

Discussed and confirmed  
on the methodical council  
of the department  
August 27, 2021

**HISTOLOGY INDEPENDENT WORK**  
for students of Faculty of Dentistry, 1<sup>st</sup> year,  
Autumn semester. Academic year 2021-2022.

№	Topic	Amount of hours	Terms of exploring
1	History of Histology, Cytology and Embryology. Histology in Ukraine.	2	6-12.09
2	Microscope. Microscopic devices. Histological techniques.	2	13-19.09
3	Modern methods of histological investigations.	2	20-26.09
4	Intercellular junctions, their types, intercellular interaction.	2	27.09-3.10
5	Chromatin and Chromosomes. Morphology and chemical structure. Karyotype. Ploidy.	2	4.10-10.10
6	Life and cell cycle, their characteristics. Apoptosis, its biological and medical meaning. Cell aging and cell death.	2	11.10-17.10
7	Conception of extracorporal fertilization, its medical and social meaning.	2	18.10-24.10
8	Cloning of animals. Fertilization vitro, morphological aspects of embryonic transplantation.	2	25.10-31.10
9.	Law of rise and evolution of tissues. Differentiation, determination, regeneration.	2	1.11-3.11
10.	Humal blood picture in the norm and white blood cells count. Age-related changes of Blood. Lymph characteristics.	2	4.11-7.11
11.	Embryonic hemopoiesis (development of blood). Peculiarities of yolk sac and hepatic hemopoiesis. Modern model of hemopoiesis.	2	9.11-10.11
12	Postembryonic hemopoiesis. Conception of colonies-making units.	2	11.11-14.11
13	Histogenesis, regeneration and age changes of cartilage.	2	15.11-21.11
14	Osteogenesis and regeneration of bone.	2	22.11-28.11
15	Molecular mechanisms of muscle fiber contraction.	2	29.11-5.12
16	Cytophysiology of conducting system of the heart.	2	6.12-12.12

In total

32 hours.

Chief of the Department  
of Histology and Embryology  
Assoc. Prof.



Ilona Chelpanova, M.D, PhD

Deputy for Academic work,  
Assoc. Prof.

Olga Yuzych, PhD