LABORATORY CLASSES

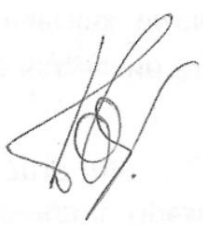
Plan of laboratory classes for the international students of **dental faculty** studying biochemistry in English

2026 – 2027 year

Autumn semester

Week N	***Date***	***Topic***
1	01.09-04.09	Intracellular amino acid metabolism. Determination of amino transferase activity in serum. *Manual on biochemistry (p.29-31)*
2	07.09-11.09	Detoxification of ammonia. Determination of nonprotein nitrogen in blood and urea in urine. *Manual on biochemistry (p.31-33).*
3	14.09-18.09	Nucleoproteins chemistry and metabolism. Determination of uric acid in the urine. *Manual on biochemistry (p.33-34)*
4	21.09-25.09	Matrix biosynthesis (synthesis of DNA, RNA, proteins). Modern techniques of molecular biology. *Manual on biochemistry (p.36)*
5	28.09-02.10	**COLLOQUIUM "METABOLISM OF SIMPLE PROTEINS. NUCLEOPROTEINS METABOLISM. SYNTHESIS OF DNA, RNA AND PROTEINS."** Questions for preparation – see *Manual on biochemistry (p. 34-35)*
6	05.10-09.10	Hormones, general characteristics and peculiarities of biological action. *Manual on biochemistry (p.36)*
7	12.10-16.10	Biochemistry of hormones. Pituitary hormones. Hormones of adrenal cortex. Thyroid hormones. *Manual on biochemistry (p.36-37)*
8	19.10-23.10	Biochemistry of hormones. Hormones regulated glucose blood level. Diabetes mellitus. Glucose tolerance test. *Manual on biochemistry (p.37-40)*
9	26.10-30.10	Biochemistry of nutrition. Role of proteins, fats, carbohydrates, and vitamins. *Manual on biochemistry (p.40-41)*
10	02.11-06.11	**COLLOQUIUM "HORMONES. BIOCHEMISTRY OF NUTRITION."** Questions for preparation – see *Manual on biochemistry (p.41-42)*
11	09.11-13.11	Blood plasma proteins. Respiratory function of blood. Hemoglobinoses. Separation of serum proteins by electrophoresis on acetylcellulose. *Manual on biochemistry (p.42-45)*
12	16.11-20.11	Hemostasis. Determination of chlorides and calcium in blood plasma. *Manual on biochemistry (p.45-46)*
13	23.11-27.11	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. *Manual on biochemistry (p.46-48)*
14	30.11-04.12	Connective tissue proteins. Biochemistry of teeth and oral cavity fluids. *Manual on biochemistry (p.48-50).*
15	07.12-11.12	Biochemistry of the liver. *Manual on biochemistry (p.50-51)*
16	14.12-18.12	**COLLOQUIUM "BLOOD BIOCHEMISTRY, CONNECTIVE TISSUE PROTEINS, BIOCHEMISTRY OF TEETH AND ORAL CAVITY FLUIDS**" Questions for preparation – see *Manual on biochemistry (p.51-53)*
17	21.12-25.12	Control over practical skills of biochemical analysis. Analysis of gastric juice. Quantitative determination of calcium in saliva
18	28.12-01.01	Final session

Head of the department of biochemistry,
professor



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