### Subject: Histology and Embryology 2

**Study Programme:** General Medicine  
**Study Period:** 2nd year, winter term  
**Evaluation:** final exam  
**Subject Type:** compulsory  
**Content:** lectures 2h and practical lessons 4h/week; total 28h /56h  
**Form of study:** by presence and by distance - online

#### WINTER TERM: 2020/2021  
**21.9. – 23.12.2020**

| Week | Lectures: Thursday 7:30 – 9:30; SNP1; P3  
**Prof. MUDr. E. Mechírová, CSc.** | Practical Lessons  
Šrobárova 2 (practice room: A, H, P3) | Skin, hair and glands - skin, lip.  
Mammary glands – active and non active.  
Tissue repetition. |
|---|---|---|---|
| 1.  
24.9.2020 | Microscopic structure of cardiovascular system  
General structure of blood vessels.  
Arteries – elastic and muscular, veins, types of capillaries. Heart - endocardium, myocardium, pericardium, conducting system. | 28.9. – 2.10.2020  
Cardiovascular system – heart, aorta, elastic artery, muscular artery and vein. |  |
| 2.  
1.10.2020 | Development of cardiovascular system  
Early heart development, later heart development. The aortic arches. Prenatal and postnatal circulation. Malformations of the heart and great vessels. |  |
| 3.  
8.10.2020 | Microscopic structure and development of lymphoid system  
Tonsils, lymph nodes, thymus, spleen - histophysiology. Histogenesis. | Lymphoid system – thymus, lymph node, spleen, palatine tonsil, lingual tonsil. |  |
| 4.  
15.10.2020 | Digestive tract I  
Oral cavity, tongue, teeth, general structure of digestive tract, oesophagus, stomach, small intestine, large intestine. | Digestive system I – lip, tongue, tongue – papilla vallata, tooth, oesophagus, oesophagus - cardia |  |
| 5.  
22.10.2020 | Digestive tract II  
Glands associated with the digestive system: parotid, submandibular and sublingual gland, liver, gallbladder, pancreas. | Digestive system II – stomach body, pylorus, duodenum, small intestine, large intestine, appendix vermiformis |  |
| 6.  
29.10.2020 | Digestive tract III  
Development of the teeth, salivary glands, tongue.  
| 7.  
5.11.2020 | Microscopic structure and development of respiratory system  
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Urinary system</th>
<th>Development of the urinary and genital system</th>
<th>Development of the face and neck</th>
<th>Microscopic structure and development of the endocrine system</th>
<th>Central and peripheral nervous system</th>
<th>Development of the nervous system</th>
<th>Holiday</th>
<th>Final slide test</th>
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</thead>
<tbody>
<tr>
<td>10, 26.11.2020</td>
<td><strong>Development of the face and neck</strong></td>
<td></td>
<td>Face, nasal and oral cavity, palate. Branchial arches, pharyngeal pouches, branchial grooves and membranes.</td>
<td>Female reproductive system, embryology - placenta, umbilical cord.</td>
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<td>Female reproductive system - ovary, uterine tube, uterus - proliferatory and secretory phase, vagina.</td>
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<tr>
<td>11, 3.12.2020</td>
<td><strong>Microscopic structure and development of the endocrine system</strong></td>
<td></td>
<td>Hypophysis, histophysiology of the adeno- and neurohypophysis, hypothalamo-hypophyseal tract. Thyroid gland, parathyroid gland, suprarenal gland, Langerhans islets.</td>
<td>Female reproductive system - ovary, uterine tube, uterus - proliferatory and secretory phase, vagina.</td>
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<td>Female reproductive system, embryology - placenta, umbilical cord.</td>
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<td>12, 10.12.2020</td>
<td><strong>Central and peripheral nervous system</strong></td>
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<td>Brain, cerebellum, spinal cord, myeloarchitecture and cytoarchitecture of the CNS. Meninges, hematoencephalic barrier. Spinal ganglia, peripheral nerves.</td>
<td>Endocrine system - hypophysis, thyroid gland, parathyroid gland, suprarenal gland, pancreas.</td>
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<td>Female reproductive system, embryology - placenta, umbilical cord.</td>
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<td>13, 17.12.2020</td>
<td><strong>Development of the nervous system</strong></td>
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<td>Development and histogenesis of neural tube. Brain vesicles, prosencephalon, mesencephalon, rhombencephalon.</td>
<td>Central and peripheral nervous system - cortex cerebri, cerebellum, spinal cord, craniospinal ganglion, peripheral nerve.</td>
<td></td>
<td>Central and peripheral nervous system - cortex cerebri, cerebellum, spinal cord, craniospinal ganglion, peripheral nerve.</td>
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<td>14, 24.12.2020</td>
<td><strong>Holiday</strong></td>
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**Final slide test 21.12. – 23.12.2020**