



Quality Assurance Unit



**TantaUniversity
Faculty of Medicine**

Department of Medical Parasitology

Course Specifications

**Medical Parasitology Doctorate
Degree**

2016-2017 (PARA 9003)

Medical Parasitology Doctorate Degree, Course specifications
University: Tanta Faculty: Medicine Department: Medical Parasitology

A- Administrative Information

- 1- Course title: Medical Parasitology for Doctorate degree
- 2- Department offering the program: Medical Parasitology Department
- 3- Department responsible for the course: Medical Parasitology Department
- 4- Course code: PARA 9003
- 5- Level: Doctorate degree of Medical Parasitology
- 6- No. of Credit / Taught hours:
Lectures: (4 credit hrs./60 taught hrs.) Practical: (3 credit hrs./90 taught hrs)
- 7- Authorization date of course specification: 1 /11/2016

B- Professional Information

1 – Overall Course aims:

The course aims to prepare a graduate having the ability to perform and perfect the bases and methods of medical research , and teach others and transfer of his medical experience to them through providing broad spectrum of knowledge and skills in Medical Parasitology cover Helminthology so he gain a positive attitude towards

- Awareness about the epidemiology and biology of endemic and non-endemic helminths and its impact on human health.
- Wide-scale knowledge about diagnostic work-up of parasitic diseases.
- Mastering of up-to-date lines of management of different parasitic infections.
- Awareness towards the current medical problems, and up to date hypothesis in Medical Parasitology.
- Orientation about his role in community development , and environmental safety

2 – Intended learning outcomes (ILOs):

A- knowledge and understanding:

By the end of the course, students should be able to:

- a.1- Describe the world distribution of helminths and explain the factors determining such distribution and their socioeconomic impact on the community
- a.2- Identify the medically important helminths, with the host parasite relationship.

a.3-Describe the various aspects of the helminths and their diseases (recent taxonomy, life cycle, pathology and pathogenesis, clinical aspects, treatment and expected complications)

a.4-Describe the recent aspects of diagnosis including parasitic, immunologic and biomolecular techniques,

a.5-Describe the mode of action of antihelminthic chemotherapy used in treatment of each parasitic infection.

a.6- Mention the methods of prevention and control of parasitic infection and on individual community levels.

b. Intellectual skills:

By the end of the course the candidate will be able to:

b.1- Analyze medical problems related to parasitic infections with differentiation between parasitic diseases.

b.2-Correlate clinical manifestations with the causative parasites and their pathogenesis.

b.3-Formulate and rearrange dispersed data related to parasitic infections and to be able to present them in a clear concise form.

b.4-Choose the suitable diagnostic techniques concerning the parasite the parasitic problems encountered (microscopy, serology, or molecular...etc)

b.5-Design and perform an advanced and innovative research in medical Parasitology.

b.6-Suggest applicable prevention and control programs

c. Professional and practical skills :

By the end of the course the candidate will be able to:

c.1- Perform the basic and modern professional skills in the area of diagnostic Medical Parasitology.

c.2- Assess and establish updated diagnostic strategies.

c.3 Write and evaluate a professional medical report for practical Parasitology.

c.4-Perfect microscopic examination and staining of different medical parasite stages.

c.5-Perfect manipulation of infectious material in a lab or hospital in a safe way.

c.6-Examine laboratory specimens (body fluid, excreta or infected tissues) using recent technological tools

d. General and transferable skills (Attitude & communication skill):

By the end of the course the candidate will be able to:

d.1-Director share in a teamwork aiming at solving an environmental problem

d.2- Use the update methods and technology for obtaining and transferring scientific data

d.3- Arrange with community authorities for planning and achieving a field plan to combat an environmental health problem

- d.4- Perform continuous medical educations
 d.5- Write the scientific article according to the basics of scientific research.
 d.6- Achieve computer skills necessary to make use of medical databases and use the internet for communication.
 d.7- Manage scientific seminars , with good time management.

3-Course contents

Total 7 credit hours Lectures: (4 credit hrs./60 taught hrs.)

Practical: (3 credit hrs./90 taught hrs.)

Topics	No. of hours			
		Lecture	Clinical/ lab	Self directed learning
Advanced studies of Platyhelminthes (Tramatores)	Taxonomy and Biology	2		
	Liver flukes	8		
	Intestinal flukes	3		
	Blood flukes	4		
	Lung flukes	1		
Advanced studies of Platyhelminthes (Cestodes)	Taxonomy and Biology	2		
	Intestinal	4		
	Tissue	6		
Advanced studies Nemathelminthes	Taxonomy and Biology	2		
	Intestinal	8		2
	Tissue	9		2
	Less common nematodes	5		2
Practical courses	1. Identification of different stages of helminthic parasites trematodes, cestodes, nematode eggs, larvae and adult free and in tissues.		15	
	2. Different methods of urine and stool examinations.		20	
	3. Different methods of blood examinations.		5	
	4. Preparation of permanent mounted slides.		5	
	5. Propagation of parasites in culture and maintenance of life cycle		20	

	of a parasite in experimental animals			
	6. Serological and immunological techniques		5	
	7. Electron microscopic identification of parasites.		20	
Total		54	90	6

4-Teaching and learning methods

Throughout the course the candidate achieves these objectives by the following activities.

A- Attending Lectures.

B- Attending Seminars:

The candidate is expected to attend and participate in meetings that update relevant recent topics in helminthic biology, relevant biochemical and genotyping of parasites, emerging parasitic problems and advances in parasitic diagnosis and treatment.

C- Attending Practical Courses

5-Student Assessment

Log book: For follow up practical activities, effective discussion in lectures and attendance (Minimum acceptance attendance in each teaching course is 75%)

- To be eligible to enter the exam, log book should be fulfilled and signed by Head of the department

End of semester exam. : MCQ examination will be during the 15th weeks

-Written, oral and practical examination will be a part of the final examination of the second part.

5.1 Written examination: to assess a.1 -6/b.1/b.2/b.3/b.4/c1

5.2 Practical :to assess c.2,3,4,5,6/ d.2.

5.3 Oral : to assess b3,4,5,6

5.4 logbook to assess d.1/d.2/d.3/d.4//d.5/d6/d7

- Assessment schedule

Formative assessment each month through log book . After completing the 8 semesters of the second part, the candidate will be eligible to enter written , oral, and practical exams exam hold twice / year at April and October according to post graduate bylaws.

6- Weighing of assessments

This semester will be a part of the final exams. of the second part

Written examination	900 (60%)
Oral examination	300 (60%)
Practical/laboratory work	300 (60%)
Other types of assessment (formative only)	Log book
Total	1500

7- List of references

7.1 Course notes: the staff lectures, Book edited by staff members of the Parasitology department

7.2 Text book; Human parasitology

By Burton Jerome Bogitsh, Clint Earl Carter, Thomas N. Oeltmann 2005.

7.3 Recommended books

An introduction to Parasitology.

By Bernard E Matthews. Copyright. Cambridge University Press. 1998

Modern Parasitology.

Textbook of Parasitology. By Francis E and G Cox. Wiley Blackwell, Copyright. 1993

Principles and Practice of Clinical Parasitology.

Edited by S. Gillespie & Richard D. Pearson. Copyright © 2001 by John Wiley & Sons Ltd, Baffins Lane, Chichester, West Sussex PO19 1UD, England.

Human parasitology

By Burton Jerome Bogitsh, Clint Earl Carter, Thomas N. Oeltmann 2005.

Topley & Wilson's microbiology & microbiological infections By F.E.G. Cox, Derek Wakelin, Stephen H. Gillespie and Dickson D. Despommier 2010

Manson' Tropical Diseases, 22th edition, in I. Gordon C. Cook and Alimuddin Z. Alimuddin editors, Saunders London, 2009.

Foundation of Parasitology, 8th edition, Gerald D. Shimdt and Larry S. Roberts editors, McGraw-Hill companies New York, 2009.

7.4 Periodicals and web sites

International Web site :

http://en.wikipedia.org/wiki/List_of_human_parasitic_diseases

http://emedicine.medscape.com/infectious_diseases-PARASITIC_INFECTIONS

<http://www.cdfound.to.it/html/intpar1.htm>

<http://www.wormdigest.org/content/view/157/2/>

<http://www.parasitology.com/worms/index.html>

<http://www.cdfound.to.it/atlas.htm>

<http://www.soton.ac.uk/~ceb/EctoEndodirectory/medendolinks.htm>

<http://homepages.ed.ac.uk/cpb/websites.htm>

<http://4smart.net/dir/sites/368-83115/Molecular-and-Biochemical-Parasitology>

<http://www.parasitology.com/resources/index.html>

<http://www.stumbleupon.com/su/36JahK/instruction.cvhs.okstate.edu/JCFOX/HTDOCS/CLINPARA/Index.htm>

<http://www.slideworld.org/slidestag.aspx/Medical-Parasitology>

8-Other resources/ facilities required for teaching and learning to achieve the above ILOs

None

9-we certify that all of the information required to deliver this course is contained in the above specifications and will be implemented

We verify that the above course and the analysis of students and external evaluator opinions are accurate.

Course coordinator and head of department
name.....signature.....Date.....

Head of quality assurance unit:
name.....signature.....Date.....