Al-Nahrain University
College of Medicine
Department of Human Anatomy
Section of Histology & Embryology

Second Year / **Medicine/** 1st Semester in Histology / 2023- 2024

Theory: 2 hours/week. **Practical: 2 hours/week. Credits: 3 credit hours.**

Course objectives

1- The student acquires knowledge and skills in the subject of human histology so that he is able to recognize the microstructure of the normal primary tissues and body organs.

2- The student appreciates the relevance of structure of tissue to their function and the close interrelationship between morphology , physiology , pathology and relevant clinically oriented relation.

*General and Transferable Skills (other skills that relevant to employability and personal development)

D1. How to use the microscope

D2. How to prepare a tissue for microscopic examination

D3. How to study tissue using glass slide

D4 study different tissue in common and specific stains.

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Curricular Topics & Timetable

Date	Subject	practical
1st week	1. Introduction to histlogy. Methods of tissue examination and stains .General informations about light micrscopy. 2. Epithelial tissue, Types , defect in epithelial tissue as: dyskeratosis ,dysplasia and metaplasia.	Introductory session: Histological preparation
2nd week	1. Polarity of epithelial tissue. 2. Glandular epithelia types.	Epithelial tissue
3rd week	1. Connective tissue components, relevant disorder in tissue fluid. 2. Cells of connective tissue, example in wound closure.	Epithelial gland
4th week	1. Specialized types of connective tissue; Adipose tissue (unilocular & multilocular). 2. Cartilage types histogensis of cartilage disorders in osteosrythropathy.	Connective tissue I.
5th week	*1.* Bone: cells, matrix, types of bones. 2. Bone histogenesis, growth & remodeling.	Connective tissue II.
6th week	1. Blood: cells, formed elements. 2. Hematopoiesis; stem cells, bone marrow, maturation. Disorders as in anaemia and spherocytosis, haemoglobiopathies as sickle cell anaemia	*Bone I*
7th week	1. Maturation of granyolocytes, maturation of lymphocytes & monocytes, origin of platelets. Disorders of lymphocytes and granulocytes examples of lymphoma and leukamia 2 *Theoretical Examination*	*Practical Examination* Blood
8th week	1. Muscle tissue: structure, contraction & of skletetal muscle, hypertrophy and	Hemopoieses

	regeneration. 2. Cardiac muscle and its changes in myocardial infact & smooth muscle structure ;and hypertrophy and hyperplasia.	
9th week	1. Nervous tissue: histogenesis, cells,& synapses , regeneration and loss of neuronal tissue in stroke. 2. Nerve fibers, nerves, ganglia, principle of regeneration of nerve fibers in traumatic injury	Muscle
10th week	1. Brain and spinal meningies , types of dural hemorrhages , and structure of blood-brain-barrier, CSF circulation and relation to hydrocephalous. 2. Cytoarchitecture of the spinal cord, roots of spinal nerves.	Nervous tissue
11th week	1. Skin: Epidermis, Dermis and Subcutaneous Tissue, difference in thin and thick skin. 2. Skin: Receptors, Hair, Nail, and Glands, specific features of nails in some clinical conditions.	The Central Nervous System, and Meninges.
12th week	1. The Circulatory System; structural plan, large elastic arteries and muscular artiers, feature of antithrombotic activity of endothelium. 2. Medium arteries, Arterioles, AV anastomosis, types of Capillaries, and Veins, special features of coronary artiers and the heart.	Skin.
13th week	1. Lymphoid Organs; mucosa associated lymphoid tissue special aggregates as gut associated and bronchus associated lymphoid tissue. 2. Tonsils types and relation to adenoids and tonsillitis, Thymus structure and function.	The Circulatory System. Heart.
14th week	1. overview.	Lymphoid organs.
15th week	overview	

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- **Lecturer:** **Ass. Professor . Dr. Huda Rashid kamoona.**
- **Practical sessions:**

1. **Professr. Dr. May Fadhil Al-Habib**
2. **Professor Dr.Hayder j.Mubarak**
3. **Ass. Professor. Dr. Huda Rashid kamoona.**
4. **Assisstant lecturer. Rusul Hamed hassan**
5. **Assisstant lecturer. Lamyaa hadi**

Textbooks:

- Junqueira LC & Carneiro J (2016): *Basic Histology*; *Text & Atlas*. 14th ed. McGraw-Hill Medical. New York.
- Leeson TS, Leeson CR & Paparo AA (1988): *Text/Atlas of Histology*. WB Saunders. USA.

Mark allocation

Quizzes	8
Mid-term theory	12
Mid-term practical	10
Final theory	50
Final practical	20

- Web sites
- http://www.histology-world.com/
- http://www.siumed.edu/%7Edking2/index.htm.http://www.lab.anhb.uwa.edu.au/mb140/