



Course Specification

Faculty: Medicine

Department: Histology

Programme: Histology , Undergraduate program

Basic Information

Course Title: Histology

Course Code: COHD 203

Contact Hours: 21

Prerequisites: Accomplished basic science phase

Academic Level: First level

Term: Fall (8 weeks module)

Course Overall Aims:

- a- To help the student to understand normal structure of different organs and various systems of the human body.
- b- To shed down alight on the functional significance of different histological parts within the system and organ.
- c- To make it easy for the student to differentiate between normal and abnormal histological findings.

Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

By the end of the course, the student should be able to:-

- 1- Describe the normal histological structure of various systems and organs.

b- *Intellectual skills*

By the end of the course the student should be able to:-

- 1- Correlate between histological structure and function of different organs and systems
- 2- Define the part of the body from which the section is taken.
- 3- Diagnose slides different from those seen during the course but of the same organs and systems previously studied.



c- Professional and practical skills:

After completing the course, the student should be able to:-

- 1- Enumerate various types of special stains of different organs.
- 2- Describe ultra-structure of different cells studied in various organs.
- 3- Differentiate between different organs seen in the same slide.

d- General and transferable skills:

After completing the course the student should be able to:-

1. Reach microscopic diagnosis of normal structure and notice any abnormal changes.
2. Work in / with different groups.
3. Give his or her opinion regarding update scientific problems (e.g. transcription).

Module: Concepts of Health & Disease- COHD-203 – Med-1					
Title	Week	Lecture	FC	TBL	Practical
Epithelial tissue	1	2			2
Connective tissue	2	2			2
Adipose tissue	2	1			
Skin	3		2		
Muscle tissue	4	1			
Nervous tissue	5	1			2
Sensory receptors	5		2		
Neuroglia , ganglia, N Tr & syn	6			2	
Blood vessels	7	1			
Immune organs	7	1			
Hours		9	4	2	6
Total Hours		21			



Module: Concepts of Health & Disease- COHD-203 - Med-1

Title	
Epithelial tissue, Types of epithelium, and Glandular epithelium	<ul style="list-style-type: none">✓ List several structural and functional characteristics of epithelial tissue.✓ Name, classify, and describe the various types of epithelia and indicate their chief function(s) and location(s).✓ Define Glands.✓ Differentiate between endocrine and exocrine glands, and between multicellular and unicellular glands.✓ Describe how multicellular exocrine glands are classified structurally and functionally.
Cell Junctions	<ul style="list-style-type: none">✓ Describe and compare the structure and function of different type of junctions
Connective tissue	<ul style="list-style-type: none">✓ Indicate common characteristics of connective tissue.✓ List and describe its structural elements.✓ Describe the types of connective tissue found in the body, and indicate their characteristic functions.
Adipose tissue	<ul style="list-style-type: none">✓ Describe the types of adipose tissue found in the body, and indicate their characteristics.
Skin	<ul style="list-style-type: none">✓ Name and distinguish the layers of the epidermis in terms of structure and function.✓ Identify the layers of the dermis and the hypodermis and explain their functional significance.✓ Identify the layers of the epidermis in thick and thin skin and describe the major cellular events that take place in each layer in the process of keratinization.
Muscle tissue	<ul style="list-style-type: none">✓ Compare and contrast the structures and body locations of the three type of muscle tissue.✓ Name and identify the three types of muscle at the light and electron microscope levels, including distinctive features of each, such as the intercalated discs of cardiac muscle.✓ Describe and understand the structural basis of muscle striation at the light microscope and EM levels and the molecular level.
Nervous tissue	<ul style="list-style-type: none">✓ Be able to identify cells of the nervous tissue.✓ Describe the organization of a typical neuron and the direction of information flow.✓ Describe and contrast the function and organization of sensory and motor neurons.✓ List the types of neuroglia and cite their function.
Sensory receptors, synapses, motor end plates	<ul style="list-style-type: none">✓ Describe the function, location and structure of sensory receptors✓ Define synapse. Distinguish between electrical and chemical synapses by structure and by the way they transmit information.✓ Describe the function and basic organization of neuromuscular junctions (motor end plates) and muscle spindles.
Peripheral nervous system	<ul style="list-style-type: none">✓ Describe the general structure of the nerve.✓ Define ganglion and indicate the general body location of ganglia✓ Follow the process of nerve regeneration.✓ Describe the process of myelination, and the function of myelin, including Nodes of Ranvier. Explain the role of the Schwann cell, with respect to both myelinated and unmyelinated neurons.
Vessels	<ul style="list-style-type: none">✓ Be able to distinguish successive parts of the circulatory pathway, and explain how the structure of the vessel wall meets the functional needs that are present in each of the parts.



	<ul style="list-style-type: none">✓ Describe the three layers that typically form the wall of a blood vessels, and state the function of each.✓ Know how structural differences in capillaries influence the passage of diverse material across the endothelium.✓ Describe the structure and distribution of lymphatic vessels.✓ List the function of the lymphatic vessels.
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Teaching and Learning Methods:

Lecture (9 Lecture).

TBL (2 TBL)

Flipped Class (4 Flipped classes)

Practical sessions(6)

Teaching and Learning Facilities/ Materials:

Lecture hall

White board

Personal computer

Data show

Electronic Databases

ACOG access

Moodle platform

5- Student Assessment Methods, Schedule and Grading:

- ✓ Written exam
- ✓ Practical exam

6- List of References:

1. Junqueira's Basic Histology 14th edition 2016
2. Wheater's Functional Histology 6th edition 2014
3. Wojciech Pawlina Histology 7th edition 2016