

Schedule of classes
«3D SIMULATION AND NANOMATERIALS IN DENTISTRY »
Anglophone Students of the 1 Course
Specialty « DENTISTRY »
2 term of 2024/2025

LECTURES

Week №	Date	Time	Topic
Topic 1. 3D simulation. Basics of strength of materials. Digital Dentistry			
1	February 3	18:00-19:35	3D simulation in the computer-aided design (CAD) systems
3	February 17	18:00-19:35	Basics of theoretical mechanics. Stress-strain conditions of dental materials
5	March 3	18:00-19:35	Planar transverse bending and complex resistance of dental materials
7	March 17	18:00-19:35	Digital Dentistry
9	March 31	18:00-19:35	CAD simulations in Dentistry and Medicine
11	April 14	18:00-19:35	3D printing. Applications in medicine
Topic 2. Nanomaterials in Medicine and Dentistry			
13	April 28	18:00-19:35	Nanotechnologies and nanomaterials
15	May 12	18:00-19:35	Experimental methods for obtaining nanomaterials
17	May 26	18:00-19:35	Composite nanomaterials and nanoparticles in Dentistry

PRACTICAL CLASSES

Week №	Date	Time	Topic
Topic 1. 3D simulation. Basics of strength of materials. Digital Dentistry			
2	February 11	09:00-10:35	Basics of 3D simulation: creation of simple 2D sketches and 3D models <i>Laboratory work «Simulation of simple 3D models»</i>
4	February 25	09:00-10:35	Simulation of solid-state samples <i>Laboratory work «Simulation of solid-state samples»</i>
6	March 11	09:00-10:35	Standard and special screw thread. Simulations of dental implant <i>Laboratory work «Simulation of dental implants»</i>
8	March 25	09:00-10:35	Surface simulations. Simulation of the tooth crown <i>Laboratory work « Simulation of the tooth crown»</i>
10	April 8	09:00-10:35	Calculation of the stress-strain conditions and simple resistance of dental materials
12	April 22	09:00-10:35	Simulations and calculation of planar transverse bending of dental materials <i>Laboratory work « Simulations and calculation of planar transverse bending of dental materials»</i>
14	May 6	09:00-10:35	Building prefabricated models <i>Laboratory work «Prefabricated models»</i>
16	May 20	09:00-10:35	Simulation of the jaw and dentition <i>Laboratory work « Simulation of the jaw and dentition»</i>
18	June 3	09:00-10:35	Colloquium: 3D simulation and nanomaterials in Dentistry

Approved at the meeting of the department
 Head of department

Machneva T.V.