Histology 1
Course Specifications

First year of M.B.B.Ch. Program

(1st semester)

Histology 1

Course specifications:

Program (s) on which the course is given: M.B.B.Ch. program

Major Element of programs

Department offering the program: All Departments

Department offering the course: Department of Histology

Date of specification approval :3\2010

Date of modification: 11\2018

Academic year / Level: First year (1st semester)

A- Basic information

Title: cell biology (histology course)

Course code: CBI 101

Credite hours/ week: - Lectures: 2 hours - practical: 1 hour

-Total: 3 hours

Note: This course is given in integration with the corresponding course of physiology.

B-Professional information

1-Overall aims

By the end of the course, students should be able to:

- Understand the structure and functions of both the light and electron microscopes.
- Learn how to deal with the light microscope.
- Identify various types of stains.
- Describe the methods of studying cells and tissues.
- Mention and describe the specific characteristic of cell components in relation to the functions of each component.
- Explain the phases of the cell cycle, cell division and types of cell death.

- Describe the structural characteristics of the epithelial tissues and differentiate between different types of epithelium.
- Describe different connective tissue components (cells, fibers and matrix).

2- Intended learning outcomes (ILOs)

A- Knowledge and understanding

By the end of the course, students should be able to:

A1- Describe the basic steps in preparing specimens for light microscopy.

A2- Define and describe the histological characteristics of normal cells.

A3- Define and describe the structure and functions of the cytoplasmic components.

A4- Describe the subunits of each nuclear component and their role in its function.

A5- Explain the process of cell division and identify the phases of the cell cycle.

A6- Describe chromosomal structure and karyotyping.

A7- Describe the structural characteristics of the epithelial and connective tissues.

A8- Describe the structural- functional relationship of each tissue type.

B-Intellectual skills

By the end of the course, students should be able to:

B1- Correlate between histological structure & function of the cell or tissue.

B2- Select appropriate methods to reveal specific microscopic features of cells and tissues.

B3- Diagnose slides different from those seen during the course but of the same organs or tissues previously studied.

C- Professional skills

By the end of the course, students should be able to:

C1- Name the instruments and techniques used to prepare and study histological specimens.

C2 - Use the microscope efficiently.

C3- Handle the histological glass slides and examine them using the maximum microscopic facilities.

C4- Identify various types of stains & microtechniques.

C5- Identify different cell organelles.

C6- Identify and differentiate between different types of epithelium and connective tissues.

C7-Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

D- General skills

By the end of the course, students should be able to:

D1- Appreciate the importance of life long learning and show a strong commitment to it.

D2- Use the sources of biomedical information to remain current with advances in knowledge and practice.

3-Course Contents

Topic	No. of credit Hours	Lecture	Tutorial / Practical
Cell biology 1-Method of studying cells and tissues	7	4	3
2- Plasma membrane &its modifications	4	4	_
3- Organelles of eukaryotic cells	4	2	2
4- Cytoplasmic inclusions	3	2	1
6-nucleus,chromosomes & karyotyping	3	2	1
7-Cell cycle & cell death	2	2	_
8-Epithelial Tissues & tissue junctions	6	4	2
9-Connective tissues & tissue matrix	6	4	2
Total	**35**	**24**	**11**

4- Teaching and learning Methods

4.1- Lectures.

4.2- Practical sessions to gain practical skills.

4.3- Practical book for drawing.

- Student assessment Methods

5.1- Written exams (short essays and MCQs).

5.2- Oral exam.

5.3- Practical exam (Identification of histological slides).

5.4- Course assignment and (practical) book to assess.

5.5- Attendance Criteria: The minimal acceptable attendance is 75%.

Assessment schedule of the 1st turn

Assessment1: Periodic and mid term MCQ assessment.

Assessment 2: Final practical examination.

Assessment 3: Final written examination.

Assessment 4: Final oral examination.

Assessment 5: Final drawing examination.

Assessment 6: Course assignment (practical book).

Weighting of assessments of the 1st turn

Periodic and mid term MCQ assessment	20 marks	22, 2%
Final practical examination	10 marks	11, 1%
Final written Examination	32 marks	35, 5%
Final Oral Examination	9 marks	10%
Final drawing examination	12 marks	13, 3%
Course assignment (practical book)	7 marks	7, 7%.
Total	**90 marks**	**100%**

6- List of references

6.1- Essential Books (Text Books):

Junqueira, Cameino and Kelly(2008) L.C,2016 Basic Histology,7th ed .Librairrie du liban and Lang buruit ,London ,New York

6.2-Recommended Books:

Fawcett (2006):A Text book ofHistology ,12th edition .Chapman and Hall. New york ,London

6.3- Periodicals:

Egyptian J of Histology

International J of Experimental Research

6.4- Web Sites of histology:

http://www.histology-world.com

7- Facilities required for teaching and learning

1_ Accommodation :

lecture room ,smart board to write on and computer

2_ computing resources :

Computer lab and internet lab

3_ other resources :

Library, seminar room ,

Wi-Fi internet connections .

Microscopes.

well-prepared glass slides for different tissues stained by routine and special stains.

Course coordinator: Dr. Eman Ahmad Abd El-Rahim
External Evaluator :Prof.Dr Amal Taha Abou El ghait Taha

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Course assignment (practical book)	7 marks	7, 7%.
Total	**90 marks**	**100%**

Weighting of assessments of the 2nd turn

The same as the 1st term

6- List of references

6.1- Essential Books (Text Books):
Basic Histology, Junqueira, L.C
6.2-Recommended Books:
Fawcett.
6.3- Periodicals and Web Sites of histology

7- Facilities required for teaching and learning

7.1- White boards.

7.2- Overhead projectors.

7.3- Microscopes.

7.4- Data show power point.

7.5-well-prepared glass slides for different tissues stained by routine and special stains.

Course coordinator: Dr. Eman Ahmad Abd El-Rahim

م.د/ ايمان احمد عبد الرحيم