

Summary of the working program of the academic discipline

«MICROSCOPIC BASES OF ANALYZERS»

(name of the academic discipline)

General Educational Program of higher education (specialist's degree programs)

31.05.01 GENERAL MEDICINE

Department: **HISTOLOGY WITH CYTOLOGY AND EMBRYOLOGY**

1. The purpose of mastering the discipline (*participation in the formation of relevant competencies – specify the codes*):

- Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy (UC-1)

2. Position of the academic discipline in the structure of the General Educational Program (GEP).

2.1. The discipline “**Microscopic bases of analyzers**” refers to or the part formed by the participants of educational relations of Block 1 of GEP HE (B1.PER.2).

The discipline is taught in 3 semester/ 2 year of study.

3. Deliverables of mastering the academic discipline and metrics of competence acquisition

Mastering the discipline aims at acquiring the following universal (UC) competencies

№	Competence code	The content of the competence (or its part)	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	possess
1.	UC-1	Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy	<p>IAC_{UC-1.1} Knows: methods of critical analysis and evaluation of modern scientific achievements; basic principles of critical analysis</p> <p>IAC_{UC-1.2} Able to: gain new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related to the professional field; search for information and solutions based on action, experiment and experience</p> <p>IAC_{UC-1.3} Has practical experience: researching the problem of professional activity using analysis, synthesis and other</p>	Methods of critical analysis and evaluation of modern scientific achievements in the field of histological research; basic principles of critical analysis	To gain new knowledge based on analysis, synthesis, etc.; to collect data on complex scientific problems related to the professional field; to search for information and solutions based on actions, experiment and experience	Practical experience: research of the problem of professional activity with the use of analysis, synthesis and other methods of intellectual activity; development of an action strategy for solving professional problems

			methods of intellectual activity; developing an action strategy to solve professional problems			
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4. Volume of the academic discipline and types of academic work

Total labor intensity of the discipline is **1 CU (36 AH)**

Type of educational work	Labor intensity		Labor intensity (AH) in semesters			
	volume in credit units (CU)	volume in academic hours (AH)	2	3		
Classroom work, including	0,6	19		19		
Lectures (L)	0,1	2		2		
Laboratory practicum (LP)*						
Practicals (P)	0,5	17		17		
Seminars (S)						
Student's individual work (SIW)	0,3	14		14		
Mid-term assessment						
credit/exam (<i>specify the type</i>)	0,1	3		3		
TOTAL LABOR INTENSITY	1,0	36		36		

5. Sections of the academic discipline and competencies that are formed

№	Competence code	Section name of the discipline	The content of the section in teaching units
1.	UC-1	NEURONS AND NEUROGLIA	Types of neurons and neuroglia. Nerve fibres. Nerve terminations Synapses Interneuronal connections and principles of the organization of neural systems. Histogenesis and regeneration of nervous tissue.
2.	UC-1	NERVOUS SYSTEM	Central and peripheral nervous system. Principles of structural and functional organization of nerves, peripheral ganglia, spinal cord and brain.
3.	UC-1	SENSE ORGANS	Classification of sensory organs. The organ of vision. The shells of the eye. Accommodation-dioptric apparatus of the eye. Neural organization of the retina. Photoreceptor cells. The organ of hearing and balance. Histophysiology of sound perception, gravity, and angular acceleration. The organ of taste.
4.	UC-1	INTEGUMENTARY SYSTEM. RECEPTORS.	The integumentary system and its derivatives. Skin receptors.
5.	UC-1	RESPIRATORY SYSTEM.	Organs of the respiratory system. Receptors. Olfactory organ.