Faculty of Dentistry (International Campus)

Title course: Anatomy 1
Audiences: International dentistry students of first semester

Total Credit: 4 (theory: 3, practical: 1)
Teacher contribution of credit: 1.2 (theory:1, Practical: 0.3)

Time of presentation: 8.10-10.10 A.M Mondays, 1 st semester (02-03)
Teacher: Dr Azita Faramarzi
Prerequisite: No
The time to answer questions: Any time

Aim of Course (theory)

Acquaintance with structure and ultrastructure of general histology emphasis on function

General session objective:

1. Acquaintance with cell and cytology
2. Acquaintance with epithelial tissue
3. Acquaintance with connective tissue and adipose tissue
4. Acquaintance with Cartilage, Bone and Joint tissues
5. Acquaintance with blood and hemopoiesis
6. Acquaintance with Muscle tissue
7. Acquaintance with Nerve tissue
8. Acquaintance with Acquaintance with heart and circulatory tissue

Specific Goals By the general purpose of each session:

General objective of first session: Acquaintance with cell and cytology
Special objective of first session: Know cell function, cytoplasm, cell membrane and cell organelles. Explain nucleus, nucleolus and their functions.

General objective of second session: Acquaintance with epithelial tissue
Specific objectives of second session: Know epithelial tissue. Explain epithelial tissue types including covering (Lining) and secretory (glandular). Describe basement membrane. Explain and compare cell adhesions. Describe apical epithelial surfaces (cilia, microvilli, Stereocilia). Explain types of epithelial secretions. Know

transportation across epithelia. Describe renewal of epithelial cells.

General objective of third session: Acquaintance with connective tissue and adipose tissue
Specific objective of third session: Explain function of connective tissue. Know and explain cells of connective tissue. Know function of connective tissue cells. Describe connective tissue fiber and their functions. Explain ground substance of connective tissue. Describe type of connective tissue and compare them. Explain and compare white adipose tissue and brown adipose tissue. Know storage and mobilization of lipid. Describe histogenesis of white and brown adipose tissue.

General objective of fourth session: Acquaintance with connective tissue and adipose tissue
Specific objective of fourth session: Describe and compare types of cartilage tissues (Hyaline, Elastic cartilage and Fibrocartilage). Explain chondrocytes and isogenous aggregates. Describe perichondrium. Explain formation, growth and repair of cartilage. Know and compare bone cells (Osteoblasts, Osteoblasts and Osteoclasts) according to morphology, function and regulation. Explain bone matrix. Describe and compare periosteum and endosteum. Know types of bones. Explain lamellar bone. Describe woven bone. Explain osteogenesis including intramembranous and endochondral. Describe bone growth, remodeling and repair. Explain metabolic role of bone. Describe and compare types and subtypes of joints.

General objective of fifth session: Acquaintance with blood and Hemopoiesis
Specific objective of fifth session: Explain composition of plasma. Describe and compare blood cells (erythrocytes, leukocytes, platelete) and their function. Explain and compare types of leukocytes.

General objective of sixth session: Acquaintance with muscle tissue
Specific objective of sixth session: Explain and compare type of muscles including skeletal muscle, cardiac muscle and smooth muscle. Explain and compare type of contraction in skeletal muscle, cardiac muscle and smooth muscle. Explain regeneration of muscle tissues.

General objective of seventh session: Acquaintance with nerve tissue
Specific objective of seventh session: Explain development of nerve tissue. Describe and compare types of neurons. Describe cell body (perikaryon), dendritic and axon. Explain and compare glial cells. Describe synapse's structure and compare types of them. Explain brain, meninges, Blood brain barrier and choroid plexus structure. Describe nerve fibers and compare them (myelinated fibers and unmyelinated fibers). Explain types of ganglia and compare them. Describe neural plasticity and regeneration.

General objective of eighth session: Acquaintance with Acquaintance with heart and circulatory tissue
Specific objective of eighth session: Explain heart structure. Describe tissues of the vascular wall. Explain and compare elastic arteries, muscular Arteries, small arteries, arterioles, capillaries, venules, small veins, medium veins and large veins.

Describe arterial sensory structures. Explain lymphatic vascular system.

At the end of the class, the student's abilities would be:

1. Description of cell and cytology
2. Description of epithelial tissue
3. Description of connective tissue and adipose tissue
4. Description of Cartilage, Bone and Joint tissues
5. Description of blood and hemopoiesis
6. Description of Muscle tissue
7. Description of Nerve tissue
8. Description of heart and cardiovascular tissue

References:
Junqueira's Basic Histology, latest edition (2021)

Methods of teaching: Teacher-centered lecture and question and answer (assignments)
Educational tools: PowerPoint, podcast, educational video

Measurement and evaluation

Test	Method	Share of total score (in percent)	Date
Quiz	Multiple question	3	Every Session
End of term exam	Multiple question	15	End of term
Active attendance at the class	Mark confirmation of study	2	Every Session

Class requirements and expectations from the student:

1. Study the contents of each session after teaching and ready for next session
2. Mark confirmation of study
3. Do assignments

دانشکده:EDOنام و امضای مدرس: **نام و امضای مدیر گروه:** **نام و امضای مسئول**

تاریخ تحویل: **تاریخ ارسال:** **تاریخ ارسال :**

Dentistry Faculty
Lesson Schedule of Histology
International Dentistry students of first semester
Day and Hour of every session: 8.10-10.10 Mondays, first semester (02-03)

Session	Date	Subject of every session	Teacher
1	1.8.02	Acquaintance with cell and cytology	Dr Azita Faramarzi
2	8.8.02	Acquaintance with epithelial tissue	Dr Azita Faramarzi
3	15.8.02	Acquaintance with connective tissue and adipose tissue	Dr Azita Faramarzi
4	22.8.02	Acquaintance with blood and hemopoiesis	Dr Azita Faramarzi
5	29.8.02	Acquaintance with Cartilage, Bone and Joint tissues	Dr Azita Faramarzi
6	6.9.02	Acquaintance with Muscle tissue	Dr Azita Faramarzi
7	13.9.02	Acquaintance with Nerve tissue	Dr Azita Faramarzi
8	20.9.02	Acquaintance with with heart and circulatory tissue	Dr Azita Faramarzi