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

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

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| **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. |

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| \*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. |

***Curricular Topics & Timetable***

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| **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 regeneration.**  **2. Cardiac muscle and its changes in myocardial infact & smooth muscle structure ;and hypertrophy and hyperplasia.** | **Hemopoieses** |
| **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** |  |

* **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**

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| Quizzes | 6 |
| Mid-term theory | 14 |
| 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/>