STUDY BRANCH: **Dental Medicine**
SUBJECT: **General and oral histology and embryology**
YEAR OF EDUCATION**: 1**
TERM: **Winter 2012/2013**
LECTURES
NUMBER OF TEACHING HOURS PER WEEK: **2**

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1 st teaching week:
The subject matter of histology. Development of the Histology, credit system, composition of the cells, intercellular substance and tissue fluid, cell membrane, transmembrane transport.

2 nd teaching week:
Cytology – general structure of eukaryotic cell, cytoplasmic matrix, cell organelles membrane limited/unlimited, cytoplasmic inclusions, nucleus and nucleolus.

3 th teaching week:
Epithelial tissue I. – covering epithelium, cell junctions – zonula occludens, zonula adhaerens, macula adhaerens.

4 th teaching week
Epithelial tissue II. – glandular epithelium, secretory and duct portion.

5 th teaching week:
Connective tissue proper - classification of connective tissues, loose connective tissue, dense connective tissue, connective tissue with special function.

6 th teaching week:
Cartilage – cells , intercellular substance, hyaline, elastic and fibrocartilage.

7 th teaching week:
Bone tissue I. – compact and spongy bone.

8 th teaching week
Bone tissue II. - Endochondral and intramembranous ossification.
Hemopoiesis - development of erythrocytes.

9 th teaching week
Muscular tissue I. - striated skeletal muscle, light and electron microscopic structure, function.

10 th teaching week
Muscular tissue II. -cardiac muscle, smooth muscle tissue. Afferent and efferent nerve endings.

11 th teaching week:

Nerve tissue - neuron and its processes – dendrites and axon, synapses, myelin sheath. Neuroglial cells – astrocytes, oligodendrocytes, microglial cells, ependymal cells.

12 th teaching week:
Developmental principles in the ontogenesis.
Gametogenesis, fertilization, implantation.First week of human development.

13 th teaching week:
Second and third week of human development.
Primitive streak, development of mesoderm, notochord, neurulation.
Primitive cardiovascular system.

14 th teaching week:
Final test.