


**Federal State Budgetary Educational Institution of Higher Education  
«North-Ossetia State Medical Academy» of the Ministry of Healthcare of the Russian  
Federation**

***Department of biological chemistry***

**Approved**

Head of the department,  
associate professor

 **A. E. Gurina**

"29" august 2022 year.

**Rating**

*Discipline of biological chemistry- biochemistry of the oral cavity*

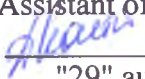
*Course* 2

*Dentistry faculty* \_\_\_\_\_

for the autumn semester 2022-2023 school year

| №   | Date     | The title of the topic  | Marks     |          |
|-----|----------|---|-----------|----------|
|     |          |   | theory    | practice |
| 1.  | 07.09.22 | Digestion of proteins in the gastrointestinal tract. Common pathways of amino acid catabolism: transamination. Clinical and diagnostic significance of determining the activity of transaminases in blood serum.                                      | 5         | 5        |
| 2.  | 14.09.22 | Common pathways of amino acid catabolism: deamination, decarboxylation. The exchange of individual amino acids. Quantitative determination of urea in the blood.  | 5         | 5        |
| 3.  | 21.09.22 | Ways of accumulation and neutralization of ammonia in the human body. Quantitative determination of urea in the blood.  | 5         | 5        |
| 4.  | 28.09.22 | Exchange of nucleotides: purine and pyrimidine.   | 5         | 5        |
| 5.  | 05.10.22 | Chromoprotein metabolism: biosynthesis and breakdown of hemoglobin in tissues. Iron exchange. Metabolic disorders of bile pigments. Jaundice. Violations of heme synthesis. Porphyria. Quantitative determination of direct bilirubin in blood serum. | 5         | 5        |
| 6.  | 12.10.22 | <b>Module for the topic: "Exchange of simple and complex proteins".</b>   | <b>10</b> | <b>5</b> |
| 7.  | 19.10.22 | Introduction to endocrinology. Chemistry of peptide hormones. Secondary messengers. Conducting a hormonal signal. Mechanism of cellular action of protein-peptide hormones, biological role.  | 5         | 5        |
| 8.  | 26.10.22 | Steroid hormones: synthesis, mechanism of cellular action, biological role of glucocorticoids, mineralocorticoids, sex hormones.  | 5         | 5        |
| 9.  | 02.11.22 | Biochemistry of the kidneys. The process of secondary urine formation. Physico-chemical properties of urine. Organic and inorganic composition of blood.  | 5         | 5        |
| 10. | 09.11.22 | Pathological components of urine. Regulation of water-salt metabolism.  | 5         | 5        |
| 11. | 16.11.22 | <b>Module for the topic: "Hormonal regulation of metabolism. Biochemistry of blood and urine".</b>  | <b>10</b> | <b>5</b> |
| 12. | 23.11.22 | Biochemistry of non-mineralized connective tissue.  | 5         | -        |

|              |          |   |            |          |
|--------------|----------|---|------------|----------|
| 13.          | 30.11.22 | Biochemistry of mineralized tissues. Bone remodeling. Regulation of the process. Features of the structure of macromolecules and metabolism of tooth tissues. | 5          | -        |
| 14.          | 07.12.22 | Inorganic components of saliva and oral fluid   | 5          | 5        |
| 15.          | 14.12.22 | The organic composition of saliva: proteins and enzymes. Organic substances of non-protein nature.  | 5          | 5        |
| 16.          | 21.12.22 | Protective systems of the oral cavity. Gingival fluid. Plaque and the development of caries. Tartar and inflammation of periodontal tissues.                  | 5          | -        |
| 17.          | 28.12.22 | <b>Module for the topic: "Biochemistry of the oral cavity".</b>   | <b>10</b>  | <b>5</b> |
| <b>Total</b> |          |   | <b>170</b> |          |

Assistant of the department  
 Kaitukova D.I.  
 "29" august 2022 year.