



Cell biology & Genetics related to dermatology & andrology COURSE SPECIFICATION

MD Dermatology, Andrology and STDs Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	MD Dermatology, Andrology and STDs
(2) Department offering the programme:	Dermatology, Andrology and STDs
(3) Department responsible for teaching the course:	Dermatology, Andrology and STDs
(4) Part of the programme:	first part
(5) Date of approval by the Department's council	3/4/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title:	Cell biology & Genetics related to dermatology & andrology
(8) Course code:	DERM 615 CB
(9) Total teaching hours:	15
(10) Number of credit hours	1

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

1- Provides the student with basic and advanced knowledge about Cell biology & Genetics related to dermatology & andrology.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- A 1- Recognize the following:
 - a) Basics of cells.
 - b) Cell membrane structure & dynamics.
 - c) Biology of skin ageing.
 - d) Genetics of Sexual Development and Differentiation.
 - e) Genetics of male infertility and sexual dysfunctions.
- A 2- Describe the following & their disorders:
 - a) Cell movements
 - b) Cell cycle
 - c) Cell divisions.
- A 3- Discuss the biology of:
 - a) Keratinocyte
 - b) Hair follicle
 - c) Melanocyte
- A 4- Identify the following:
 - a) Cell signaling & ion channels.

- b) Skin barrier.
- c) Cell biology of wound healing.
- d) Apoptosis.

A 5- Explain the following:

- a) Structure & function of genes and chromosomes.
- b) Transcription & control of gene expression.
- c) Genetics of skin diseases
- d) Gene therapy
- e) Genetic counseling

A 6- Identify the following:

B-Intellectual skills:

- B-1- Compare between types of:
 - 1. Cell movements
 - 2. Cell junctions.

(3) Course content:

Subjects	Total Teaching Hours
1. Basics of cells.	1
 Cell membrane structure & dynamics. 	1
3. Cell movements & their disorders.	1
4. Cell cycle & its disorders.	1
5. Cell divisions & their	1

disorders.	
6. Cell signaling & ion channels.	1
7. Skin barrier.	1
8. Biology of skin ageing.	1
9. Keratinocyte biology.	1
10.Hair follicle biology and Melanocyte biology.	1
11.Cell biology of wound healing & Apoptosis.	1
12.Genetics of Sexual Development and Differentiation	1
13.Genetics of male infertility and sexual dysfunctions.	1
14. Structure & function of genes & chromosomes. Transcription & control of gene expression.	1

15.Genetics of skin	1
diseases & Gene therapy	
and Genetic counseling	
Total	15

(4) Teaching methods:

4.1: Lectures

(5) Assessment methods:

5.1: Written exams for assessment of knowledge and intellectual ILOS.

Assessment schedule:

MCQ Exam at the end of the semester

Final Written exam Assessment one semester after registration of MD degree

Percentage of each Assessment to the total mark:

MCQ Exam 20 % = 20 marks.

Final Written exam 80% = 80 marks.

(6) References of the course:

6.1: Hand books: conferences and Department staff handouts

6.2: Text books: Rook's text book of Dermatology Blackwell USA, 2010, Andrew's Disease of the skin 2006, Habif clinical dermatology, electronic text book of dermatology

6.3: Journals: British Journal of dermatology, Journal of the American Academy of Dermatology, Archives of Dermatology International Journal of Dermatology, Journal of skin surgery,

6.1: Websites: <u>WWW.eblue.org</u>, archderm.ama.org, <u>www.wiley.com</u>, www.telemedicine.org, www.amazon,com

6.1: Others: MD Dermatology course of Cairo University

- (7) Facilities and resources mandatory for course completion:
 - **1-Fully Equipped Lecture halls**
 - **2-Department library**
 - **3-Faculty library**

Course coordinator:

Head of the department:

Prof. Ibraheem Abu-Bakr Abdel Hamid, MD

Date: 3/4/2016