CONTENT OF THE SUBJECT

Subject:	**Histology and Embryology 2**		
Study	*Dental Medicine*	**Study Period:**	*1st year, Summer semester*
Evaluation:	*Graduated (A-E)*	**Subject Type:**	*Compulsory*
Content:	*2 h lectures and 3 h practical exercises / week*		*Total 28/42 hours*

Department: **Department of Histology and Embryology UPJŠ FM**

Week	***Lectures*** https://portal.lf.upjs.sk/index-en.php	***Practical exercises***
1.	**Microscopic structure and development of cardiovascular system** Structure of heart, arteries – elastic and muscular, veins. Capillaries. Early and late heart development. The aortic arches. Prenatal and postnatal circulation.	**Cardiovascular system** muscular artery and vein aorta elastic artery
2.	**Microscopic structure and development of lymphoid system** Thymus, lymph node, tonsills and Waldayer´s ring. Histogenesis.	**Lymphoid system** lymph node thymus
3.	**Development of the face and neck** Branchial arches, pharyngeal pouches, branchial grooves, branchial membranes, development of the face, nasal cavity, palate. Congenital anomalies.	**Lymphoid system** palatine tonsil lingual tonsil
4.	**Microscopic structure of the oral cavity** Lip, tongue, salivary glands, palate, gingiva. Development of the tongue and salivary glands.	**Digestive system I** lip tongue tongue - papilla vallata tooth oesophagus
5.	**Microscopic structure of the tooth** Hard tissues of the tooth – enamel, dentin, cementum, dental pulp. Supporting tissues of the tooth.	**Digestive system II** stomach – fundus small intestine large intestine
6.	**Development of the tooth** Labiogingival ridge, dental lamina. Development of the crown, enamel organ – ameloblasts, dental papilla - odontoblasts, predentin, dentin. Root development. Tooth eruption.	**Digestive system III** parotid gland submandibular gland sublingual gland liver

7.	**Microscopic structure and development of respiratory system** Structure of the nasal cavity, larynx, trachea, bronchy, bronchioli, respiratory part of the lung. Blood - air barrier. Histogenesis of larynx, trachea, lungs.	**Respiratory system** epiglottis trachea lung
8.	**Microscopic structure of ren, testis and ovary.** Histophysiology.	**Urinary system** kidney **Male reproductive system** testis
9.	**The female reproductive system** Histophysiology of the uterus - the menstrual cycle. Microscopic structure and development of placenta.	**Female reproductive system** ovary uterus – proliferative phase
10.	**Microscopic structure and development of the endocrine system** Histophysiology and development of hypophysis, thyroid gl., parathyroid gl.	**Placenta** Microscopic structure and development.
11.	**Microscopic structure and development of the nervous system** Brain, cerebellum, spinal cord – cytoarchitecture. Development of the neural tube, neural crest and its derivatives. Spinal cord histogenesis, brain vesicles.	**Endocrine system** hypophysis thyroid gland parathyroid gland
12.	**Development of the skull, microscopic structure of the skin** Chondrocranium, desmocranium, viscerocranium. Scull of the newborn. Epidermis, dermis. Sweat and sebaceous glands, hair follicles.	**Central nervous system** cortex cerebri (H&E, Nissl staining, silver impregnation) cerebellum spinal cord
13	**Microscopic structure and development of the ear**	**Peripheral nervous system** spinal ganglion peripheral nerve

14.	**Microscopic structure and development of the eye**	**Final slide test** Microscopic anatomy and structure of tissues.