COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	Postgraduate MD degree of Obstetrics and Gynecology/ GYN600
(2) Department offering the programme:	Obstetrics and Gynecology
(3) Department responsible for teaching the course:	**Microbiology and immunology department**
(4) Part of the programme:	**First part**
(5) Date of approval by the Department`s council	27/7/2016
(6) Date of last approval of programme specification by Faculty council	2016
(7) Course title:	**Genetics and Molecular Biology**
(8) Course code:	**GYN 609** **GYN 621 GMB**
(9) Total teaching hours:	15 hours
(10) Credit hours	**1 hour**

(B) Professional information

(1) Course Aims:

To provide the candidates with the basic knowledge about the basics of genetic and molecular related to gynecology.

(2) Intended Learning Outcomes (ILOs):

A: Describe the most recent knowledge update regarding the Genetics and Molecular Biology of the following

> A1.DNA organization, replication
>
> A2.Synthesis of RNA (transcription)
>
> A3.Mutation and repair types of RNA
>
> A4.RNA processing (post-transcriptional modification)
>
> A5.Regulation of gene expression
>
> A6.DNA amplification techniques
>
> A7.The polymerase chain reaction
>
> A8.Apoptosis
>
> A9.Tumor markers
>
> A10. Sex chromosomes and Sex chromosome anomaly syndromes
>
> A11. Molecular biology of PCOS
>
> A12. Recombinant DNA technology (Genetic engineering)
>
> A13. Carcinogenesis & oncogenesis

A14. B– Intellectual skills

B1. integrate basic genetic and molecular related to gynecology with clinical care

B2. analyze and prioritize genetic problems related to gynecology.

B3. evaluate genetic and molecular information related to gynecology objectively, recognizing its limitations.

B4. use personal judgment for genetic and molecular related to gynecology

B5. construct appropriate management strategies for genetic problems related to obstetrics & gynecology .

B6. retrieve relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence .

(3) Course content:

Subjects	Lectures 1h/w	Total Teaching Hours
DNA organization, replication	2	15 hours
Synthesis of RNA (transcription)	2	
Mutation and repair types of RNA	1	
RNA processing (post-transcriptional modification)	1	
Regulation of gene expression	1	
DNA amplification techniques	1	
The polymerase chain reaction	1	
Apoptosis	1	
Tumor markers	1	
Sex chromosomes and Sex chromosome anomaly syndromes	1	
Molecular biology of PCOS	1	
Recombinant DNA technology (Genetic engineering)	1	
Carcinogenesis & oncogenesis	1	

Subjects	program ILOs																		
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	B1	B2	B3	B4	B5	B6
DNA organization, replication	x													x	x	x	x	x	x
Synthesis of RNA (transcription)		x												x	x	x	x	x	x
Mutation and repair types of RNA			x											x	x	x	x	x	x
RNA processing (post-transcriptional modification)				x										x	x	x	x	x	x
Regulation of gene expression					x									x	x	x	x	x	x
DNA amplification techniques						x								x	x	x	x	x	x
The polymerase chain reaction							x							x	x	x	x	x	x
Apoptosis								x						x	x	x	x	x	x
Tumor markers									x					x	x	x	x	x	x

Topic																			
Sex chromosomes and Sex chromosome anomaly syndromes											X				x	x	x	x	x	x
Molecular biology of PCOS											X				x	x	x	x	x	x
Recombinant DNA technology (Genetic engineering)												X			x	x	x	x	x	x
Carcinogenesis & oncogenesis													X		x	x	x	x	x	x

(4) **Teaching methods:**
- **4.1: Lectures**

(5) **Assessment methods:**

5.1 Written exam for assessment of a1– a13 , b1 –b6

5.2 MCQ continuous assessment a1– a13 , b1 –b6

Percentage of each Assessment to the total mark:

Written exam: 80 marks

MCQ : 20marks

Course coordinator:

Dr. Rafik Barakat
Dr. Sara Abdelaziz

Head of the department:

Prof. Nasser Allakany

Date: 7/2016