

**Thematic plan of independent work
in the discipline "Microbiology, Virology"
for students entered 2023 according to the educational program
of the specialist in the specialty 05.31.01 General medicine,
2024-2025 academic year**

№	Themes	Time
1	Age-related features of the human microflora.	5
2	Gnotobiology.	5
3	Bacterial preparations used for the prevention of dysbiosis.	5
4	Intrauterine infection, ways of infection of the fetus.	5
5	Immunological relationships in the mother-fetus system. Isoantigens of ABO erythrocytes. Rhesus antigen and its significance in the pathology of pregnancy.	5
6	Pathogenic properties of rickettsias, chlamydia, mycoplasmas, fungi, protozoa.	5
7	Definition of bacterial genetics as a science. Its importance in the theory and practice of medicine. The organization of genetic material in bacteria. The genotype. Phenotype.	4
8	Biotechnology, its role in scientific research. Main directions. Genetic engineering, the concept of a gene and how to obtain it. Recombinant strains of microorganisms.	4
9	Microbiology of food.	4
10	Etiology and pathogenetic role of streptococci of group B. Immunity after diseases. Laboratory diagnostics. Treatment and prevention.	4
11	Streptococci of group A. Treatment and prevention.	4
12	The importance of mycoplasmas in the pathology of pregnancy. Pathogenesis and immunity. Laboratory diagnostics and treatment.	4
13	The role of chlamydia in the pathology of pregnancy. Features of the laboratory diagnosis, treatment and prevention.	4
14	Yeast-like fungi of the genus Candida. Pathogens of dermatotoxicosis.	4
15	Hospital infections caused by bacteria from the group of intestinal bacteria (Klebsiella, Proteus, Salmonella spp.). Ways of prevention.	4
16	DNA-genomic viruses. General characteristics and classification. Human polioma- and papilloma viruses. Oncogenicity.	4

17	Pseudomonads. Taxonomy, ecology, biological properties, pathogenicity factors. The role in human pathology and the occurrence of hospital infections. Microbiological diagnosis, treatment, and prevention.	4
18	Rickettsia. Taxonomy. Biological properties. Ecology. Pathogenicity for humans. Laboratory diagnostics, treatment and prevention.	4
	Total	78 hours

Reviewed and approved at the Microbiology Department meeting, 26. 08. 2024
by protocol №1.

Head of the Microbiology Department,

Professor



Stepanenko I.S.