



CALENDAR AND THEMATIC PLAN OF PRACTICAL CLASSES

**in Microbiology with the Basics of Immunology for the 2nd year
of the 226 Pharmacy and industrial pharmacy**

ФМ23(4,10Д)англ-01

(spring semester, 2024-2025 academic year)


№	Date	Lesson topic	Volume in hours, type of lesson	Knowledge assessment system, points	
				min	max
CONTENT MODULE 1. The concept of microbiology. Morphology of microorganisms. Physiology of microorganisms. The doctrine of immunity. Immunodiagnostics of infectious diseases.					
1.	04.02.25	The concept of Microbiology. Subject and tasks of medical microbiology. Classification of microorganisms. Taxonomy of microorganisms. Structure of prokaryotic and eukaryotic cells.	3, PL	-	-
2.	11.02.25	Methods of studying microorganisms. Dyes, simple and complex methods of staining microorganisms. Tinctorial properties of microorganisms. Microscopic method of studying the morphology of microorganisms. Types of microscopy.	3, PL	3	5
3.	18.02.25	Morphology and biology of Fungi and Actinomycetes. Morphology and biology of Protozoa.	3, PL	3	5
4.	25.02.25	Morphology and ultrastructure of viruses. Bacteriophages: structure and features.	3, PL	3	5
5.	04.03.25	Molecular composition of microorganisms. Physiology of microorganisms. Conditions and stages of growth and reproduction of bacteria.	3, PL	3	5
6.	11.03.25	Bacterial physiology. Cultivation methods. Culture media. Bacterial identification.	3, PL	3	5
7.	18.03.25	The doctrine of immunity. Organs of the immune system. Factors of nonspecific protection of the body against pathogenic microorganisms. Characteristics of antigens. Antibodies as a product of the humoral immune response.	3, PL	3	5
8.	25.03.25	Immunodiagnostics of infectious diseases. Types of serological reactions. Practical use of immune reactions.	3, PL	3	5
9.	01.04.25	<i>Final test of CM 1 assimilation</i>	3, PL	6	10
Total for Content Module 1				27	45
CONTENT MODULE 2. Ecology of microorganisms. Sanitary indicator microorganisms. Phytopathogenic microorganisms. Microbial disruption of plant medicinal raw materials, microbial contamination of the finished dosage forms. The basics of chemotherapy. The doctrine of immunodiagnostics, immunotherapy and immunoprophylaxis of infectious diseases.					

10.	08.04.25	Ecology of microorganisms. Microbiocenoses of healthy and pathologically altered biotopes of the human body. Dysbacteriosis dysmicrobiocenosis). Eubiotics.	3, PL	3	5
11.	15.04.25	Sanitary indicator microorganisms. Microflora and indicators of microbiological safety of medical facilities, pharmacies.	3, PL	3	5
12.	22.04.25	Effects of physical, chemical and biological factors on microorganisms. Asepsis, antisepsis, preservation. Disinfection. Disinfectants. Sterilization. Methods of sterilization.	3, PL	3	5
13.	29.04.25	Phytopathogenic microorganisms. Microbial contamination of finished dosage forms.	3, PL	3	5
14.	06.05.25	The doctrine of Infection. The infectious process, its types, conditions of occurrence and development.	3, PL	3	5
15.	13.05.25	Fundamentals of Epidemiology. The concept of the epidemic process.	3, PL	3	5
16.	20.05.25	Antimicrobial chemotherapy. Chemotherapeutic drugs. Antibiotics side effects of antimicrobial medicines.	3, PL	3	5
17.	27.05.25	Immunobiological drugs for prophylaxis and therapy of infectious diseases.Vaccines.	3, PL	3	5
18.	03.06.25	Immunobiological drugs for prophylaxis and therapy of infectious diseases. mmunesera.	3, PL	3	5
19.	10.06.25	Final test of CM 2 assimilation	2, PL	6	10
		Total for Content Module 2		33	55
		Semester credit for the Module 1 “ GENERAL MODULE”	1, PL		
TOTAL FOR STUDYING MODULE 1			57, PL	60	100

Head of the Department of Clinical
Laboratory Diagnostics, Microbiology and
Biological Chemistry,
professor



Vira KRAVCHENKO

				
CALENDAR AND THEMATIC PLAN OF LECTURES in Microbiology with the Basics of Immunology for the 2nd year of the 226 Pharmacy and industrial pharmacy ФМ23(4,10Д)АНГЛ-01 <i>(spring semester, 2024-2025 academic year)</i>				
№	Date	Lecture topic	Volume in hours	Lecturer
1	04.02.25	Morphology of prokaryotes and eukaryotes/	1	Associate Professor Tishchenko Iryna Yuriyivna
2	11.02.25	Morphology and biological properties of rickettsia, chlamydia and mycoplasmas.	1	
3	18.02.25	Morphology and ultrastructure of viruses. Bacteriophages: structure and features.	1	
4	25.02.25	Physiology of microorganisms.	1	
5	04.03.25	Human microbiocenoses. Eubiotics.	1	
6	11.03.25	Microbiological control of medicines.	1	
7	18.03.25	The doctrine of infection.	1	
8	25.03.25	The doctrine of immunity.	1	
9	01.04.25	Immunobiological drugs: vaccines and serums.	1	
Total:			9	

Note: the lecture takes place every Tuesday at 12⁵⁰ online (ZOOM platform):

<https://us02web.zoom.us/j/2791114897?pwd=dVBKQWUvN0NTWXIDZTczd0E1T3Nldz09&omn=88319616443>

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