


**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
"3" February 2022 year.

Rating

Discipline of biological chemistry
Course 2
Medical faculty _____

for the spring semester 2021-2022 school year

№	Date	The name of the theme	Marks	
			theory	practice
1	09.02.22-11.02.22	Lipids: structure, properties, classification.	5	-
2	09.02.22-11.02.22	Digestion and absorption of lipids in the gastrointestinal tract. Stages, characteristic. The role of bile acids in this process.	5	5
3	14.02.22-18.02.22	Exchange of higher fatty acids: oxidation and biosynthesis. Regulation. Exchange of ketone bodies. Determination of ketone bodies in urine.	5	5
4	14.02.22-18.02.22	The exchange of simple and complex lipids, TAG and phospholipids.	5	-
5	21.02.22-25.02.22	Cholesterol metabolism. Quantitative determination of serum cholesterol.	5	5
6	21.02.22-25.02.22	Lipoprotein spectrum of blood plasma. Pathology of lipid metabolism. Biochemical aspects of the development of atherosclerosis. Lipidoses.	5	-
7	18.02.22-04.03.22	Module section: "Lipid metabolism".	10	5
8	18.02.22-04.03.22	Digestion and absorption of proteins. Determination of the activity of the enzymes of the gastric juice.	5	5
9	07.03.22-11.03.22	Common pathways of amino acid catabolism: transamination. Clinical and diagnostic value of the determination of transaminase activity in blood serum	5	5
0	07.03.22-11.03.22	The general way of catabolism of amino acids: deamination, decarboxylation.	5	-
1	14.03.22-18.03.22	Ways of accumulation and neutralization of ammonia in the human body. Quantitative determination of urea in the blood.	5	5
2	14.03.22-18.03.22	The exchange of individual amino acids. Quantitative determination of creatinine in blood serum.	5	5
3	21.03.22-25.03.22	Module section: "Exchange of simple proteins."	10	5
4	21.03.22-25.03.22	Exchange of nucleoproteins: purine nucleotides.	5	5
5	28.03.22-01.04.22	Exchange of nucleoproteins: pyrimidine nucleotides	5	-

16	28.03.22-01.04.22	Chromoprotein metabolism: biosynthesis and breakdown of hemoglobin in tissues. Iron metabolism. Metabolic disorders of bile pigments. Jaundices. Violations of heme synthesis, porphyria. Quantitative determination of direct blood bilirubin.	5	5
17	04.04.22-08.04.22	Module section: "Exchange of complex proteins."	10	5
18	04.04.22-08.04.22	Introduction to endocrinology. Chemistry of peptide hormones. Secondary messengers. Carrying a hormonal signal.	5	5
19	11.04.22-15.04.22	Iodine-containing thyroid hormones, biosynthesis, properties, hormonal effect. Hormones of pancreas: synthesis, properties, biological effects.	5	5
20	11.04.22-15.04.22	Steroid hormones: synthesis, mechanism of cellular action, biological role of mineralocorticoids.	5	5
21	18.04.22-22.04.22	Steroid hormones: synthesis, mechanism of cellular action, biological role of glucocorticoids.	5	-
22	18.04.22-22.04.22	Sex hormones: female and male. Synthesis, mechanism of cellular action, biological role. Endocrinopathy.	5	-
23	25.04.22-29.04.22	Module section: "Hormonal regulation of metabolism".	10	5
24	25.04.22-29.04.22	Blood biochemistry: organic composition of blood. Biochemical aspects of the body's immune defense.	5	5
25	02.05.22-06.05.22	Inorganic composition of blood. Quantitative determination of blood calcium.	5	5
26	02.05.22-06.05.22	Module section: "Blood biochemistry".	10	5
27	09.05.22-13.05.22	Biochemistry of the kidneys. The process of secondary urine formation. Physicochemical properties of urine. Organic and inorganic composition of urine.	5	5
28	09.05.22-13.05.22	Pathological components of urine. Regulation of water-salt metabolism.	5	5
29	16.05.22-20.05.22	Module section: "Biochemistry of urine".	10	5
30	16.05.22-20.05.22	Final lesson.	-	-
Total			285	

Assistant of the department

" 3 " Skav Kaitukova D.I.
February 2022 year.