Speciality “General Medicine”

ACADEMIC DISCIPLINE "HISTOLOGY, CYTOLOGY, EMBRYOLOGY" OF THE MORPHOLOGICAL MODULE

Academic discipline outline	Introduction to the academic discipline "Histology, cytology, embryology". Research methods in histology. Cytology. Embryology. General histology: the study of tissues, structural foundations of homeostasis, epithelial tissues; blood and lymph, hematopoiesis; connective tissues; muscle tissues; nervous tissue. Particular histology: nervous system; sensory organs; cardiovascular system; organs of hematopoiesis and lymphopoiesis (lymphoid system); endocrine system; digestive system; integumentary system; respiratory system; urinary system; reproductive system. Principles of diagnostics of histological slides and electron photomicrographs.
Resulting skills	BOD. To use knowledge about the structure of the human body at the tissue, cellular and subcellular levels, human embryogenesis and its disorders in the provision of medical care.
Learning outcomes	The student must **to know:** general patterns and stages of human embryonic development; embryonic sources of development, structural features, function, age-related changes in the main types of tissues; tissue composition of human organs and spatial relationships of tissues within organs; structure, functions and age-related transformations of the structure of cells in a living organism; the basis of tissues regeneration and the limits of their variability; features of obtaining material for histological examination, methods of tissue fixation; parts of the light microscope, their purpose and technic of microscopy; **be able to:** to diagnose the structural elements of cells and tissues in the organs during microscopic examination of biopsy and surgical material, to orient themselves in their functional purpose; decipher electron photomicrographs of cells and non-cellular structures of tissues and organs; **Own:** microscopy technique;

	practical skills in diagnosing cell and tissue structures; histological terminology and histological conceptual apparatus.
Semester(s)	2,3
Prerequisite	Biology (school course)
Credit value	6 credits
Academic hours	222 academic hours in total, including: 173 classroom hours; 49 hours of independent work
Forms of midterm attestation	Credit Examination