

**Quality Assurance Unit** 



Tanta University Faculty of Medicine

Department of Medical Parasitology Course specifications

Medical Parasitology Master degree 2016-2017 (8006) Medical Parasitology Master Degree Course specifications

**University: Faculty: Medicine Department: Medical Parasitology** Tanta A- administrative Information 1- Course title: Master degree of medical Parasitology 2- Department offering the program: medical Parasitology Department 3- Department responsible for the course: medical Parasitology Department 4- Course code: PARA 8006 5- Level: Master degree of Medical Parasitology 6- No. of <u>Credit</u> / 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 to be able to perform and perfect the bases and methods of medical research in the field of medical Parasitology, and to have a broad information about the theoretical and practical aspects of Medical Parasitology, cover the helminthology of humans and Malacology, in its different topics; including:

1) Correlation of basic information with the clinical presentations of helminths parasitic disease.

2) Awareness about the snails of medical importance include, classification, diagnosis and control.

3) Perfect professional skills, and use of technological tools needed in practices of Medical Parasitology

4) Decision of appropriate diagnostic tools.

5) Awareness about the epidemiological and environmental impacts of the heminths parasitic diseases; and how to plan and share in solving the subsequent problems.

6) Realize the importance of self development and continuous Medical education.

#### 2 - Intended learning outcomes (ILOs):

#### A- knowledge and understanding:

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

a.1- Identify the medically important helminthic parasites and snails, with the host parasite relationship.

a.2- Specify the various aspects of the helminthic parasites and snails and their diseases (Taxonomy, Morphology, Biology, epidemiology, life cycle).

a.3- Recognize pathology and pathogenesis, clinical aspects and expected complications of the helminthic parasites.

a.4- Recognize the modern diagnostic methods.

a.5-Discuss immunological and molecular biological aspects of helminthic infections.

a.6- Discuss the various lines of treatment of helminths.

a.7- List the effective therapeutic measures of helminthic infections and snails and also recognize how to prevent and control them.

#### b. Intellectual skills:

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

b.1- Analyze clinical problems related to helminthic infections and snails and perform a differential diagnosis.

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

b.3-Suggest applicable prevention and control programs for helminths and snails b.4-Formulate and rearrange dispersed data related to heminthic infections and to be able to present them in a clear concise form.

#### 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 include helminthology and Malacology

c.2- Assess and perform appropriate methods to establish a proper diagnosis.

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

## d. General and transferable skills (attitude & communication skill): By the end of the course the candidate will be able to:

d.1-Direct or 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 units for planning and achieving a field plan to combat an environmental health problem

d.4-Perform continuous medical education.

d.-5 Manage time perfectly.

## **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			
Τοριες		Lecture	Clinical/lab	Self directed learning
Platyhelminthes	Liver flukes	7		learning
(Tramatodes)	Intestinal flukes	5		
	Blood flukes	5		
	Lung flukes	1		
Malacology	Medical importance &	2		
	Morphology			
	Taxonomy &Ecology of medical snails	1		
	Control of snalis	1		
Platyhelminthes	Intestinal	3		
(Cestodes)	Tissue	5		
Nemathelminthes	Intestinal	15		
	Tissue	10		
	Less common nematodes	5		
Practical courses	<ol> <li>Identification of different stages of helminthic parasites trematodes, cestodes, nematode eggs, larvae and adult free and in tissues and identification of snails.</li> </ol>		20	
	<ol> <li>Different methods of urine and stool examinations.</li> </ol>		10	
	3. Different methods of blood, examinations.		10	
	4. Preparation of permanent mounted slides.		10	
	5. Maintenance of life cycle of one parasite in experimental animals or snails.		10	
	6. Recent serological and immunological		10	

	techniques.			
	7.Handle with lab animals		10	
	including animals care			
	guidelines.		1.0	
	Electron microscopic		10	
	identification of			
	parasites.			
Total		60	90	

## 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 helminthology, snalis, molecular biology, relevant biochemical and geno-typing of parasites, emerging parasitic problems, advances in parasite vaccinations, and advances in parasitic diagnosis and treatment.

# **C- Attending a Practical Course**

#### **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 week

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

- 5.1 Written examination: to assess a.1.2.3.4.5.6.7./b.1/b.2/b.3/b.4
- 5.2 Practical :.to assess a.1 /c.2/c.3/ d.3.
- 5.3 Oral : to assess b.1/b.2/b.3/b.4/c.1
- 5.4 logbook to assess d.1/d.2/d.3/d.4/d.5.

#### - Assessment schedule

Formative assessment each month through log book. After completing the 4 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	540 degree (60%)			
Oral examination	180 degree (20%)			
Practical/laboratory work	180 degree (20%)			
Other types of assessment (formative only)	Log book			
Total	900 degree 100%			

## 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. Oeltmann2005.

## 7.3 Recommended books

#### An introduction to Parasitology.

By Bernard E Matthews. <u>Copyright</u>. <u>Cambridge University Press</u>. 1998

# Modern Parasitology.

Textbook of Parasitology.ByFrancis E and G Cox. <u>Wiley Blackwell</u>, <u>Copyright</u>. 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 P019 1UD, England.

#### Human parasitology

By Burton Jerome Bogitsh, Clint Earl Carter, Thomas N. Oeltmann2005.

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

AlimuddinI.Zumla editors, Saunders London, 2009.

**Foundation of Parasitology**, 8<sup>th</sup> 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......Date......

Head of quality assurance unit:

name.....Date.....Date.....