



Beni-Suef University  
Faculty of Dentistry  
Quality Assurance Unit



## Course Specification

University: **Beni-Suef** Faculty: **Dentistry**  
Course Title: **General Histology 1** Course code: **MHS111**  
Program on which the course is given: **Bachelor's degree of Dental Science, Graduate program**  
Department offering the course: **General Histology Department, Faculty of Medicine**  
Academic year: **2023-2024** Academic level: **1<sup>st</sup>** Semester: **1<sup>st</sup>**  
Date of specification approval: **September 2023**

### A- Basic Information

|                                     |   |
|-------------------------------------|---|
| Academic Year:                      | <b>2023-2024</b>                          |
| Course Code:                        | <b>MHS111</b>                             |
| Course Theoretical (contact hours): | 1hr*14w                                   |
| Practical (contact hours)           | 2hr *14w                                  |
| Total hours: -                      | 3h. 42 hr (Theoretical: 14 Practical: 28) |

### 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.

***b. Intellectual skills:***

- b1. Analyze the ultrastructural details of the cell
- b2. correlate between the predominance of a certain cell organelle & the function of its cell.
- b3. Correlate between the structure & function of every organ according to its type of cells.
- b4. Compare between the different types of tissues according to their structure, function and distribution in the human body.
- b5. Differentiate the projector slides of the cells and tissues previously studied
- b6. Select the best answer of MCQ questions on various parts of the curriculum.
- b7. Correlate his knowledge in histology with clinical findings caused by cellular errors

***c. Professional and practical skills:***

- c1. Differentiate between different tissues and organs in histological slides using light microscope.
- c2. Demonstrate some cells or tissues using special stains.
- c3. Identify the ultrastructural details of cells through electron microscopic pictures.
- c4. Illustrate the different human body tissues and its components in their practical books.

***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- Acquire the ethics and respect to the staff, workers and themselves inside the classroom.
- d4. Use internet in research and communications.

### 3-Contents:

| <b>Topic</b>  | <b>Lecturer</b>          | <b>Lectures<br/>(1hrs)</b> | <b>Practical<br/>(2hrs)</b> | <b>Total<br/>Hours</b> | <b>weighting</b> | <b>ILOs<br/>covered by<br/>this topic</b> | <b>Teaching<br/>method</b>   | <b>Assessment<br/>methods</b>   |
|---|--------------------------|----------------------------|-----------------------------|------------------------|------------------|---|--|---|
| <b>Introduction to Histology [microscopy – micro-technique]</b>                                 | <b>Dr. Fatma Mohamed</b> | 1                          | 1                           | 3                      | 7.14             | A1  | <ul style="list-style-type: none"> <li>-Lectures</li> <li>-Discussions during the lecture</li> <li>-Clinical and histological pictures</li> <li>-Practical sessions using light microscope and cases on smartboard</li> <li>- Assignments</li> </ul> | <ul style="list-style-type: none"> <li>-Periodic evaluation.</li> <li>-mid-year exam.</li> <li>-Practical exam.</li> <li>- Oral exam.</li> <li>- Final written exam.</li> <li>-Attendance assessments (sketch book, assignments)</li> </ul> |
| <b>The cell structure and function [cell membrane-mitochondria-SER- RER-Secretory vesicles]</b> | <b>Dr. Mai Amin</b>      | 2                          | 2                           | 6                      | 14.28            | A2, b1-b7, c1-4, d1-4                     |  |   |
| <b>The cell structure and function [lysosomes-ribosomes-cytoskeleton-nucleus]</b>               | <b>Dr. Ola Esmail</b>    | 2                          | 2                           | 6                      | 14.28            | A2, b1-b7, c1-4, d1-4                     |  |   |
| <b>Epithelium [</b>   | <b>Dr. Eman</b>          | 2                          | 2                           | 6                      | 14.28            | A3, b1-b7,                                |  |   |

|  |                          |   |   |   |       |                       |  |  |
|--|--------------------------|---|---|---|-------|-----------------------|--|--|
| <b>general characters- surface epithelium- glandular epithelium. – myoepithelium. – neuroepithelium]</b>       | <b>Mohamed</b>           |   |   |   |       | c1-4, d1-4            |  |  |
| <b>Connective tissue [ general characters- free and fixed CT cells - fibers and matrix &amp; types of C.T]</b> | <b>Dr. Amira Shaban</b>  | 2 | 2 | 6 | 14.28 | A4, b1-b7, c1-4, d1-4 |  |  |
| <b>Blood (Erythrocytes)</b>  | <b>Dr. Asmaa Mohamed</b> | 1 | 1 | 3 | 7.12  | A5, b1-b7, c1-4, d1-4 |  |  |
| <b>Blood (leukocytes, blood platelets)</b>   | <b>Dr. Asmaa Mohamed</b> | 1 | 1 | 3 | 7.12  | A5, b1-b7, c1-4, d1-4 |  |  |
| <b>Cartilage [General characters of</b>  | <b>Dr. Asmaa Mohamed</b> | 1 | 1 | 3 | 7.12  | A6, b1-b7, c1-4, d1-4 |  |  |

|   |                          |   |   |   |       |                       |  |  |
|---|--------------------------|---|---|---|-------|-----------------------|--|--|
| <b>cartilage – structure of cartilage - types and sites of cartilage]</b>                                   |                          |   |   |   |       |                       |  |  |
| <b>Bone [ General characters of bone – structure of bone - types and sites of bone – bone ossification]</b> | <b>Dr. Asmaa Mohamed</b> | 2 | 2 | 6 | 14.28 | A7, b1-b7, c1-4, d1-4 |  |  |

| <b>Week No.</b> | <b>Topic</b>   | <b>No. of hours</b> |
|-----------------|--|---------------------|
| 1.              | Introduction to Histology [microscopy – micro-technique]   | 1                   |
| 2.              | The cell structure and function [cell membrane-<br>[mitochondria)                                      | 1                   |
| 3.              | The cell structure and function [SER- RER-<br>Secretory vesicles]                                      | 1                   |
| 4.              | The cell structure and function [lysosomes-<br>ribosomes]  | 1                   |
| 5.              | The cell structure and function [cytoskeleton-<br>[nucleus   | 1                   |
| 6.              | Epithelium [ general characters- surface epithelium-<br>glandular epithelium]                          | 1                   |
| 7.              | [Epithelium [ myoepithelium. – neuroepithelium   | 1                   |
| 8.              | Midterm+ Connective tissue [ general characters-<br>free and fixed CT cells]                           | 1                   |
| 9.              | Connective tissue [fibers and matrix & types of<br>[C.T  | 1                   |
| 10.             | Blood (Erythrocytes)   | 1                   |
| 11.             | Blood (leukocytes, blood platelets)  | 1                   |
| 12.             | Cartilage [General characters of cartilage –<br>structure of cartilage - types and sites of cartilage] | 1                   |
| 13.             | Bone [ General characters of bone – structure of<br>bone]  | 1                   |
| 14.             | [Bone [types and sites of bone – bone ossification   | 1                   |

**Practical/Tutorial:**

| <b>Week No.</b> | <b>Topic</b>  | <b>No. of hours</b> |
|-----------------|---|---------------------|
| 1.              | Introduction to Histology [microscopy – micro-technique]          | 2                   |
| 2.              | The cell structure and function [cell membrane-<br>[mitochondria) | 2                   |
| 3.              | The cell structure and function [SER- RER-                        | 2                   |

|     |  |   |
|-----|--|---|
|     | Secretory vesicles]  |   |
| 4.  | The cell structure and function [lysosomes-<br>ribosomes]  | 2 |
| 5.  | The cell structure and function [cytoskeleton-<br>[nucleus   | 2 |
| 6.  | Epithelium [ general characters- surface epithelium-<br>glandular epithelium]                          | 2 |
| 7.  | [Epithelium [ myoepithelium. – neuroepithelium   | 2 |
| 8.  | Midterm+ Connective tissue [ general characters-<br>free and fixed CT cells]                           | 2 |
| 9.  | Connective tissue [fibers and matrix & types of<br>[C.T  | 2 |
| 10. | Blood (Erythrocytes)   | 2 |
| 11. | Blood (leukocytes, blood platelets)  | 2 |
| 12. | Cartilage [General characters of cartilage –<br>structure of cartilage - types and sites of cartilage] | 2 |
| 13. | Bone [ General characters of bone – structure of<br>bone]  | 2 |
| 14. | [Bone [types and sites of bone – bone ossification   | 2 |

Each one credit hour equal two practical hours.

#### **4- Teaching and learning methods**

| <b>Method</b>                                      | <b>Assessed ILO</b>        |
|--|----------------------------|
| <b>4.a</b> Small group discussion / Brain storming | A1-9, b1-5,7               |
| <b>4.b</b> Practical Labs and Demonstrations       | C1,2,4, b5                 |
| <b>4.c</b> Interactive lecture                     | A1-9, b1-5,7, c2,3, d2, d3 |
| <b>4.d</b> Blended learning                        | D1-3                       |

#### **5- Student assessment methods**

| <b>Method</b>   | <b>Assessed ILO</b> |
|-----------------|---------------------|
| 1. Written exam | A1- 9,<br>B1-4,6,7  |



|                   |  |
|-------------------|--|
|                   | D3   |
| 2. Midterm        | A1- 9,<br>B1-4,6,7<br>D3                                   |
| 3. Class work     | A1,2,3,4,5,6,7,8,9<br>B1,2,3,4,6,7<br>C1,2,3,4<br>D1,2,3,4 |
| 4. Oral exam      | A1,2,3,4,5,6,7,8,9<br>B1-4,6,7<br>C1,2,3,4<br>D1,2,3,4     |
| 5. Practical exam | A1,2,3,4,5,6,7,8,9<br>B5<br>C1-4                           |
| 6. Quizzes        | A1,2,3,4,5,6,7,8,9<br>B1,2,3,4, 6,7<br>D3                  |

### Assessment schedule

|                |                     |
|----------------|---------------------|
| Mid-year exam  | November 2023       |
| Assignments    | During the semester |
| Practical exam | December 2023       |
| Final exam     | January 2024        |

### Weighting of assessments

| Final Exam |           |           | Attendance / cutaneous assessments | Total |
|------------|-----------|-----------|------------------------------------|-------|
| Written    | Practical | Oral Exam | 20                                 | 100   |
| 40         | 20        | 20        |                                    |       |

### 6- List of reference;

- Course notes
- Important web sites

- [www.bluehistology.com](http://www.bluehistology.com)
- Recommended textbook
  - Basic Histology Junqueira, L.C.
  - Atlas of Histology (Wheater's) Text & Atlas of Histology

**Facilities required for teaching and learning**

LMS of system, lecture halls, data show, library, practical lab and laboratory equipment.

Course coordinator: **Prof. Dr. Samraa Hassan**

Head of Department: **Prof. Dr. Samraa Hassan**

Date: **September 2023**