

CONTENT OF THE SUBJECT

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

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 the heart, arteries – elastic and muscular, veins. Capillaries. Early development of primitive blood circulation and primitive heart.	Skin cutis
2.	Microscopic structure and development of lymphoid system Thymus, lymph node, tonsils and Waldayer´s ring.	Cardiovascular system muscular artery and vein aorta / elastic artery
3.	Development of the face and neck Face, nasal and oral cavity, palate. Branchial arches, pharyngeal pouches, branchial grooves and membranes. Congenital anomalies.	Lymphoid system lymph node thymus
4.	Microscopic structure of the oral cavity Lip, tongue, salivary glands, palate, gingiva, Pharynx. Development of the tongue and salivary glands.	Lymphoid system palatine tonsil lingual tonsil
5.	Microscopic structure of the tooth Hard tissues of the tooth – enamel, dentin, cementum. Dental pulp. Supporting tissues of the tooth.	Digestive system I lip tongue tongue - papilla vallata tooth
6.	Development of the tooth Labiogingival ridge, dental lamina. Development of the crown, enamel organ – ameloblasts. Dental papilla - tooth pulp. Odontoblasts, predentin, dentin. Root development, cementoblasts. Tooth eruption.	Digestive system II oesophagus stomach – fundus small intestine large intestine
7.	Microscopic structure and development of respiratory system Structure of the nasal cavity, larynx, trachea, bronchy, bronchioli, respiratory portion of the lungs. Blood - air barrier. Development of nasal cavity, larynx and trachea.	Digestive system III parotid gland submandibular gland sublingual gland

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8.	Microscopic structure of testis and ovary.	Respiratory system epiglottis trachea lungs
9.	The female reproductive system Uterus and menstrual cycle. Microscopic structure and development of placenta.	Male and female reproductive system testis ovary
10.	Microscopic structure and development of the endocrine system Microscopic structure and development of hypophysis, thyroid gland, parathyroid gland.	Female reproductive system + placenta uterus – proliferative phase uterus – secretory phase placenta
11.	Microscopic structure and development of the nervous system Brain, cerebellum, spinal cord – cytoarchitecture. Development of the neural tube, neural crest and derivatives. Neural tube histogenesis. Brain vesicles – development and differentiation.	Endocrine system hypophysis thyroid gland parathyroid gland
12.	Development of the skull. Intramembranous and endochondral ossification. Chondrocranium, desmocranium, viscerocranium. Skull of the newborn.	Central nervous system cortex cerebri 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	Semestral slide test