

**Discussed and confirmed  
on the methodical council  
of the department  
August 30, 2019.**

**HISTOLOGY INDEPENDENT WORK  
for students of Faculty of General Medicine, 2nd year,  
Autumn semester. Academic year 2019-2020.**

№	Topic	Amount of hours
1.	Embryonic development of nervous system. Derivatives of neural tube.	4
2.	Concepts of basic structural components of blood-brain barrier.	4
3.	Histophysiology of the eye. Thin ultrastructure of rods and cones.	4
4.	Histophysiology of the ear.	4
5.	Histophysiology of the microcirculatory bed.	4
6.	Embryonic hematopoiesis.	4
7.	Structural peculiarities and functional meaning of spleen.	4
8.	Age-related and accidental involution of thymus	4
9.	Hypothalamic-pituitary relationships in the regulation of endocrine functions.	4
10.	Cytophysiological aspects of synthesis and secretion of catecholamines and steroid hormones.	4
11.	Embryonic development of digestive system.	4
12.	Relationship of structural and functional peculiarities of oral cavity.	4
13.	Perimembranous and luminal digestion. Peculiarities of absorption of different types of nutrients.	4
14.	Cytophysiological aspects of synergic and antagonistic functions of islet cells of different types.	4
15.	Relationship of morphology and functional features of the liver.	4
16.	Air-blood barrier. Surfactant and its functions.	4
17.	Endocrine function of kidneys. Morphological aspects of renin-angiotensin system functioning.	4
18.	Spermatogenesis-hormonal regulation.	4
19.	Relationship of ovarian and menstrual cycles. Morphofunctional aspects Morphofunctional aspects of the use of hormonal contraceptives.	4
20.	Basics of histocompatibility as the key aspect of in vitro fertilization method.	4

**In total**

**80 hours.**

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

**Alexander Lutsyk, MD, PhD**

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

**Olga Nakonechna, PhD**