarygin. – M.: GEOTAR-Media, 2015. – 725 p.
4. Yarygin V.N. Biology: textbook. T2: in 2 volumes [rec. GOU VPO "First Moscow State Medical University"] / V.N. Yarygin. – M.: GEOTAR-Media, 2015. – 553 p.
5. Pekhov A.P. Biology. medical biology, genetics and parasitology. textbook for medical universities/ A.P. Pekhov. – M.: GEOTAR-Media, 2011. – 656 p.

### **6.2. Internet resources**

	<b>ELECTRONIC EDUCATIONAL RESOURCES</b>	<b>Access to the resource</b>
1.	<b>Student Advisor:</b> EBS. – Moscow: LLC “IPUZ”. - URL: <a href="http://www.studmedlib.ru">http://www.studmedlib.ru</a>	Unlimited access
2.	<b>UpToDate:</b> DB / Wolters Kluwer Health. – URL: <a href="http://www.uptodate.com">www.uptodate.com</a>	Unlimited access
3.	<b>Scientific electronic library eLIBRARY.</b> - URL: <a href="http://elibrary.ru">http://elibrary.ru</a>	Open accesses
4.	<b>Scopus/</b> Elsevier Inc., Reed Elsevier. – Philadelphia: Elsevier BV, PA. – URL: <a href="http://www.scopus.com/">http://www.scopus.com/</a> ( <i>National project</i> )	Unlimited access
5.	<b>Web of Science</b> /Clarivate Analytics. - URL:	Access

	<a href="http://apps.webofknowledge.com">http://apps.webofknowledge.com</a> ( <i>National project</i> )	is not limited
6.	<b>ScienceDirect. Freedom Collection</b> [journals] / Elsevier. – URL: <a href="http://www.sciencedirect.com">www.sciencedirect.com</a> by IP addresses RostSMU. ( <i>National project</i> )	Access is not limited
7.	<b>Springer Nature database.</b> - URL: <a href="http://link.springer.com/">http://link.springer.com/</a> By IP addresses of RostSMU. (National project)	Access is not limited
8.	<b>Federal Electronic Medical Library of the Ministry of Health Russia.</b> - URL: <a href="http://www.femb.ru/feml/">http://www.femb.ru/feml/</a> , <a href="http://feml.scsm1.rssi.ru">http://feml.scsm1.rssi.ru</a>	Open access
9.	<b>Medline</b> (PubMed, USA). – URL: <a href="https://www.ncbi.nlm.nih.gov/pubmed/">https://www.ncbi.nlm.nih.gov/pubmed/</a>	Open access
10.	<b>Free Medical Journals.</b> - URL: <a href="http://freemedicaljournals.com">http://freemedicaljournals.com</a>	Open access
ele ve n.	<b>Free Medical Books.</b> - URL: <a href="http://www.freebooks4doctors.com/">http://www.freebooks4doctors.com/</a>	Open access
12.	<b>International Scientific Publications.</b> – URL: <a href="https://www.scientific-publications.net/ru/">https://www.scientific-publications.net/ru/</a>	Open access
13.	<b>CyberLeninka:</b> scientific electron. beep. - URL: <a href="http://cyberleninka.ru/">http://cyberleninka.ru/</a>	Open access
14.	Archives of scientific journals/NEICON. - URL: <a href="https://archive.neicon.ru/xmlui/">https://archive.neicon.ru/xmlui/</a>	Open access
15.	<b>Open access journals in Russian</b> /EIPub platform NEICON. – URL: <a href="https://elpub.ru/">https://elpub.ru/</a>	Open access
16.	<b>Medical Bulletin of the South of Russia</b> . - URL: <a href="https://www.medicalherald.ru/jour">https://www.medicalherald.ru/jour</a> or from the RostSMU website	Open access
17.	<b>World Health Organization.</b> - URL: <a href="http://who.int/en/">http://who.int/en/</a>	Open access
18.	<b>Med-Edu.ru:</b> medical video portal. -URL: <a href="http://www.med-edu.ru/">http://www.med-edu.ru/</a>	Open access
19.	<b>Modern problems of science and education:</b> electron. magazine. - URL: <a href="http://www.science-education.ru/ru/issue/index">http://www.science-education.ru/ru/issue/index</a>	Open access

### 6.3. Guidelines for students on mastering the discipline

The training consists of contact work (118 hours), including lectures and practical work, as well as independent work (98 hours). The main study time is allocated to practical work (84 hours).

Practical work is carried out in the form of active and interactive forms of training, demonstrations of macro- and micropreparations, the use of visual aids, solving situational problems, answering test tasks, and discussions.

Independent work of students involves preparing for practical classes, completing assignments, solving test tasks and situational problems, preparing for current and intermediate control. It promotes mastery of a culture of thinking, the ability to logically present results in oral and written form, the perception of innovation, and forms the ability and readiness for self-improvement and self-realization.

Students are provided with access to the library funds of the University and the department.

While studying the academic discipline “Biology”, students independently prepare workbooks. Student work in a group develops a sense of teamwork and communication skills.

The initial level of students' knowledge is determined by testing, the current control of mastering the subject is determined by oral questioning during classes, when solving typical situational problems and answering test tasks.

At the end of studying the academic discipline, an intermediate control of knowledge is carried out using test control, determination of drugs, solving situational problems and an oral interview.

## VII. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

No.	Name of the discipline (module), practice in accordance with the curriculum	Name of special* premises and premises for independent work	Equipment and rooms for independent work specialrooms
1.	Biology	344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Letter A-Z, 1st floor)</i> Lecture room No. 2Classroom For carrying out classeslecture-type By discipline "Biology"	Room staffedspecialized educationalfurniture (150 seats)Technical means training,employees for representationeducational information bigaudience: multimediapresentation complex
2.	Biology	344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i> Auditorium No. 206 room for holdingclasses practicallike, groupconsultations, individualconsultations, consultations currentcontrol intermediatediscipline certification "Biology"	The room is equipped with: - specialized furniture - tables (11 pcs.), chairs (21 pcs.), cabinets (1 pc.) - demonstration equipment - TV (1 pc.), laptop (1 pc.), microscope "Biolam R 11" (5 pcs.), illuminator (5 pcs.) - board - educational visual aids for all modules of the discipline, providing thematic illustrations: a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester c) macropreparations – 10 pcs. d) demonstration material on topics (video films - 10 pcs.) e) visual materials on topics (presentations – 26 pcs.)
3.	Biology	344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i> Auditorium No. 207 room for holding	The room is equipped with: - specialized furniture - tables (18 pcs.), chairs (33 pcs.), computer desk (1 pc.), cabinets (13 pcs.) - demonstration equipment - TV (1 pc.), laptop (1 pc.),

		<p>classes practicallike, groupconsultations, individual consultations, departmental student conferences, departmental museum, ongoing monitoring of intermediate certification by discipline "Biology"</p>	<p>screen (1 pc.), Epson EB – S6 projector (1 pc.), digital microscope (1 pc.), microscope "Biolam R 11" (8 pcs.), illuminator (8 pcs.)</p> <ul style="list-style-type: none"> <li>- board</li> <li>- educational visual aids for all modules of the discipline, providing thematic illustrations:</li> </ul> <p>a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester  b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester  c) macropreparations – 40 pcs.  d) demonstration material on topics (video films - 10 pcs.)  e) visual materials on topics (presentations – 26 pcs.)</p>
4.	Biology	<p>344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i> Auditorium No. 208 room for holdingclasses practicallike, groupconsultations, individual consultations, currentcontrol intermediatediscipline certification "Biology"</p>	<p>The room is equipped with:</p> <ul style="list-style-type: none"> <li>- specialized furniture - tables (11 pcs.), chairs (21 pcs.), cabinets (1 pc.)</li> <li>- demonstration equipment - TV (1 pc.), laptop (1 pc.), microscope "Biolam R 11" (5 pcs.), illuminator (5 pcs.)</li> <li>- board</li> <li>- educational visual aids for all modules of the discipline, providing thematic illustrations:</li> </ul> <p>a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester  b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester  c) macropreparations – 10 pcs.  d) demonstration material on topics (video films - 10 pcs.)  e) visual materials on topics (presentations – 26 pcs.)</p>
5.	Biology	<p>344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i> Auditorium No. 208 room for holdingclasses practicallike, groupconsultations, individual consultations, current</p>	<p>The room is equipped with:</p> <ul style="list-style-type: none"> <li>- specialized furniture - tables (12 pcs.), chairs (21 pcs.), cabinets (2 pcs.), cabinets (2 pcs.)</li> <li>- demonstration equipment - TV (1 pc.), laptop (1 pc.), microscope "Biolam R 11" (5 pcs.), illuminator (5 pcs.)</li> <li>- board</li> <li>- educational visual aids for all modules of the discipline, providing thematic</li> </ul>

		control intermediatedisc ipline certification "Biology"	illustrations: a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester c) macropreparations – 10 pcs. d) demonstration material on topics (video films - 10 pcs.) e) visual materials on topics (presentations – 26 pcs.)
6.	Biology	344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i> Auditorium No. 210 room for holdingclasses practicallike, groupconsultatio ns, individualconsultations, consultations currentcontrol intermediatedisc ipline certification "Biology"	The room is equipped with: - specialized furniture - tables (11 pcs.), chairs (21 pcs.), cabinets (1 pc.) - demonstration equipment - TV (1 pc.), laptop (1 pc.), microscope "Biolam R 11" (5 pcs.), illuminator (5 pcs.) - board - educational visual aids for all modules of the discipline, providing thematic illustrations: a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester c) macropreparations – 10 pcs. d) demonstration material on topics (video films - 10 pcs.) e) visual materials on topics (presentations – 26 pcs.)
7.	Biology	344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i> Auditorium No. 212 room for holdingclasses practicallike, groupconsultatio ns, individualconsultations, consultations currentcontrol intermediatedisc ipline certification "Biology"	The room is equipped with: - specialized furniture - tables (10 pcs.), chairs (18 pcs.), wardrobe (1 pc.), computer desk (1 pc.) - demonstration equipment - TV (1 pc.), laptop (1 pc.), digital microscope (1 pc.), Biolam R 11 microscope (5 pcs.), illuminator (5 pcs.) - board - educational visual aids for all modules of the discipline, providing thematic illustrations: a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester c) macropreparations – 5 pcs.

			<p>d) demonstration material on topics (video films - 10 pcs.)</p> <p>e) visual materials on topics (presentations – 26 pcs.)</p>
8.	Biology	<p>344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i>Auditorium No. 213 room for holding classes practicallike,  groupconsultations, individualconsultations, consultations currentcontrol intermediatediscipline certification "Biology"</p>	<p>The room is equipped with:</p> <ul style="list-style-type: none"> <li>- specialized furniture - tables (10 pcs.), chairs (17 pcs.), wardrobe (1 pc.), computer desk (1 pc.)</li> <li>- demonstration equipment - TV (1 pc.), laptop (1 pc.), digital microscope (1 pc.), Biolam R 11 microscope (6 pcs.), illuminator (6 pcs.)</li> <li>- board</li> <li>- educational visual aids for all modules of the discipline, providing thematic illustrations:</li> </ul> <p>a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester</p> <p>b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester c) macropreparations – 5 pcs.</p> <p>d) demonstration material on topics (video films - 10 pcs.)</p> <p>e) visual materials on topics (presentations – 26 pcs.)</p>
9.	Biology	<p>344022, <i>Rostovskaya region, Rostov-on-Don, lane. Nakhichevan, 38/57-59/212-214 (No. 41, Liter A-Z, 2nd floor)</i>Auditorium No. 214 room for holding classes practicallike,  groupconsultations, individualconsultations, consultations currentcontrol intermediatediscipline certification "Biology"</p>	<p>The room is equipped with:</p> <ul style="list-style-type: none"> <li>- specialized furniture - tables (10 pcs.), chairs (17 pcs.), wardrobe (1 pc.), computer desk (1 pc.)</li> <li>- demonstration equipment - TV (1 pc.), laptop (1 pc.), digital microscope (1 pc.), Biolam R 11 microscope (6 pcs.), illuminator (6 pcs.)</li> <li>- board</li> <li>- educational visual aids for all modules of the discipline, providing thematic illustrations:</li> </ul> <p>a) tables: 32 pcs. – 1 semester, 40 pcs. – 2nd semester</p> <p>b) microslides: 10 pcs. - 1 semester, 20 pcs. – 2nd semester c) macropreparations – 5 pcs.</p> <p>d) demonstration material on topics (video films - 10 pcs.)</p> <p>e) visual materials on topics (presentations – 26 pcs.)</p>

10.		344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 41, Liter A-I, 2nd floor) Room No. 211, room for storage and preventive maintenance of educational equipment	Storage furniture educational equipment: wardrobe (4 pcs.), tables (4 pcs.), chairs (5 pcs.)
eleven.		344022, Rostov region, Rostov-on-Don, lane. Nakhichevansky, 38/57-59/212-214 (No. 41, Liter A-I, 2nd floor, 4th floor, Letter B-A, 6th floor) 344022, Rostov region, Rostov-on-Don, st. Adygei/Pushkinskaya 12/191. Special rooms for independent work - library reading rooms, auditorium of the Department of Physics, Department of Automation and Monitoring of the Quality of Education	Computer technology With connecting to the Internet and providing access to the EIOS RostSMU