STUDY BRANCH**: General medicine**
SUBJECT: **Histology and embryology 2**
YEAR OF EDUCATION: **1**
TERM: **Summer**
LECTURES
NUMBER OF TEACHING HOURS PER WEEK: **2**

1th teaching week:
Microscopic structure of cardiovascular system
Heart, endocardium, myocardium, pericardium. Arteries – elastic and muscular, veins. Capillaries – continuous, fenestrated, discontinuous – sinusoids.

2 nd teaching week:
Development of cardiovascular system
Early heart development, later heart development. The aortic arches. Prenatal circulation, postnatal circulation. Malformations of the heart and great vessels.

3 rd teaching week
Microscopic structure and development of lymphoid system
Tonsils, lymph nodes, thymus, spleen, organ transplantation. Histogenesis.

4 th teaching week:
Microscopic structure and development of respiratory system
Nasal cavity, nasopharynx, larynx, trachea, bronchial tree, lung, the alveolo-capillary membrane. Histogenesis of lungs.

5 th teaching week:
Digestive tract I
Oral cavity, tongue, teeth, general structure of digestive tract, oesophagus, stomach, small intestine, large intestine.

6 th teaching week:
Digestive tract II
Glands associated with the digestive system: parotid gland, submandibular gland, sublingual gland, liver, gallbladder, pancreas.

7 th teaching week:
Digestive tract III
Development of the teeth, salivary glands, tongue.
Development of the forgut – oesophagus, stomach, part of duodenum.
Development of the midgut – part of duodenum, jejunum, ileum, colon ascendens, part of colon transversum.
Development of the hindgut - colon transversum, descendens, sigmoideum, rectum, part of canalis analis. Development of the liver and pancreas.

8 th teaching week:
Microscopic structure of the urinary and genital system
Kidneys, nephron, urinary passages.
Male genital system – testis, genital ducts, prostate.
Female genital system – ovary, uterine tube, uterus, placenta.

9 th teaching week:
Development of the urinary and genital system
Pronephros, mesonephros, metanephros.
Development of the male genital system – testis and genital ducts.
Development of the female genital system – ovary, uterine tube, uterus, vagina.

10 th teaching week:
Development of the face and neck
Face, nasal and oral cavity, palate.
Branchial arches, pharyngeal pouches, branchial grooves and membranes.

11 th teaching week:
Microscopic structure and development of the endocrine system
Hypophysis, histophysiology of the pars distalis, neurohypophysis, hypothalamo-hypophyseal tract. Thyroid gland, parathyroid gland, suprarenal gland, Langerhans islets.

12 th teaching week:
Central and peripheral nervous system
Brain, cerebellum, spinal cord, myeloarchitecture and cytoarchitecture of the CNS. Meninges, hematoencephalic barrier. Spinal ganglia, peripheral nerve.

13 th teaching week:
Development of the nervous system
Brain vesicles, prosencephalon, mesencephalon, rhombencephalon. Histogenesis of neural tube.

14 th teaching week:
The sensory organs - receptors related to superficial and deep sensation. Eye, ear and vestibulocochlear apparatus. Histogenesis.