

Topics of lectures
in Medical Chemistry
(Bioinorganic, Physical, and Colloidal Chemistry)
for Ist year dental students in 2015 - 2016 academic year.

Module 1. Bioinorganic Chemistry

Lecture 1. Introduction. Chemistry in Medicine.

Part 1. Chemistry of Elements.

Lecture 2. Chemical elements. Structure and properties of blocks of biogenic elements. Biogenic elements of s-block.

Lecture 3. Biogenic elements of d-block.

Module 2. Physical Chemistry

Part 2. Basic laws of chemical processes.

Lecture 4. Principles of chemical thermodynamics and bioenergetics.

Lecture 5. Physical and chemical bases of kinetics of chemical reactions.

Module 3. Colloidal Chemistry

Part 3. Fundamentals of physical chemistry of disperse systems.

Lecture 6. Classification of disperse systems. Colligate properties of solutions.

Lecture 7. True solutions.

Lecture 8. Buffer solutions.

Lecture 9. Colloidal solutions.

Lecture 10. Solutions of biopolymers.

Part 4. Physical methods of analysis.

Lecture 11. Electrochemical and spectral methods of analysis.

Schedule of Lectures and Lab classes

in Medical Chemistry

(Bioinorganic, Physical, Colloid and Bioorganic Chemistry)

for 1st year dental students during 2015 - 2016 academic year. Lecturer:

№	Topics of lectures	Time, auditorium Date of classes
1.	Module 1. Bioinorganic Chemistry	11 ⁵⁰ – 13 ¹⁰ Ауд. Monday
2.	Lecture 1. Introduction. Chemistry in Medicine.	14.12 21.12
3.	Part 1. Chemistry of Elements.	
4.	Lecture 2. Chemical elements. Structure and properties of blocks of biogenic elements. Biogenic elements of s-block. Lecture 3. Biogenic elements of d-block.	28.12 11.01
5.	Module 2. Physical Chemistry	
6.	Part 2. Basic laws of chemical processes.	
7.	Lecture 4. Principles of chemical thermodynamics and bioenergetics. Lecture 5. Physical and chemical bases of kinetics of chemical reactions.	18.01 25.01
8.	Module 3. Colloidal Chemistry	
9.	Part 3. Fundamentals of physical chemistry of disperse systems.	
10.	Lecture 6. Classification of disperse systems. Colligate properties of solutions. Lecture 7. True solutions.	01.02 08.02
11.	Lecture 8. Buffer solutions. Lecture 9. Colloidal solutions. Lecture 10. Solutions of biopolymers.	15.02 22.02
12.	Part 4. Physical methods of analysis.	
13.	Lecture 11. Electrochemical and spectral methods of analysis.	29.02 05.03
14.	Consultations	__ .05 – 9:00
15.	Exam	__ .05 – 9:00