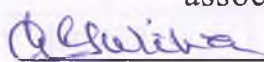


**Federal State Budgetary Educational Institution of Higher Education
«North-Ossetia State Medical Academy» of the Ministry of Healthcare of the
Russian Federation**

Department of biological chemistry

Approved

Head of the department,
associate professor

 A. E. Gurina
" 27 " 08 2020 year.

Rating

Discipline of biological chemistry

Course 2

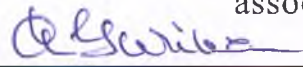
Medical faculty

for the autumn semester 2020-2021 school year

№	date	The title of the topic	mark
1.	03.09. 20	Introductory lesson. Proteinogenic amino acids: structure, properties, classification	5
2.	10.09. 20	Chemistry of simple proteins, structural organization of a protein molecule	5
3.	17.09. 20	Physico-chemical properties of simple proteins. Methods of deposition and separation.	5
4.	24.09. 20	The chemistry of complex proteins. Definition of nukleo-, chromo-, lipo-, glyco – and phosphoproteins.	5
5.	01.10.20	Module for the topic: "Chemistry of proteins"	T-10 P-5 Common-15
6.	08.10. 20	Enzymes as biological catalysts: structure and properties. Determination of enzyme activity in biological liquids.	5
7.	15.10. 20	Water-soluble vitamins: vitamin B1, B2, B6, PP, C. The coenzyme function. Participation in the exchange of matter and energy.	5
8.	22.10. 20	Regulation of enzyme activity. Medical aspects of enzymology.	5

9.	29.10.20	Module for the topic: "Enzymes"	T-10 P-5
			Common-15
10.	05.11.20	Fat-soluble vitamins A, D, E, F, K. The metabolism of vitamin D in the human body.	5
11.	12.11.20	The lipids of biomembranes, structure and function. The ways of the transmembrane transport of substances. The mechanisms of transfer the signal into the cell.	5
12.	19.11.20	Metabolism and energy. The chain of electron transport, its structural organization. The mechanism of oxidative phosphorylation.	5
13.	26.11.20	Peroxidation. Its role in health and disease. Reactive oxygen species.	5
14.	03.12.20	The citric acid cycle as general way of catabolism. Determination of the activity of succinate dehydrogenase.	5
15.	10.12.20	Module for the topic: "Introduction to metabolism. The biological oxidation. The tricarboxylic acid cycle ".	T-10 P-5
			Common-15
16.	17.12.20	The digestion of carbohydrates in the gastrointestinal tract.	5
17.	24.12.20	Anaerobic oxidation of glucose: glycolysis, glycogenolysis, alcoholic fermentation.	5
18.	31.12.20	Aerobic: direct and indirect oxidation of glucose.	5
19.	14.01.21	Regulation of glucose blood level. Gluconeogenesis. The metabolism of glycogen. Disorders of carbohydrate metabolism.	5
20.	21.01.21	Module for the topic: "Metabolism of carbohydrates"	T-10 P-5
			Common-15
Common			140

Head of the department
associate professor

 A. E. Gurina
"27" 08 2020 year.