



Biochemistry Related to Andrology & STDs

COURSE SPECIFICATION

MD Andrology and Sexually transmitted infections

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Programme offering the course:	MD Andrology and Sexually transmitted infections
(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:	Biochemistry Related to Andrology & STDs
(8) Course code:	ANDRO 615 BM
(9) Total teaching hours:	15
(10) Credit hours	1

(B) Professional information

(1) Course Aims:

The broad aims of the course are as follows:

- 1- Provides the student with detailed and advanced knowledge about Biochemistry related to the field of Andrology and Sexually transmitted infections
- 2- Provides the student with knowledge about certain diagnostic procedures for cases of Andrology and sexually transmitted infections like PCR.

(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

A1- Recognize the following:

- a) Types and functions of Chemical components of the cell.
- b) Protein structure and function.
- c) Technique and values of PCR.
- d) Apoptosis related to Andrology
- e) Nucleic acids including DNA structure, replication, Sequencing and Cloning
- f) Gene expression (transcription, translation).
- g) Recombinant DNA technology and genetic engineering.

A 2- Identify Principles of:

- a) Signal Transduction Pathways
- b) Nanotechnology.

A 3- Discuss Biochemistry of sex hormones and pituitary hormones.

A4- Explain different types of gene Mutations.

B- Intellectual skills:

B 1- Illustrate steps of DNA synthesis.

B2- Differentiate between different pathways of apoptosis.

B3- Compare between different types of gene Mutations.

(3) Course content:

Subjects	Teaching Hours
1. Chemical components of the cell.	1
2. Protein structure and function	1
3. Nucleic acids including DNA structure, replication, Sequencing and Cloning	1
4. Gene expression (transcription, translation).	1
5. Principles of Signal Transduction Pathways	1
6. PCR.	1
7. Apoptosis related to andrology	1
8. Mutations.	2
9. Recombinant DNA technology and genetic	1

engineering.	
10.Biochemistry of sex hormones.	2
11.Biochemistry of pituitary hormones.	2
12.Principles of nanotechnology.	1

(4) Teaching methods:

4.1: Lectures

4.2: Workshops

4.3: Grand meetings

4.4: Specialty conferences

(5) Assessment methods:

5.1: Written exams for assessment of knowledge and intellectual ILOS

Assessment schedule:

MCQ Exam at the end of the semester (one semester after MD registration)

Final Written exam Assessment after one semester after MD registration

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: Department staff handouts

6.2: Text books: Andrology: Male Reproductive Health and Dysfunction, E. Nieschlag, H.M. Behre and S. Nieschlag (Editors) 2009, Springer; 3rd ed. Edition, A Practical Guide to Basic Laboratory Andrology by Lars Björndahl,

David Mortimer, Christopher L. R. Barratt, and Jose Antonio Castilla Cambridge University Press; 1 edition (2010)

6.3: Journals: human andrology,

6.1: Websites: www.iasstdaids.org, www.telemedicine.org/std , and ijsa.rsmjournals.com

(7) Facilities and resources mandatory for course completion:

1- Fully Equipped Lecture halls

2- Department library

3- Faculty library

Course coordinator:

Prof. Samir Elhanbaly, MD

Chairman of the department:

Prof. Ibrahim A. Abdel-Hamid, MD

Date: 3/4/2016