

LECTURES

Plan of lectures for the international students of **medical faculty** studying biochemistry in English
2025 – 2026 year

Autumn semester

N	3 batch	4 batch	Topic	Lecturer
1	04.09	02.09	Research techniques in protein chemistry	Kadushkin A.G. Ryabtseva T.V.
2	11.09	09.09	Introduction to enzymology. Classification and general properties of enzymes. Mechanisms of enzyme action	
3	18.09	16.09	Regulation of enzyme action	
4	25.09	23.09	Introduction to metabolism and energy exchange. Central pathways of metabolism: oxidative decarboxylation of pyruvate	
5	02.10	30.09	Central metabolic pathways: citric acid cycle. Tissue respiration. Oxidative phosphorylation	
6	09.10	07.10	Carbohydrate metabolism. Digestion and absorption. Glycogen metabolism	
7	16.10	14.10	Carbohydrate metabolism. Aerobic and anaerobic pathways of glucose oxidation. Gluconeogenesis	
8	23.10	21.10	Lipid metabolism. Digestion and absorption. Transport of exogenous lipids.	
9	30.10	28.10	Lipid metabolism. Cholesterol and triacylglycerol biosynthesis in the liver. Transport of endogenous lipids in the blood. Atherosclerosis	
10	06.11	04.11	Lipid metabolism. Oxidation and biosynthesis of fatty acids.	
11	13.11	11.11	Protein metabolism. Intracellular amino acid metabolism.	
12	20.11	18.11	Protein metabolism. Ammonia detoxification	

Spring semester

1	12.02	13.02	Nucleic acid metabolism	Kadushkin A.G. Ryabtseva T.V.
2	19.02	20.02	Matrix biosyntheses	
3	05.03	06.03	Modern techniques of molecular biology	
4	19.03	20.03	Introduction to endocrinology	
5	02.04	03.04	Regulation of metabolism. Biochemistry of hormones	
6	16.04	17.04	Biochemistry of hormones	
7	30.04	08.05	System of hemostasis.	
8	14.05	15.05	Biochemistry of nutrition. Malnutrition	
9	21.05	22.05	Biochemistry of the liver	
10	28.05	29.05	Integration of metabolism	

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