Quality Assurance Unit

Tanta University

Faculty of Medicine

Department of Medical Parasitology

Course Specifications

Medical Parasitology third year

2015-2016

Medical parasitology, third year Course specifications

University: Tanta **Faculty: Medicine** **Department: Medical Parasitology**

1- Administrative Information

1. **Course title: Medical Parasitology**
2. **Code: TMED.03:04**
3. **Department offering the course: Parasitology Department**
4. **Program (s) on which this course is given: M.B.B.Ch**
5. **Departments offering the program: All departments of Tanta Faculty of Medicine**
6. **Academic year/ Level : 3rd year of M.B.B.Ch**
7. **Semester in which the course is given: All the academic year**
8. **Date of specifications /revision: 21/ 7 /2015**
9. **Date of approval by department council : 4 /8 /2015**
10. **Date of approval by faculty council: / /2015**
11. **Taught hours: in 30 weeks**
    - **Lectures: 60 hours : (2hrs/week)**
    - **Practical: 60 hours: (2hrs/week)** **Extra added hours: Tutorial: 30 (1hr/week)**
    - **Total : 120 hours (4hrs/week)**

2 – Overall Course Aims

1- To help students to acquire knowledge concerning biological, epidemiological and ecological aspects of parasites causing diseases to humans.
2- To develop students awareness of the pathogenesis, clinical presentations and complications of these parasitic infections.
3- To help the students to select the diagnostic methods in order to reach the final proper diagnosis.
4- To help the students to know the general outline of treatment, the best drug of choice, prevention and control of parasitic diseases.
5- To develop students' knowledge about endemic parasitic problems and their impact upon health

3– Intended learning outcomes (ILOs):

a- Knowledge and understanding:

At the end of this course the student should be able to:

a1. Specify various aspects of parasites of medical importance as Geographical distribution and epidemiologic principles and describe the morphology and life cycle.

a2. Explainhow the previous aspects together with the social and demographic patterns could help in causation, propagation and maintenance of each parasitic disease.

a3. Recognize the pathogenesis of parasitic infections and relate the stage of the life cycle to its pathogenesis and clinical signs and symptoms.

a4. Describe the clinical manifestations and recognize differential diagnosis and complications of parasitic diseases.

a5. Recognize the scientific basis of the conventional and up-to-date diagnostic procedures needed to carry out accurate diagnosis of common parasitic diseases with emphasis on their prioritization in management plans.

a6. List the effective therapeutic measures of parasitic infections and alsodescribe how to prevent and control parasitic diseases.

a7. Identify common arthropods of medical interest and recognize their medical importance and methods of combat.

b- Intellectual skills

At the end of this course the student should be able to:

b1. Point out the most appropriate and cost effective diagnostic laboratory investigations for each parasitic infection to reach the proper final diagnosis within short time.

b2. Integrate the most important signs and symptoms of important parasitic infections and the laboratory test findings into a meaningful diagnostic significance (using case study) .

b3. Express systemic thinking and personal judgment for differential diagnosis with prioritization of the common possibilities for each parasitic infection.

c- Professional & practical skills:

At the end of this course the student should be able to :

c1. Practice examination of mounted slides microscopically to identify**,** draw and labeldiagrams of parasites and their different stages (eggs, cysts, larvae, trophozoites) or any of their body parts (segment, hooks, scolices…etc).

c2. Practice examination of some parasites or their stages (e.g. hydatid cyst) macroscopically for their identification and drawing.

c3. Practice examination of the whole body or any part of arthropods of medical importance (in boxes or mounted slide) in order to identify them.

d- General transferable, Professional attitude and communication skills:

At the end of this course the student should be able to:

d1. Ensure the ability for health education in conjunction with prevention and control of parasitic diseases.

d2. Acquire self and lifelong learning using the available electronic facilities to update his/her knowledge and gain presentation abilities (present information clearly in written, electronic and verbal forms).

d3. Work collaboratively in a team, adopt ethical behavior and respect the role of staff and co-staff members regardless of degree or occupation.

4- Topics (Contents of the course)

Topic	No. of hrs.			
	Lectures	Practical	Total	Small groups
	60	**60**	**120**	**30**
I-Introduction to parasitology: -Host-parasite relationship -Types of parasites -Types of hosts.	**1**		**1**	
Trematodes& cestodes	**12**	**12**	**24**	**6**
Fasciola species	**1**	**1**		
Heterophyes heterophyes	**1**	**1**		
Paragonimus westermani	**1**	**1**		
- Schistosoma species & snails	**3**	**2**		
-Diphylobothrium species	**1**	**1**		
-Tanenia species and cystecercosis	**2**	**2**		
-Ecchinococcus species + hydatid disease	**1**	**1**		
-Coenurosis cerebralis+ sparganosis	**1**	**1**		
Hymenlepis spp. and Dipylidium caninum	**1**	**2**		
Nematodes	**14**	**18**	**32**	**9**
Introduction to nematodes	**1**			
- Entrobius vermiicularis	**1**	**1**		
- Ascaris lumbricoides	**1**	**2**		
- Trichuris trichiura	**1**	**2**		
- Hook worms	**1**	**2**		
- Trichostrongylus colubriformis	**1**	**1**		
- Stongyloides stercoralis	**1**	**2**		
- Capillaria philippinensis	**1**	**1**		
- Trichinella spiralis	**1**	**2**		
- Dracanculus medinensis	**1**	**2**		
- Filariae	**3**	**2**		
- Larva migrans	**1**	**1**		

Topic	No. of hrs.			
	Lectures	Practical	Total	Small groups
Protozoa	**18**	**16**	**34**	**8**
- Introduction to protozoa + Amoebae	**2**	**2**		
- Potentially pathogenic free-living amoebae	**1**	**1**		
- Balantidium coli	**1**	**2**		
- Giardia lamblia	**1**	**1**		
-Trichomonas vaginalis	**1**	**1**		
- Leishmania species	**2**	**2**		
- Trypanosomes	**2**	**2**		
- Plasmodium species	**2**	**2**		
- Cryptosporidium parvum	**1**	**1**		
-- Sarcocystis species & Isospora belli	**1**	**1**		
- Toxoplasma gondii	**2**	**1**		
- Revision	**2**			
- Entomology	**9**	**14**	**23**	**7**
- Mosquitoes & their control	**2**	**3**		
- Phlebotomus papatsii + Muscidae, Calliphoridae & Myasis	**2**	**4**		
- Fleas, Lice, Bugs,	**2**	**3**		
- Ticks & Mites + Cyclops	**2**	**4**		
- Control of arthropods & Insecticides	**1**			
- Immunology -As regards the immunopathology of parasitic infections, parasite immune evasion and immunodiagnosis of parasiticinfections.	**2**		**2**	
- Diagnostic techniques	**2**		**2**	
- **Miscellaneous** e.g.Parasites causing symptoms complexes, (diarrhoea, dysentery, anaemia, fever), opportunistic parasites etc.	**2**		**2**	

5-Teaching and learning methods

5.1 Lectures: 2 hours / week.

5.2 Practical classes: 2 hours / week.

5.3 Tutorials: 1 hour / week - The students are divided in groups, each of 15

5.4 E learning: an electronic copy of the course is available on line.

5.5 Log book including research assignmentand practical notebook to draw, sketch and classify different Parasites

7-Student Assessment :

a) Methods used

.1- Written exam: (3 hours): to assess a1-a7, b1-b3, and d1

.2- Practical exam: to assess c1- c3

.3- Oral exam: (one session): to assess a1-a7, b1-b3 and d3

.4-Research assignment: to assess d2 & d3

5- Practical notebook: to assess c1-c3

b) Assessment schedule التوقيت

Assessment	Week
1- Mid-year exam.: One-hour written examination composed of MCQs, true or false, matching, enumerate, explain why, drawing & labeling…etc	The second week of **February / 2016**
2- Periodical examinations: 2 Quizzes	One after finishing helminthology and one after protozoa
3- Practical exam: Identification of parasites & their different stages by data show and microscopically + macroscopical identification of parasites in boxes and Jars	**April / 2016**
4- Practical notebook	**April / 2016**
5-Research assignment	**At the end of March /2016**
6- Final exam: Three -hours written examination composed of short essay questions, MCQs, explain why, case report, drawing & labeling and problem solving…etc**.**	Once at the end of academic year, **May 2016**

c) Weighing of assessments (توزيع الدرجات)

Exam	Marks	% of Total
Mid-year examination	15	10%
Final year examination	75	50%
Oral examination	20	13.33%
Practical/laboratory work	25	16.67%
Periodical examinations	6	4%
Practical notebook	5	3.33%
Other types of assessment (research assignments)	4	2.67%
Total	**150**	**100%**

D- Attendance criteria:

1. 1. Practical attendance: Students should be according to the Faculty bylaws attending at least 75% of the Practical course otherwise the student will be not able to attend the practical exam.
2. 2. Log books: It is used to register daily attendance besides the requested activities and assignments which must be done.
3. The continuous assessment must be fulfilled before the final exam. **The students with accepted excuse will be subjected to another evaluation before the final exam.**

E- Grading System

Examination	Topic	Description	Marks
Midterm exam	written	One-hour written examination composed of MCQs, true or false, matching, enumerate &, explain why, drawing & labeling…etc	15marks
Practical exam		Identification of parasites & their different stages by data show and microscopically + macroscopical identification of parasites in boxes and Jars	25
Final Examination	Written	Three -hours written examination composed of short essay questions, MCQs, explain why, case report, drawing & labeling and problem solving.	75

Examination	Topic	Description	Marks
	Oral exam		20
Quiz		2 quizzes composed of MCQs, true or false, matching, explain why, drawing & labeling…etc	6
Practical notebook		Drawing and labeling of different stages and life cycles of parasites	5
Assignments & other activities		a- Preparing and presenting project assignments on parasites & parasitic diseases provided with illustrations and presented clearly in written, electronic and verbal forms. b- Involvement of the students in the researches and the projects of the department (optional). **c-** Involvement of the students in educational seminars regarding endemic parasitic diseases in Egypt and their prevention and control (optional).	4

8- List of references

8.1 Course notes

- **Department books**
- **Practical and self-evaluation book.**
- **A colour atlas.**
- **Hand outs.**
- **E learning: an electronic copy of the course is available on line.**
- **Microscopic slides photos are available on line.**

8.2 Text books

1- Basic Clinical Parasitology: By H.W., Brown, F.A. Neva (2005)

2- Medical Parasitology: By E.K., Markell; M.A., Marietta Voge and D.T., John.(2007)

8.3 Recommended books:

1. Topley & Wilson's microbiology & microbiological infections By F.E.G. Cox, Derek Wakelin, Stephen H. Gillespie and Dickson D. Despommier (2009)

2. Colour Atlas of Tropical Medicine and Parasitology By W. Peters& H.M. Gillies (1989).

3. Atlas of Medical Helminthology and Protozoology. By H.C. Jeffrey, R.M. Leach and G.O. Cowan, 3rd ed., Churchil Livingstone (2002).

8.4 Periodicals and web sites

1- Parasites online:http://WWW.parasitesonline.net/homepage.htm.

2- http://WWW.asp.unl.edu.

3- http://WWW.parasitology.org.uk

4- http://WWW.dpd.cdc.gov/dpdx

5- http://WWW.cvm.okstate.edu/~users/jcfox/htdocs/clinpara/index.htm

6- http://WWW.parasite.biology.Qiowa.edu.

7- http://www.parasites on line.

8- http://www.Tanta.edu.Eg/ar1/medicine1/para.Htm/index htm.

9- http://www.Tanta.edu.Eg/ar1/medicine1/para.Htm/para htm.

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 / /2015

Head of quality assurance unit: name…….signature…….Date / /2015…….

(A)Intended learning outcomes of the course

Academy / University: Tanta
Faculty: Medicine
Department: Parasitology

The name of course	Medical Parasitology
Code of course	TMED.03:04

Topics of the course	Total hours (lecture+practical) + research assignment	Knowledge & Understanding	Intellectual Skills	Practical (Professional) skills	General transferable skills, attidude and communication skills
Introduction, Trematodes and Cestodes	25	A1-A6	B1-B3	C1 &C2	D1
Nematodes	32	A1-A6	B1-B3	C1 &C2	D1
Protozoa	34	A1-A6	B1-B3	C1 & C2	D1
Entomology	23	A7		C3	D1
Immunology	2	A5	B1		
Diagnostic techniques	2	A5	B1		
Miscellaneous (parasites causing symptom complex as diarrhoea, dysentery, hepatosplenomegaly, menigoencephalitis, fever, anaemia…etc	2	A4	B2 & B3		
research assignment)project(		a1-a7			D2 & D3
Total	**120**	**100%**	**100%**	**100%**	**%100**

- ILO's of the course were 100% achieved by lectures, research assignment and practical lessons

Course coordinator: Sirria Elmarhoumy

Head of the department: Samy Elkorany

Intended learning outcomes of the program

Academy / University: Tanta
Faculty: Medicine:
Department: Parasitology

The name of course	Medical Parasitology
Code of course	TMED.03:04

Matrix of the course ILO,s with the Program ILO,s

Course ILOS \ program ILO		knowledge & understanding					Intellectual skills					Professional & practical skills					General , transferable, Professional Attitude and communication skills				
knowledge & understanding	a.1.	a13																			
	a.2.	a5	a13																		
	a.3.	a5																			
	a.4.	a10																			
	a.5.	a6																			
	a.6.	a11																			
	a.7.																				
Intellectual skills	b.1.						b2														
	b.2.						b5														
	b.3.						b4														
Professional & practical skills	c.1.											c1 e									
	c.2.											c1 e									
	c.3.											c1 e									
General , transferable, Professional Attitude and communication skills	d.1.																d8				
	d.2.																d12	d13	d14		
	d.3.																d15	d25			