



Mansoura University
Faculty of Veterinary Medicine
Histology and Cytology Department

Histology Curriculum Content And Logbook (1st Term)

Student's Name:

Section:



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Histology and Cytology Department

Personal Data

Student's Name:

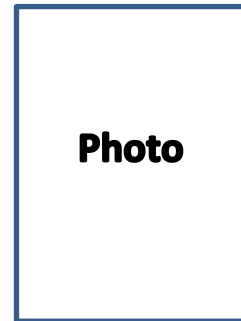
Address:

Telephone no.:

Email:

Serial No:

Attendance Ratio:





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Histology and Cytology Department

Curriculum Content



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Histology and Cytology Course

- ◆ **Theoretical Topics (Lectures): 30 hours**
- ◆ **Practical Course: 30 hours**

Academic Teaching Materials

- Histology of the cell
- Histology of Epithelium
- Histology of Connective tissue
- Histology of Cartilage
- Histology of Bone
- Histology of Muscular Tissue
- Histology of Nervous Tissue
- Histology of Blood

Practical Course

- Staining techniques & types of Microscopes
- Structure of the cell
- Structure of Epithelium
- Structure of Connective tissue
- Structure of Cartilage
- Structure of Bone
- Structure of Muscular Tissue
- Structure of Nervous Tissue
- Structure of Blood



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Intended Learning Outcomes of Course

◆ Knowledge and Understanding

- 1- Enlist the basic steps in preparing and staining specimens for light and electron microscopy.
- 2- Recognize the histological characteristics of normal cells.
- 3- Identify the structure and functions of cytoplasmic components (membranous and non membranous cell organelles, cell inclusions).
- 4- Describe the subunits of each nuclear component and their role in its function.
- 5- Describe the structure characteristics of the four basic tissue types (epithelium, connective tissue, muscular tissue and nervous tissue).
- 7- Describe and classify different blood elements and discuss their development.

◆ Intellectual Skills

- 1- Choose appropriate methods to reveal specific microscopic features of cells and tissues.
- 2- Distinguish slides different from those seen during his course but of same organs previously studied.
- 3- Correlate between histological structure & function of any different cell or tissue.
- 4- Interpret a complete blood picture report.



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◆ Professional and practical skills

- 1- Employ the instruments and techniques used to prepare and study histological specimens.
- 2- Use the microscope efficiently.
- 3- Handle the histological glass slides and examine them using the maximum microscopic facilities.
- 4- Distinguish various types of stains & micro-techniques.
- 5- Distinguish different cell organelles.
- 6- Distinguish different blood cells in blood films.
- 7- Differentiate between different types of epithelium, connective tissue cells, connective tissue proper & bone cells.
- 8- Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

◆ General and Transferable Skills

- 1- Use the sources of biomedical information to remain current with advances in knowledge and practice.
- 2- Express themselves freely and adequately by improving their descriptive capabilities through power point presentation and enhancing their communication skills through communication with their colleague during preparing the topic of presentation.

◆ Attitude

- 1- Appreciate the importance of the life-long learning and show a strong commitment to it.
- 2- Self-study and education.



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Student Assessment Methods

- 1- Written exams.
- 2- Oral exam.
- 3- Practical exam (identification of histological slides).
- 4- Log Book and practical book.
- 5- Student activities (Presentations & Essays).
- 6- Attendance criteria: The minimal acceptable attendance is 75%
- 7- Formative examinations (Online tests).

	Assessment Schedule	Weight	Degree
Assessment 1	Log book & practical book	10 %	5
Assessment 2	Activities	10 %	5
Assessment 3	Practical Exam	10 %	5
Assessment 4	Oral Exam	20 %	10
Assessment 5	Final Written Exam	50 %	25
Total		100 %	50



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Week 1

- 1. Histological Techniques and Staining of paraffin sections with Hematoxylin and Eosin (H&E).**
- 2. Microscopy.**

Technique	Uses	Date	Signature

Assessment Question:

What are the resolution powers of light and electron microscopes?



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Week 2

- 1. The Cell Membrane & Cell Coat.**
- 2. The Mitochondria.**
- 3. The Ribosomes.**
- 4. The Endoplasmic Reticulum (ER).**

LM	EM	Date	Signature

Assessment Question:

Describe LM and EM of the previous organelles.



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Week 3

- 1. The Golgi Apparatus.**
- 2. The Lysosomes & Peroxisomes.**
- 3. The Cytoplasmic filaments**
- 4. The Cell Inclusions**
- 5. The Nucleus**

LM	EM	Date	Signature

Assessment Question:

EM appearance of Nuclear membrane



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Week 4

The Epithelial Tissue & Cell Junctions

Slide	Stain	Date	Signature

Assessment Question:

Types and sites of pseudostratified colum. epith.

Why it is called pseudostratified?



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Week 5

The Connective Tissue

Slide	Stain	Date	Signature

Assessment Question:

What are the stains of reticular C.T?



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Week 6

The Cartilage

Slide	Stain	Date	Signature

Assessment Question:

What are the types of Cartilage?



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Week 7

The Bone

Slide	Stain	Date	Signature

Assessment Question:

Mention the different arrangements of bone matrix in compact bone.



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Week 8

The Muscular Tissue

Slide	Stain	Date	Signature

Assessment Question:

Difference between cardiac muscle & Skeletal muscle?



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Week 9

The Nervous Tissue

Slide	Stain	Date	Signature

Assessment Question:

What are the types of neurons?



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Week 10

The Blood

Slide	Stain	Date	Signature

Assessment Question:

What are the cellular components of blood?



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Student Activity

The Type of the Student Activity:

The Topic of the Activity:

.....

Supervisors on the Activity:

Date	Signature



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Assessment

	Mark	Signature
Log book & practical book		
Activities		
Practical Exam		