

LABORATORY CLASSES

Plan of laboratory classes for the international students of dental faculty studying biochemistry in English
2025 – 2026 year
Autumn semester

Week N	Date	Topic
1	01.09-05.09	Intracellular amino acid metabolism. Determination of amino transferase activity in serum. <i>Manual on biochemistry (p.29-31)</i>
2	08.09-12.09	Detoxification of ammonia. Determination of nonprotein nitrogen in blood and urea in urine. <i>Manual on biochemistry (p.31-33).</i>
3	15.09-19.09	Nucleoproteins chemistry and metabolism. Determination of uric acid in the urine. <i>Manual on biochemistry (p.33-34)</i>
4	22.09-26.09	Matrix biosynthesis (synthesis of DNA, RNA, proteins). Modern techniques of molecular biology. <i>Manual on biochemistry (p.36)</i>
5	29.09-03.10	COLLOQUIUM “METABOLISM OF SIMPLE PROTEINS. NUCLEOPROTEINS METABOLISM. SYNTHESIS OF DNA, RNA AND PROTEINS.” Questions for preparation – see <i>Manual on biochemistry (p. 34-35)</i>
6	06.10-10.10	Hormones, general characteristics and peculiarities of biological action. <i>Manual on biochemistry (p.36)</i>
7	13.10-17.10	Biochemistry of hormones. Pituitary hormones. Hormones of adrenal cortex. Thyroid hormones. <i>Manual on biochemistry (p.36-37)</i>
8	20.10-24.10	Biochemistry of hormones. Hormones regulated glucose blood level. Diabetes mellitus. Glucose tolerance test. <i>Manual on biochemistry (p.37-40)</i>
9	27.10-31.10	Biochemistry of nutrition. Role of proteins, fats, carbohydrates, and vitamins. <i>Manual on biochemistry (p.40-41)</i>
10	03.11-07.11	COLLOQUIUM “HORMONES. BIOCHEMISTRY OF NUTRITION.” Questions for preparation – see <i>Manual on biochemistry (p.41-42)</i>
11	10.11-14.11	Blood plasma proteins. Respiratory function of blood. Hemoglobinoses. Separation of serum proteins by electrophoresis on acetylcellulose. <i>Manual on biochemistry (p.42-45)</i>
12	17.11-21.11	Hemostasis. Determination of chlorides and calcium in blood plasma. <i>Manual on biochemistry (p.45-46)</i>
13	24.11-28.11	The role of minerals in the formation of bone tissue and teeth. The role of calcium, phosphorus, magnesium, fluorine, iron, zinc, copper. Regulation of calcium and phosphorus metabolism. <i>Manual on biochemistry (p.46-48)</i>
14	01.12-05.12	Connective tissue proteins. Biochemistry of teeth and oral cavity fluids. <i>Manual on biochemistry (p.48-50).</i>
15	08.12-12.12	Biochemistry of the liver. <i>Manual on biochemistry (p.50-51)</i>
16	15.12-19.12	COLLOQUIUM “BLOOD BIOCHEMISTRY, CONNECTIVE TISSUE PROTEINS, BIOCHEMISTRY OF TEETH AND ORAL CAVITY FLUIDS” Questions for preparation – see <i>Manual on biochemistry (p.51-53)</i>
17	22.12-26.12	Control over practical skills of biochemical analysis. Analysis of gastric juice. Quantitative determination of calcium in saliva
18	29.12-02.01	Final session

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professor



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