



## كيفية إعداد توصيف المقررات الدراسية للدراسات العليا

توصيف المقررات الدراسية يتضمن توضيح أقل المتطلبات الواجب توافرها في طالب الدراسات العليا للحصول على درجة الماجستير والدكتوراه. يشمل توصيف المقرر الدراسي الآتي:

- الأهداف التعليمية للدرجة العلمية
- المعرفة والمهارات التي يجب أن يحصل عليها الطالب في نهاية فترة الدراسة والتدريب
- طرق التدريس (مثال: محاضرات ، ورش عمل، تدريب معلمي)
- محتويات المنهج العلمي (الموضوعات العلمية ومراجعتها، عدد ساعات تدريس الجزء النظري والعملي والإكلينيكي)
- طرق تقييم الطالب ( مثال: الامتحانات بكافة صورها، الحضور، المقال العلمي، log book)
- نظام الامتحانات وكيفية توزيع الدرجات
- طرق التقييم للمقرر الدراسي
- المراجعة السنوية والمسؤولين عنها.

### PROGRAMME SPECIFICATION FOR POSTGRADUATE DEGREE

This specification provides a concise summary of the main features of the course and the learning outcomes that a typical candidate might reasonably be expected to achieve and demonstrate if he or she takes full advantage of the learning opportunities provided. More detailed information on the specific learning outcomes, context and the teaching, learning and assessment methods of each module can be found in the Programme Descriptions Handbook.



## COURSE SPECIFICATION

### Faculty of Medicine– Mansoura University

#### (A) Administrative information

(1) Programme offering the course.	MD degree in Medical Physiology
(2) Department offering the programme.	Department of Medical Physiology
(3) Department responsible for teaching the course.	Department of Medical Physiology
(4) Part of the programme.	Second part
(5) Date of approval by the Department's council	10/7/2016
(6) Date of last approval of programme specification by Faculty council	9/8/2016
(7) Course title.	Genetic Physiology
(8) Credit hours	3 hours
(9) Course code.	Phys 603 GP
(10) Total teaching hours.	45 Hours

#### (B) Professional information

##### (1) Course Aims.

The broad aims of the course are as follows: (either to be written in items or as a paragraph)

To enable students to understand basic facts about genetics which enable him to master the physiological control of body genes. Also, to develop skills related to physiological experimental work.

## (2) Intended Learning Outcomes (ILOs):

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

### A- Knowledge and Understanding

- A25** Describe the basic structure of chromosomes and nucleic acids DNA and RNA
- A26** Describe the principles of Mendel's law of inheritance and basis of genetic disorders
- A27** Describe the process of DNA replication, transcription and translation and cell division types
- A28** recognize the regulation of gene transcription

### B- Intellectual skills

- B1** Apply basic and clinically supportive sciences which are appropriate to Physiology related topics.
- B2** Argue, and discuss medical issues on evidence based manner
- B3** Join different types of knowledge to solve the professional problems.

## (3) Course content:

Subjects	Lectures	Total Teaching Hours
Introduction to genetics	2	2
Mitosis and meiosis	5	5
Mendelian laws of genetics	4	4
Chromosome mapping in eukaryotes	5	5
Sex determination and sex chromosome	3	3
Chromosome mutation: variation in chromosome number and arrangement (aberrations)	5	5
DNA structure and analysis	4	4
DNA replication and recombination	3	3
DNA organization in chromosomes	3	3
DNA recombinant technology and gene cloning	3	3

The genetic code and transcription	2	2
Translation and protein	2	2
Regulation of gene expression in eukaryocytes	2	2
Cancer and regulation of cell cycle and apoptosis	2	2
<b>Total</b>	<b>45</b>	<b>45</b>

#### (4) Course Matrix ILOs

Course Title	ILOs																									
	Knowledge and understanding									Intellectual skills						Practical skills					Transferrable skills					
	A 2 4	a 2 5	A 2 6	A 2 7	A 2 8	A 2 9	A 3 0	A 3 1	A 3 2	b1	b2	b3	b4	b5	b 6	c1	c2	c3	c4	c5	d1	d2	d 3	d4	d 5	d 6
Genetic physiology		√	√	√	√					√	√	√														

Course content	ILOS						
	Knowledge and understanding				Intellectual skills		
	A25	A26	A27	A28	B1	B2	B3
Introduction to genetics	√				√	√	√
Mitosis and meiosis			√		√	√	√
Mendelian laws of genetics		√			√	√	√
Chromosome mapping in eukaryotes	√				√	√	√
Sex determination and sex chromosome	√				√	√	√
Chromosome mutation: variation in chromosome number and arrangement (aberrations)	√				√	√	√
DNA structure and analysis	√				√	√	√
DNA replication and recombination			√		√	√	√
DNA organization in chromosomes	√				√	√	√
DNA recombinant technology and gene cloning				√	√	√	√
The genetic code and transcription				√	√	√	√
Translation and protein				√	√	√	√

Regulation of gene expression in eukaryocytes				√	√	√	√
Cancer and regulation of cell cycle and apoptosis				√	√	√	√

**(5) Teaching methods:**

Method	ILOS covered by this method
5.1: Lectures	A25-A28, B1-B3
5.2: Seminars	A25-A28, B1-B3

**(6) Assessment methods:**

Tools	Marks	Percentage of the total mark	ILOS assessed by the exam.	Schedule
6.1:Written exam	40	80%	A25-A28, B1-B3	Feb/Sept
6.2:MCQ exam	10	20%	A25-A28, B1-B3	May/Nov
Total marks	50			

**(7) References of the course:**

7.1: **Hand books:** Staff member books & lecture notes.

7.2: **Textbooks:** Guyton Medical Physiology, Ganong Physiology

**(8) Facilities Required for Teaching And Learning:**

The facilities include: appropriate teaching accommodation, teaching aids, laboratories, laboratory equipment, computer, etc, facilities for field work, site visits, etc, which are necessary for teaching the course.

**(9) Facilities and resources mandatory for course completion:**

**1- Attendance Criteria:**

Minimum acceptance attendance in each course is 75%

**2- Assessment tool:**

Minimum percentage accepted is 60% of total marks

**Course coordinator: Dr. Abdelaziz Hussein**

**Head of the department: Dr. Sabry Mohammed Awad Gad**