



Program SPECIFICATION FOR Diploma Degree in allergy

Code: 1708600

University: Alexandria

Faculty: Medical Research Institute

Program Specification

A- Basic information

1- Program title: Diploma in allergy

2- Program type: single double multiple

3- Department(s) : Immunology and Allergy

4- Coordinator : Prof. Mohamed Sami Afifi

5- External evaluator(s): Prof. Dr. Serag Eldin – 1/9/2016

6- Last date of program specification approval: 8/1/2017

B- Professional Information

1- Program aims:

Provide the students with a framework for understanding the role of immunology in medicine.

By end of the program, the student should:

1. Demonstrate **knowledge** of essential facts , concepts, principles and theories of normal and abnormal immunological function
2. Acquire an appropriate functional background of cells, tissues, organs & systems involved in immunologic response.
3. Acquire basic **knowledge** of immunology
4. Describe the **integration** of immunologic functions, which characterize the performance of the human body.
5. **Integrate** concepts and relate ideas covered in different parts of the degree programme to analyze and **solve problems**.
6. Manage common and less common **clinical immunology problems** properly
7. Be able to perform basic and some advanced procedural / **practical skills** competently
8. Be able to carry out immunologic **investigations** and relevant **techniques**.
9. Understand basics behind the choice of appropriate **tests**
10. Communicate effectively through written and oral presentation
11. Establish working relationship with colleagues and work effectively as a part of a team
12. Use information technology to increase his immunology knowledge.

2- Intended learning outcomes (ILOS)

a- knowledge and understanding:

a1- Recall the general description of immune system and describe different molecules that share in immunological cellular interaction.

a2- Describe cell surface ligand interaction and explain antigen processing and presentation.



- a3- Define types of T cells, their response to antigens and relationship to B cells.
- a4- Discuss the different techniques for serological diagnosis of infectious diseases as hepatitis A, B, C, EBV, TB, immunologic and molecular techniques.
- a5- Understand how to present clinical data and recall national and international relevant clinical cases.
- a6- Define the concept of hypersensitivity reactions and demonstrate different types of allergic reactions.
- a7- Recall the mechanisms of allergic diseases (i) Food Allergy, (ii) Eczema, Urticaria and Anaphylaxis and (iii) Allergic Airways Disease.
- a8- Discuss the physiology of allergic reactions, list the manifestation of allergic diseases and understand the management of allergic diseases

b- Intellectual skills:

- b1- Illustrate the basis of immune system and demonstrate the innate immune mechanisms.
- b2- Illustrate the regulation of immune response and cellular activation in the immune system: signal transduction.
- b3- Demonstrate primary and secondary immune response to defend the body against microorganisms.
- b4- Interpret results of different immunological tests in correlation with clinical and laboratory data.
- b5- Distinguish between protective and hazards defense mechanisms.
- b6- Illustrate inter-relation between allergic reactions and discuss differential diagnosis based on clinical signs.
- b7- Illustrate principles and procedures in allergology.
- b8- Illustrate the manifestations of allergic diseases, evaluate indications of immunotherapy and contra indications as well as route of administrations.

c- Professional and practical skills:

- c1- Use immunological laboratory techniques for diagnosis of cell mediated and humoral immune response.
- c2- Use immunological laboratory techniques to differentiate T and B cells.
- c3- Gain skills in applying different immunodiagnostic and molecular tests.
- c4- Gain skills to differentiate between different allergic reactions.
- c5- Gain professional skills to perform various allergic testing procedures used in experimental medicine and clinical settings.
- c6- Gain experience to take a complete medical history, perform a careful accurate physical examination with a focus on allergy and immunology, gain skills to formulate comprehensive and accurate problem lists, differential diagnoses, recommendations for further investigation and management.

d- General and transferable skills:

- d1- Communicate through group discussion
- d2- Work as a part of team
- d3- Develop skills in information technology
- d4- Develop skills for oral presentation
- d5- Develop skills in reading and research
- d6- Develop skills to work safely in a laboratory environment



3- Academic standards

3a. External references for standards (Benchmarks)

Generic Academic Reference Standards if the National Authority for Quality Assurance and Accreditation of Education (NAQAAE)

Date of Academic Reference standards (ARS) approval by Institute Council: 12/2/2014

3b. Comparison of provision to selected external references

Comparison between NAQAAE and ARS

NAQAAE	ARS for Diploma Diagnostic in Immunology
A1-Basic facts , theories, of the specialty and related subjects/ fields	A1- Recall the general description of immune system and describe different molecules that share in immunological cellular interaction.
A2-Fundamentals of ethical & legal practice	A2- Describe cell surface ligand interaction and explain antigen processing and presentation. Define types of T cells, their response to antigens and relationship to B cells. A3-Discuss the different techniques for serological diagnosis of infectious diseases as hepatitis A, B, C, EBV, TB, immunologic and molecular techniques.
A3 -Quality standards of the practice	A4-Recall the immune response to infections and understand the different mechanisms of immune damages.
A4- Effect of the specialty practice on the environment including rules for environmental conservation	A5-Understand how to present clinical data and recall national and international relevant clinical cases
B1- Determine , analyze & prioritize problems	B1- Illustrate the basis of immune system and demonstrate the innate immune mechanisms
B2- Solve common problems effectively	B2- Illustrate the regulation of immune response and cellular activation in the immune system: signal transduction. Demonstrate primary and secondary immune response to defend the body against microorganisms.
B3- Critically appraise researches and articles	B3- Interpret results of different immunological tests in correlation with clinical and laboratory data
B4-Evaluate professional risks	B4-Distinguish between protective and hazards defense mechanisms
B5- Make decisions to solve professional problems according to available data	B5- Illustrate how to present clinical data in case presentations
C1- Practice basic professional skills (clinical/practical & procedural skills) competently	C1-Use immunological laboratory techniques for diagnosis of cell mediated and humoral immune response and to differentiate T and B cells.
C2- Write reports related to the profession (Patient records, self appraisal/ audit reports etc...)	C2- Gain skills in applying different immunodiagnostic and molecular tests
D1- Communicate effectively using all methods	D1- Communicate through group discussion
D2- Use information technology to improve his/her professional practice	D3 Develop skills in information technology
D3- Practice self appraisal and determines his learning needs	D3 Develop skills in information technology
D4- Use different sources of	D3 Develop skills in information technology



information to obtain data	
D5- Work in teams D6- Manage time effectively	D2 Work as a part of team
D7-Work as team leader in situations comparable to his work level	D2.Work as a part of team

4- curriculum structure and contents

4.a program duration: 3 semesters

4.b program structure :

4.b.i- No. of hours per week in each year/semester:

Semester	Core Courses	Elective Courses
	No. of hours	No. of hours
First semester	10 H	
Second semester	6 H	4 H
Third semester	10 H	

4.b.ii- No. of credit hours	Lectures	19	Practical	11	Total	30
	Compulsory	26	Elective	4	Optional	0

4.b.iii- No. of credit hours of basic science courses (elective from other departments except for computer and statistics)	No.	2	%	6.66
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4.b.iv- No. of credit hours of courses of social sciences and humanities.	No.	0	%	0
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4.b.v- No. of credit hours of specialized courses (مواد التخصص)	No.	26	%	86.7
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4.b.vi- No. of credit hours of other courses(e.g. statistics, computer)	No.	2	%	6.66
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4.b.vii- Practical/Field Training	No.	-	%	-
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**4.b.viii- Program levels (in credit-hours system)****5- Program Courses****5.1- Compulsory (26 CH)**

Code No.	Course Title	No. of credit hours	No. of hours /week	
			Lecture	Practical
1708601	Elementary immunology I	2	2	-
1708602	Elementary immunology II	4	3	2
1708603	Cellular immunology I	4	2	4
1708604	Diagnostic immunology I	4	2	4
1708606	Interactive clinical immunology I	2	2	-
1708607	Hypersensitivity reactions	2	1	2
1708608	Allergology I	4	2	4
1708609	Allergology II	4	3	2

5.2- Elective I (4 CH)

Code No.	Course Title	No. of credit hours	No. of hours /week	
			Lecture	Practical
1715720	Chest diseases	2	1	2
1700655	Skin diseases	2	1	2
1700656	ENT diseases	2	1	2
1721720	Medical statistics	2	1	2
1721721	Computer	2	1	2
1708605	General clinical immunology	4	3	2
1708711	Immunoematology I	2	1	2

6- Program admission requirements

Graduate students with a M.B.Ch.B of Medicine

7- Regulations for progression and program completion



For the progression and completion of the program to obtain the degree of **allergy**, the student must complete 30 credit hours with CGPA of at least C+

8- - Evaluation of Students enrolled in the program.

Tool evaluation	Intended learning outcomes being assessed
Written	ILOs a &b
Practical	ILOs c
Oral	ILOs a ,b &d
Semester Work	ILOs b & d

Evaluation of program intended learning outcomes

Evaluator	Tool	Sample
1- Senior students	Interview	50%
2- Alumni	interview	Representative sample
3- Stakeholders (Employers)	Interview	Representative sample
4- External Evaluator(S) External Examiner (s)	Report	Prof. Dr. Serag Eldin 1/9/2016
5- Other		

Dates of Previous editions/revisions:

Editions/Revisions Number	Date
Edition no.1	2009
Edition no. 2	2011
Edition no.3	5/6/2014
Edition no.3, revision no.1	12/2014
Edition no.3, revision no.2	10/2016

Program coordinator:



Name: Prof. Dr.Mohamed Sami Afifi

Signature

Department Head:

Name: Prof. Dr. Eman Rashwan

Signature:

Date of Department Council Approval: 6/9/2017



Courses vs program ILO Matrix

Course Title	a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	b3	b4	b5	b6	b7	b8	c1	c2	c3	C4	c5	c6	d1	d2	d3	d4	d5	d6
Elementary immunology I 1708601	X								X														X	X	X	X	X	
Elementary immunology II 1708602		X								X							X						X	X	X	X	X	X
Cellular immunology I 1708603			X								X							X					X	X	X	X	X	X
Diagnostic immunology I 1708604				X								X							X				X	X	X	X	X	X
Interactive clinical immunology 1708606					X								X										X	X	X	X	X	
Hyper-sensitivity reactions 1708607						X								X						X			X	X	X	X	X	X
Allergology I 1708608							X								X						X		X	X	X	X	X	X
Allergology II 1708609								X								X						X						X



Program Aims vs ILOs Matrix

Aims	ILOs																												
	a1	a2	a3	a4	a5	a6	a7	a8	b1	b2	b3	b4	b5	b6	b7	b8	c1	c2	c3	C4	c5	c6	d1	d2	d3	d4	d5	d6	
1. Demonstrate knowledge of essential facts , concepts, principles and theories of normal and abnormal immunological function	+	+				+			+				+																
2. Acquire an appropriate functional background of cells, tissues, organs & systems involved in immunologic response.			+							+	+							+	+										
3. Acquire basic knowledge of immunology	+	+	+						+	+																			
4. Describe the integration of immunologic functions, which characterize the performance of the human body.					+						+	+						+	+	+									
5. Integrate concepts and relate ideas covered in different parts of the degree program to analyze and solve problems .				+	+			+				+		+															
6. Manage common and less common clinical immunology problems properly							+	+				+		+															
7. Be able to perform basic and some advanced procedural / practical skills competently				+														+	+	+	+								
8. Be able to carry out immunologic investigations and relevant techniques				+																		+	+						
9. Understand basics behind the choice of appropriate tests				+															+										
10. Communicate effectively through written and oral presentation					+																						+	+	

**Teaching and Learning Methods Vs Courses Matrix****Degree: Diploma in Allergy****Code:1708600**

	1708601	1708602	1708603	1708604	1708606	1708607	1708608	1708609
Lecture	x	x	X	x	x	x	x	x
Practical/Clinical		x	X	x		x	x	x
Brainstorming	x	x	X	x	x	x	x	X
Discussion Groups	x	x	X	x	x	x	x	x
Problem Solving	x	x	X	x	x	x	x	x
Case Study							x	x
Field Training								
Role playing								
Training Workshops								
Self-Directed Learning	x	x	X	x	x	x	x	x
e-learning								
Project	x	x	X	x	x	x	x	x