

**Thematic plan of lectures
in in the discipline / internship "Immunology"
for students of the educational program
Specialist in the specialty/direction of training 31.05.01 General medicine,
direction (profile) General medicine,
form of study is full-time
for the 2023-2024 academic year**

№	Topics of lectures	Hours (academic)
1.	Introduction to immunology. The concept of immunity. The subject and tasks of immunology. History of immunology. Functional organization of the immune response. Antigens, nature, structure, classification, properties. Antigen-presenting cells. Presentation of exo- and endogenous antigens.	2
2.	Humoral immune response: cellular basis; antibodies, nature, structure, types, functions, dynamics of production in primary and secondary immune responses. Serological research methods.	2
3.	Cytokines as factors regulating the immune response. Cellular immunity: differentiation of T-lymphocytes; main subpopulations of T-lymphocytes; antigen recognition; cellular cytotoxicity, mechanism, biological significance; regulatory functions of T-lymphocytes; methods of studying cellular immunity. Immunological tolerance.	2
4.	Infection and immunity: immune response in bacterial, viral, fungal infections, helminth infestations; ways of "escaping" infectious pathogens from immune surveillance. Immunological monitoring of infectious diseases. Immunoprophylaxis of infectious and non-communicable diseases.	2
5.	Immunological aspects of the tumor process. Immunological aspects of reproduction. Basic concepts of autoimmunity. Hypotheses of the development of autoimmune diseases.	2

6.	Principles and methods of human immune status assessment. The main types of immunopathology. Types of allergic reactions.	2
7.	Immunodeficiency conditions. The concept. Classification. Formation of marker syndromes. Principles of treatment. Immunotropic therapy (immunosuppressive therapy, immunostimulating agents, monoclonal antibodies, cytokines, anti-cytokine therapy, allergen-specific immunotherapy).	2
	Total	14

¹ -Subject

² - essential content (if necessary)

Considered at the meeting of the department of Immunology and allergology "31"
May 2023, protocol No 16

Head of the Department



Belan E.B.