

**Thematic plan for lecture-type classes  
in discipline «Biochemistry»  
for students of 2025 year of admission  
under the educational programme  
31.05.01 General medicine,  
specialisation (profile) General medicine  
(Specialist's degree),  
form of study full-time  
for the 2025 - 2026 academic year**

<b>№</b>	<b>Topics of lecture-type classes</b>	<b>Hours (academic)</b>
<b>second semester</b>		
<b>1</b>	Introduction. Subjects and tasks of biochemistry. The structure of proteins. Classification of proteins. Biological functions of proteins.	<b>2</b>
<b>2</b>	Introduction to the energy metabolism of the cell. Biological oxidation. Mitochondrial electron transfer chain.	<b>2</b>
<b>3</b>	Introduction to metabolism. The metabolism of proteins, fats and carbohydrates.	<b>2</b>
<b>third semester</b>		
<b>4</b>	Biochemical bases of storage and transmission of genetic information.	<b>2</b>
<b>5</b>	Basic intercellular communication systems. Classification of hormones. Target cells and cellular hormone receptors. Mechanisms of transmission of hormonal signals to cells.	<b>2</b>
<b>6</b>	Metabolic processes in organs and tissues using the example of erythrocyte metabolism.	<b>2</b>
	<b>Total</b>	<b>12</b>

Considered at the department meeting fundamental and clinical biochemistry,  
protocol of «29» may 2025 y., № 12.

Head of the Department of Basic  
and Clinical Biochemistry

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