

**Discussed and confirmed
on the methodical council
of the histology department
January 11, 2024.**

**Calendar and Thematic plan of lectures
on discipline "Histology, Cytology and Embryology"**
for 1st year students, Faculty of General Medicine, Spring semester 2023/2024

№	Topic of the lecture	Date
1	Introduction to Histology, Cytology and Embryology. Eukaryotic cell, functions, reproduction, development, adaptation and recovery of multicellular organisms.	16.01
2	Early human embryogenesis. Periods of embryogenesis. Characteristics of gametes. Gametogenesis. Fertilization. Cleavage. Implantation. Gastrulation.	30.01
3	Introduction to the theory of tissues. Tissue, as a system of histological elements. Cells and their derivatives. Epithelial tissues. Cell therapy as one of the areas of regenerative medicine.	13.02
4	Blood and Lymph. Cells (neutrophils, eosinophils, basophils, macrophages), chemical mediators (chemokines, cytokines, bactericidal proteins and complement system) and inflammation processes in the system of nonspecific protection. Hematopoiesis.	27.02
5	Connective tissues. General characteristics, classification. Cells of loose connective tissue. Resident cells and wandering cells. Classification of tissues with special properties.	12.03
6	Muscular tissues. Properties, classification, structure. Structural bases of growth of muscle fibers. Adaptation of skeletal muscle to the changing of physical activity. Regeneration of skeletal muscular tissue.	26.03
7	Nervous tissue. General characteristics. Sources of development, structure, functional properties and meaning. The concept of neurotransmitters.	9.04
8	Central and peripheral nervous system. General morphofunctional characteristics. Regularities of development. Classification (anatomical and functional).	23.04
9	Sensory systems: types, links, functional meaning. General characteristics of sensory organs. Classification of sensory organs. Structure of the Eye.	7.05

All lectures are given online. Link for each lecture will be available on MISA on the date mentioned.

In total: 18 hours

**Chief of the Department
of Histology and Embryology,
Assoc. Professor**

Ilona Chelpanova, Ph.D., M.D.

**Deputy for Academic work,
Assoc. Prof.**

Olga Yuzych, PhD