

Discussed and confirmed
on the methodical council
of the department
January 30, 2013.

HISTOLOGY INDEPENDENT WORK
for students of Faculty of General Medicine, 1st year,
Spring semester. Academic year 2012-2013.

#	Topic	Amount of hours
1.	History of Histology, Cytology and Embryology. Histology in Ukraine.	2
2.	Microscope. Microscopic devices. Histological techniques.	2
3.	Modern methods of histological investigations.	2
4.	Intercellular junctions, their types, intercellular interaction.	3
5.	Chromatin and Chromosomes. Morphology and chemical structure. Karyotype. Ploidy.	3
6.	Life and cell cycle, their characteristics. Apoptosis, its biological and medical meaning. Cell aging and cell death.	3
7.	Conception of extracorporal fertilization, its medical and social meaning.	3
8.	Cloning of animals.	3
1.	Law of rise and evolution of tissues. Differentiation, determination. Regeneration.	4
2.	Hemogram and white blood cells account. Age-related changes of Blood. Lymph characteristics.	4
3.	Embryonic hemopoiesis (development of blood). Peculiarities of yolk sac and hepatic hemopoiesis. Modern model of hemopoiesis.	4
4.	Postembryonic hemopoiesis. Conception of colonies-making units.	4
5.	Histogenesis, regeneration and age changes of cartilage.	3
6.	Osteogenesis and regeneration of bone.	4
7.	Molecular mechanisms of muscle fiber contraction.	4
8.	Mechanisms of transferring excitation in synapses. Nerve fibers.	4
9.	Brain barrel. Interneuronal connections.	4
10.	Histophysiology of the eye.	4
	In total	60

Chief of the Department of Histology and Embryology
Professor

Alexander Lutsyk, M.D, PhD

Deputy for Academic work
Assoc. Prof.

Olga Nakonechna, PhD