

Beni-Suef University Faculty of Dentistry Quality Assurance Unit



# **Course Specification**

University: Beni-SuefFaculty: DentistryCourse Title: General HistologyCourse code: MGH2Program on which the course is given: Bachelor's degree in Dentistry, Graduate programDepartment offering the course: Histology Department, Faculty of MedicineAcademic year: first yearDate of specification approval: September 2023

### A- Basic Information

Academic Year:	2023-2024
Course Code:	MGH2
Course Theoretical	1hr*30w
(contact hours):	
Practical (contact hours)	2hr *30w
Total Hours: -	3h. 90 hr (Theoretical: 30 Practical: 60)

### **B- Professional Information**

### **Overall aims of course**

By the end of the course, the student should be able to describe the different types of human body cells and their functions. Also, the student should be able to identify the structure of normal human tissues and organs and to correlate their structure to their function

### .2- Intended learning outcomes of course (ILOs)

### a. Knowledge and understanding:

a1- Define histology, types of microscopes and the principles of staining with hematoxylin and eosin

a2- Describe light microscopic and electron microscopic features and the function of cell organelles, cell inclusions, and the nucleus

a3- Discuss the general characteristics of epithelium, its types, sites and the structure of each type.

a4. Describe the general characteristics of connective tissue (CT), types of CT cells (LM, EM and function), the structure and types of CT fibers, and types and sites of CT proper.

a5. Describe the structure and function of red blood corpuscles, white blood cells and platelets (LM, normal and abnormal count, and function).

a6. Discuss the general characteristics of cartilage, types of cartilage cells (LM, EM and function), and the structure and sites of different types of cartilage.

a7. Describe the general characteristics of bone, types of bone cells (LM, EM and function), the structure and sites of different types of bone, and types of ossification.

a8. Describe the different types of muscle (skeletal, cardiac and smooth muscle)

a9. Describe the neuron (LM, EM and types), types of nerve fibers & types of ganglia.

a10. Describe the histological structure and function of Gastrointestinal tract [oral cavity, salivary gland, liver, pancreas].

a.11 Describe the histological structure and function of Endocrine system [suprarenal gland, thyroid gland, pituitary gland]

a.12 Describe the histological structure and function of Respiratory system [trachea, lung].

a13. Describe the structure and function of each type of lymphatic organs (lymph node, spleen and tonsil).

a.14 Describe the structure and function of skin

#### b. Intellectual skills:

b1. Analyze the ultrastructural details of the cell & correlate between the predominance of a certain cell organelle & the function of its cell.

b2. Correlate between the structure & function of every organ according to its type of cells.

b3. Compare between the different types of tissues according to their structure, function and distribution in the human body.

#### c. Professional and practical skills:

c1. Differentiate between different tissues and organs in histological slides using light microscope.

c2. Apply different types of stains specific for different types of cells and tissues.

c3. Identify the ultrastructural details of cells through electron microscopic pictures.

#### d. General and transferable skills:

d1- Apply how to work effectively in a team.

d2- Express himself freely and adequately by improving his descriptive capabilities & enhancing his communication skills

d3- Maintain professional image in manner, dress speech and interpersonal relationships that is consistent with the medical profession's accepted contemporary standards in the community.

# **<u>3-Contents:</u>**

Торіс	<b>Lecturer</b>	Lectures	<b>Practical</b>	weighting	ILOs covered	<b>Teaching method</b>	Assessment
		(1hrs)	( <b>2hrs</b> )		<u>by this topic</u>		methods
Introduction to	Dr. Fatma	1	1	3.45	A1	-Lectures	-Periodic
Histology	Mohamed					-Discussions during	evaluation.
[microscopy –						the lecture	-mid-year exam.
micro-						-Clinical and	-Practical exam.
technique]						histological pictures	- Oral exam.
The cell	Dr. Mai	2	2	6.9	A2, b1-b3,c1-	-Practical sessions	- Final written
structure and	Amin				3, d1-3	using light	exam.
function [cell						microscope and	-Attendance
membrane-						cases on smartboard	-continuous
mitochondria-						- Assignments	assessments
SER- RER-							(sketch book,
Secretory							assignments)
vesicles]							
The cell	Dr. Ola	2	2	6.9	A2, b1-b3,c1-		
structure and	Esmail				3, d1-3		
function							
[lysosomes-							
ribosomes-							
cytoskeleton-							
nucleus]							
Epithelium [	Dr. Eman	2	2	6.9	A3, b1-b3,c1-		
general	Mohamed				3, d1-3		

characters-					
surface					
epithelium-					
gialiuular					
myoonitholium					
neuroenitheliu					
ml					
Connective	Dr. Amira	2	2	6.9	A4. b1-b3.c1-
tissue [ general	Shaban				3. d1-3
characters-					,
free and fixed					
CT cells -					
fibers and					
matrix & types					
of C.T]					
Blood	Dr. Asmaa	1	1	3.45	A5, b1-b3,c1-
(Erythrocytes)	Mohamed				3, d1-3
Blood	Dr. Asmaa	1	1	3.45	A5, b1-b3,c1-
(leukocytes,	Mohamed				3, d1-3
blood platelets)					
Cartilage	Dr. Asmaa	2	2	6.9	A6, b1-b3,c1-
[General	Mohamed				3, d1-3
characters of					
cartilage –					

		1			
structure of					
cartilage -					
types and sites					
of cartilage]					
Bone [ General	Dr. Asmaa	2	2	6.9	A7, b1-b3,c1-
characters of	Mohamed				3. d1-3
bone –					,
structure of					
bone - types					
and sites of					
bone – bone					
ossification]					
Muscular	Dr. Asmaa	2	2	6.9	A8. b1-b3.c1-
tissue [general	Mohamed				3. d1-3
characters.					-,
structural					
details of					
skeletal.					
cardiac. and					
smooth					
muscles]					
Nervous tissue	Dr Asmaa	2	2	69	A9 h1-h3 c1-
[structura]	Mohamed	2	2	0.7	$3  d1_{-3}$
details of the	Wionameu				5, 01 5
neuron types					
of nourons					
of neurons,					

myelination,					
structure and					
function of					
neuroglial					
cells]					
Gastrointestina	Dr. Asmaa	2	2	6.9	A10, b1-
l tract [ oral	Mohamed				b3,c1-3, d1-3
cavity, salivary					
gland, liver,					
pancreas]					
Endocrine	Dr. Asmaa	2	2	6.9	A11, b1-
system	Mohamed				b3,c1-3, d1-3
[suprarenal					
gland, thyroid					
gland,					
pituitary					
gland	<b>~</b> .				10.1.1
Respiratory	Dr. Asmaa	2	2	6.9	a.12, b1-
system	Mohamed				b3,c1-3, d1-3
[trachea, lung]	<b>.</b>	-			10.1.1
Lymphatic	Dr. Asmaa	2	2	6.9	a.13, b1-
organs	Mohamed				b3,c1-3, d1-3
[structure &					
function of					
thymus, lymph					
nodes, spleen					

& tonsils]					
Skin	Dr. Asmaa	2	2	6.9	a.14, b1-
	Mohamed				b3,c1-3, d1-3

### 4- Teaching and learning methods

4.a Small group discussion / Brain storming

- 4.b Demonstrations
- **4.c** Interactive lecture
- 4.d Research project.

#### **<u>5- Student assessment methods</u>**

- **5.a** Written and short answer question
- **5.b** Written and long essay.
- **5.c** Multiple choice questions (MCQ)
- **5.d** True or false question with justifying answer.
- **5.e** Practical / OSPE
- **5.g** Oral exam
- **5.h** Final exam

# Assessment schedule

Mid-year exam	January 2024
Assignments	During the 1 <sup>st</sup> and the 2 <sup>nd</sup> semesters
Practical exam	May 2024
Final exam	June 2024

### Weighting of assessments

Final Ex	am		Attendance / cutaneous assessments	Total
Written	Practical	Oral		
		Exam	20	100
40	20	20		

# 6- List of reference;

• Course notes

# Facilities required for teaching and learning

• Use the light microscope during practical sections

Course coordinator: Prof. Dr. Samraa Hassan

Head of Department: Prof. Dr. Samraa Hassan

Date: September 2023