



# **COURSE SPECIFICATION**

# Clinical immunology & genetics Endocrinology, Diabetes, Clinical Nutrition and Metabolism MD

# Faculty of Medicine- Mansoura University

# (A) Administrative information

(1) Programme offering the course.	Postgraduate MD program of	
	Endocrinology, diabetes ,clinical nutrition and metabolism. EDCNM600	
(2) Department offering the programme.	Internal medicine department	
	(Endocrinology , diabetes and metabolism unit)	
(3) Department responsible for teaching the	Internal medicine department	
course:	(Endocrinology, diabetes and metabolism unit)	
	Clinical Pathology Department	
(4) Part of the programme.	First part (first semester)	
(5) Date of approval by the Department's	12/7 / 2016	
council		
(6) Date of last approval of programme	9/8 /2016	
specification by Faculty council		
(7) Course title:	Clinical immunology & genetics	
(8) Course code:	EDCNM610CG / EDCNM630	
(9) Credit hours	1 hour	
(10) Total teaching hours:	15	

# (B) Professional information

## (1) Course Aims:

The broad aims of the course are as follows:

The course will be a preparatory course for the postgraduate students to acquire knowledge and understanding of the genetic and immunological basis of endocrine disorders to facilitate their study of these disorders during next semesters.

# (2) Intended Learning Outcomes (ILOs):

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

A- Knowledge and Understanding

- A 1 Recall the basic principles of human genetics
- A 2 Describe the recombinant DNA technology, genomics and proteomics
- A 4 Recognize basics of genetic testing and family screening
- A 5 Recognize cells and cytokines involved in innate immunity
- A6. Demonstrate the mechanism of phagocytosis.
- A7. Describe role of complement in immune response.
- A8. Identify cellular and humoral immune response.
- A 9. Describe the role of B cell and Immunoglobulins in humoral immunity.
- A 7 Illustrate T cell subsets and their role in cell mediated immunity.
- A8. Identify MHC system and immune recognition response.
- A9. Explain immune tolerance and mechanisms of autoimmunity.
- A10. Describe hypersensitivity reactions.
- A11. Recall immunodeficiency states.

#### B- Intellectual skills.

- B1 differntiate between innate and acquired immunity.
- B 2 differentiate between cellular and humoral immunity.
- B 3 analyze clinical scenarios to identify the immunological basis of endocrine disorders.
- B 4 Integrate the results laboratory test regarding autoimmune disorders with clinical findings to reach a diagnosis.
- B 5 Predict the role of immune deficiency in pathogenesis of endocrine disorders.
- B6. Correlate types of hypersensitivity reactions to disease states in endocrine disorders .

# (4) Course content:

#### **A- Basic Information**

Title: Endocrinology, diabetes, clinical nutrition and metabolism.

Code: EDCNM610CG / EDCNM630 Credit Hours: 1 credit hour

#### **B-** Course content:

#### Course is a preparatory course in the first semester

	Lecture	Seminar	Credit hours
1. Basic principles of human genetics	1		1 hour
2. Recombinant DNA, genomics, proteomics, metabolomics	1		
3. Genetic testing and family screening	1	1	
4. Innate and Adaptive immunity	1		
5. B cell and Immunoglobulins	1	1	
6. T cells & complement	1	1	
7. MHC system and immune recognition response	1	1	
8. Immune tolerance and mechanisms of autoimmunity, genetic and environmental influences	1	1	
9. Hypersensitivity	1		
10. Immune deficiency	1		
Total	15 hours		

#### (5) Student assessment methods.

Written exam 80 marks MCQ Exam 20 marks

To be eligible for the final exam , the candidate must have , fulfilled the credit hours of the courses and log book activities .

The candidate must earn 60% of the marks to pass the exam.

### (6) References of the course.

- 5.1- Course Notes (paper and/or electronic)
- 5.4- Periodicals, Web Sites, etc. endocrinology, diabetes and metabolism journals.

# (7) Facilities and resources mandatory for course completion:

Candidates and their learning are supported in a number of ways:

- Candidates logbook
- **■**Course Specification and Handbooks
- Extensive library and other learning resources
- Computer laboratories with a wide range of software
- Intranet with a wide range of learning support material

## Course coordinator.

Prof Nagy Shaaban, Professor of internal medicine, Head of endocrinology unit Prof Omayma Saleh, Professor of internal medicine, endocrinology and diabetes unit.

# Head of the department.

Prof Salah Elgamal, Professor of internal medicine

Date: /2016