THE TIME-TABLE
of biological chemistry practical classes
2026/2027 acad. year, *autumn semester* for 2nd year students of the faculty of international students

№	Date	The topic of the practical class
1	07.09 – 12.09	*Preparatory class.* Introduction to Biochemistry. Modern biochemical methods of research**.** *Accident prevention technique.* LW: Devices and utensils in biochemical laboratory and rules to operate them.
2	14.09 – 19.09	*Structure and functions of proteins.* LW: Determining of total protein concentration in blood plasma by biuretic method.
3	21.09 – 26.09	*Enzymes-1.* Structure, properties, nomenclature and classification of enzymes. LW: Determining of α-amylase activity in blood plasma by Caraway unified method.
4	28.09 – 03.10	*Enzymes 2.* The mechanism of enzyme action. LW: Determining of γ-glutamyltransferase activity in blood plasma by optimized kinetic method.
5	05.10 – 10.10	*Enzymes 3.* Medical enzymology. LW: Determining of creatine kinase activity in blood plasma.
6	12.10 – 17.10	*Biological oxidation 1.* Krebs cycle. Ways of oxygen consumption in organism. LW: Determining of lactic acid concentration in blood plasma by enzymatic colorimetric method.
7	19.10 – 24.10	*Biological oxidation 2.* Tissue respiration. Oxidative phosphorylation. Microsomal and peroxide oxidation. LW: Determining of iron concentration in blood plasma by colorimetric method without deproteinization.
8	26.10 – 31.10	*Carbohydrates 1*. Digestion and absorption. Glycogen, fructose and galactose metabolism. LW: Determining of α-amylase activity in urine by enzymatic kinetic method.
9	02.11 – 07.11	**Control class №1 on partitions:** "Introduction to Biochemistry. Structure and functions of proteins", "Enzymology" and "Biological Oxidation".
10	09.11 – 14.11	*Carbohydrates 2.* Tissue carbohydrate metabolism. Anaerobic and aerobic glycolysis. LW: Determining of lactate dehydrogenase (LDH) activity in blood plasma.
11	16.11 – 21.11	*Carbohydrates-3.* Tissue carbohydrate metabolism. Gluconeogenesis. Pentosophosphate pathway. Blood glucose level regulation. LW: Determining of plasma glucose concentration by hexokinase method.
12	23.11 – 28.11	*Carbohydrates 4.* Pathology of carbohydrate metabolism. LW: Determining of glucose concentration in urine by glucose oxidase method.
13	30.11 – 05.12	**Control class №2 on partition:** "Biochemistry of Carbohydrates".
14	07.12 – 12.12	*Lipids 1.* Structure, classification, and biological functions of lipids. Digestion and absorption. Lipoprotein metabolism. LW: Determining of high density lipoprotein (HDL) concentration in blood plasma.
15	14.12 – 19.12	*Lipids 2.* Tissue lipid metabolism: lipolysis, fatty acid β-oxidation, ketone bodies metabolism. LW: Determining of triglyceride concentration in blood plasma by enzymatic colorimetric method.
16	21.12 – 26.12	*Lipids-3.* Tissue lipid metabolism: lipid biosynthesis. Regulation and pathology of lipid metabolism. LW: Determining of total cholesterol concentration in blood plasma by enzymatic colorimetric method.
17	28.12 – 02.01	**Computer test on partitions:** "Enzymology" and "Biological Oxidation", "Biochemistry of Carbohydrates", "Biochemistry of Lipids"**.**
18	04.01 – 09.01	**Final class of the semester.**

The head of department of biological chemistry O.S. Logvinovich
29.08.2026

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