TIMETABLE
for biological chemistry classes for 2nd year students
of the faculty of international students for the 4th semester of the 2024/2025 acad. year

№	Date	Topic
1	07.09	*Proteins and nucleic acids 1.* Protein digestion. Amino acid absorption. LW Determination of aspartate transaminase activity in blood plasma by unified Reitman-Frankel method.
2	14.09	*Proteins and nucleic acids 2.* Tissue metabolism of amino acids. LW Determination of urea concentration in urine by urease phenol/hypochlorite method.
3	21.09	*Proteins and nucleic acids 3.* Features of selected amino acid metabolism. LW Determination of alanine transaminase activity in blood plasma by optimized enzymatic kinetic method.
4	28.09	*Proteins and nucleic acids 4.* Metabolism of nucleoproteins. LW Determination of uric acid concentration in urine by enzymatic colorimetric method without deproteinizing.
5	05.10	*Proteins and nucleic acids 5.* Biosynthesis of protein. Pathology of the protein metabolism. LW Determination of total blood serum protein concentration by refractometry test.
6	12.10	*Biochemistry of vitamins*. Water-soluble and fat-soluble vitamins. Intervitamin relationship. LW Determination of zinc concentration in urine by colorimetric method without deproteinizing.
7	19.10	*Water and mineral salts*. Metabolism of calcium and phosphorus. Microelements. LW Determination of magnesium concentration in urine by colorimetric method without deproteinizing.
8	**26.10**	**Final class №4 on partitions:** "Biochemistry of Proteins and Nucleic acids" and "Biochemistry of Nutrition".
9	02.11	*Hormones 1.* General endocrinology. LW Determination of calcium concentration in blood plasma by colorimetric method. **Computer testing.** Final class No. 4.
10	09.11	*Hormones 2.* Individual endocrinology. Determination of albumin concentration in blood plasma by colorimetric method.
11	16.11	*Biochemistry of Blood 1*. Fundamentals of acid-base balance regulation. LW Determination of hemoglobin concentration in blood by unified colorimetric method.
12	23.11	*Biochemistry of Blood 2.* Features of Erythrocytes, Leukocytes, and Platelets metabolism. LW Determination of total and direct bilirubin concentration in blood plasma by unified Jendrassik-Grof method.
13	30.11	*Biochemistry of Kidneys*. LW Urinalysis with test strips.
14	07.12	*Biochemistry of Liver*. Xenobiotic metabolism. LW Determination of alkaline phosphatase activity in plasma by an optimized kinetic method.
15	14.12	*Biochemistry of Muscular tissue and Myocardium*. *Biochemistry of nervous system. Biochemistry of connective tissue.* LW Determination of creatinine concentration in urine by the pseudo kinetic two-point method, based on the Jaffe reaction, without deproteinizing. **Computer testing.** Final class No. 5. **Computer test on partitions**: "Biochemistry of Proteins and Nucleic acids", "Biochemistry of Nutrition", "Metabolism regulation. Biochemistry of Hormones", and "Biochemistry of Organs and Tissues".
	Referat	*Nervous system biochemistry*
16	**21.12**	**Final class №5 on partitions:** "Regulation of Metabolism. Biochemistry of Hormones" and "Biochemistry of Organs and Tissues".
17	**28.12**	*Integration of major metabolic pathways.*

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30.08.2024