

AMENDMENTS AND CHANGES TO THE CURRICULUM IN THE EDUCATIONAL DISCIPLINE
«MICROBIOLOGY, VIROLOGY, IMMUNOLOGY» for the specialty 1-79 01 01 «General Medicine»
(experimental project) 2020/2021 academic year

Amendments and changes	
1. Changes have been introduced into the educational discipline curricular chart	Basis/Reason Educational Plan for 2021/2022 academic year
<p>2. The following sections have been added to the information and methodological part:</p> <p style="text-align: center;">MAIN FORMS OF SUPERVISED STUDENT INDEPENDENT WORK:</p> <ul style="list-style-type: none"> - preparation and presentation of abstracts; - presentation of reports; - studying topics and problems that have not been discussed at the lectures; - taking notes of original sources (sections of anthologies, collections of documents, monographs, textbooks); - computer testing; - preparation of tests for the organization of mutual assessment; - preparation of didactic materials; - participation in active forms of education; - others. <p>Control of supervised student independent work is carried out in the forms of:</p> <ul style="list-style-type: none"> - test paper; - final class, colloquium in the form of an oral interview, written work, testing; - discussion of abstracts; - defense of educational assignments; - assessment of an oral reply to a question, presentation, report or problem solving; - checking up abstracts, written reports, accounts, prescriptions; - checking up notes of original sources, monographs and articles; - individual interview; - other tools. 	<p>Educational Plan for 2021/2022 academic year</p>

3. The literature has been updated

The curriculum is revised and approved at the microbiology, virology, immunology department meeting (protocol № 15 of 12.06.2020 year)

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METHODOICAL MAP OF DISCIPLINE "MICROBIOLOGY, VIROLOGY, IMMUNOLOGY"

Appendix 1

№	The code and the name of the section, topic	Number of class hours				Educative literature	Form of control
		Lectures	Practical classes)	supervised self-study	Independent study		
1	2	3	4	5	6	7	9
4th semester							
1	General microbiology	6	27	3	24 (46) ¹		
1.1-1.2	Microbiology as a science. Microbial world. Bacterioscopic method of investigation. Bacterial forms. Methods for investigation of bacterial morphology	1	3	–	2 (5) ¹	1	Oral questioning, Laboratory report
1.2	The structure of the bacterial cell	–	3	–	2 (5) ¹	1	Oral questioning, Laboratory report, Computer test
1.2	Microbiology of actinomycetes, spirochetes, rickettsia, chlamydia, mycoplasma	–	3	1	2 (5) ¹	1	Oral questioning, Laboratory report, Computer test
1.3	Physiology of microorganisms. Antimicrobial measures. Bacteriological research method of the 1st and 2nd steps	2	3	–	3 (5) ¹	1	Oral questioning, Laboratory report, Computer test
1.3	Methods for pure cultures identification	–	3	–	2 (5) ¹	1	Oral questioning, Laboratory report, Computer test
1.4	Genetics of microorganisms	1	3	–	3 (5) ¹	1	Oral questioning, Laboratory report, Computer test
1.5-1.6	Ecology of microbes. The microflora of the human body. Infection. Biological research method	1	3	1	2 (5) ¹	1	Oral questioning, Laboratory report, Computer test
1.7	Microbiological basis of chemotherapy and antiseptics of bacterial infections	1	3	1	2 (5) ¹	1	Oral questioning, Laboratory report, Computer test
	Concluding session for "General Microbiology"	–	3	–	6	1	Concluding test, Control work, Computer test
2.	Theoretical and applied immunology	6	24	3	20		
2.1-2.2	Immunology. The immune system. Innate immunity	1	3	1	2 (4) ¹	2	Oral questioning, Laboratory report, Computer test
2.3	Immune response. Antigens. B-lymphocytes. Humoral immune response	1	3	–	2 (4) ¹	2	Oral questioning, Laboratory report, Computer test

1	2	3	4	5	6	7	9
2.6	Serological method of research	–	3	–	2(4) ¹	2	Oral questioning, Laboratory report, Computer test
2.6	Enzyme immunoassay	–	3	–	2(4) ¹	2	Oral questioning, Laboratory report, Computer test
2.3–2.4	Cellular immune response. Allergy and ecological immunology.	2	3	–	2(4) ¹	2	Oral questioning, Laboratory report, Computer test
2.5–2.7	Antinfection immunity. Immunoprophylaxis and immunotherapy.	2	3	–	2(5) ¹	2	Oral questioning, Laboratory report, Computer test
2.8	Clinical Immunology	1	3	1	2(5) ¹	2	Oral questioning, Laboratory report, Computer test
	Concluding session for the section : "Immunology".	–	3	–	6	2	Concluding test, Control work, Computer test
3	Special medical microbiology	5	33	5	60		
3.1–3.2	Gram positive cocci. Neisseria	1	3	–	5	1	Oral questioning, Laboratory report, Computer test
3.2–3.3	Neisseria, Bordetella, Hemophilus, Legionella, Coxiella.	–	–	1	–	1	
3.3	Enterobacteria. Escherichia. Salmonella. Shigella.	1	–	–	–	1	
5th semester							
3.3	Bordetella, Hemophilus, Legionella, Coxiella	–	3	–	5	1	Oral questioning, Laboratory report, Computer test
3.3	Enterobacteria. Escherichia. Salmonella. Shigella	–	3	–	5	1	Oral questioning, Laboratory report, Computer test
3.3	Klebsiella. Yersinia. Proteus. Pseudomonas.	–	3	–	5	1	Oral questioning, Laboratory report, Computer test
3.4	Corynebacterium. Listeria. Actinomyces. Mycobacteria	1	3	1	5	1	Oral questioning, Laboratory report, Computer test
3.5	Vibrio. Pathogens of especially dangerous infections.	–	3	1	5	1	Oral questioning, Laboratory report, Computer test
3.6	Ecological group of anaerobic bacteria	1	3	–	5	1	Oral questioning, Laboratory report, Computer test
3.7	Spirochetes	–	3	1	5	1	Oral questioning, Laboratory report, Computer test
3.8	Rickettsia. Chlamydia. Mycoplasma	1	3	–	5	1	Oral questioning, Laboratory report, Computer test
3.9–3.10	Basics of Medical Mycology and Protozoology	–	3	1	5	1	Oral questioning, Laboratory report, Computer test

1	2	3	4	5	6	7	9
	Concluding session for: "Special medical microbiology."	-	3	-	10	1	Concluding test, Control work, Computer test
4	General and special virology	3	18	3	40		
4.1	General virology	1	3	-	6	3	Oral questioning, Laboratory report, Computer test
4.2	RNA genomic viruses Orthomyxoviruses, Paramyxoviruses, Coronaviruses,	1	3	-	6	3	Oral questioning, Laboratory report, Computer test
4.2.4.6	Picornaviruses, Retroviruses, Oncogenic viruses	-	3	1	6	3	Oral questioning, Laboratory report, Computer test
4.3	Environmental group of arboviruses and roboviruses. Rabdoviruses..	1	3	-	6	3	Oral questioning, Laboratory report, Computer test
4.4	DNA-Genomic viruses. Herpesviruses, Adenoviruses, Papillomaviruses	-	3	1	6	3	Oral questioning, Laboratory report, Computer test
4.5.4.7	Hepatitis viruses. Etiology of slow infections. Concluding session for: "General and Special Medical Virology."	-	3	1	10	3	Oral questioning, Laboratory report, Computer test
5	Clinical microbiology	1	6	1	10		
5.1	Clinical microbiology. Methods for opportunistic infections diagnostics.	1	6	-	5	1	Oral questioning, Laboratory report, Computer test
5.2	Nosocomial infections.	-	-	1	5	1	Oral questioning, Laboratory report, Computer test
	Intotal hours	21	108	15	154		Examination

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