



Quality Assurance Unit



**Tanta University
Faculty of Medicine**

Department of Parasitology

Course Specifications

Parasitology third year

2011-2012

Parasitology third Year Course specifications

University: T anta

Faculty: Medicine

Department: parasitology

1- Administrative Information

- **Course title: Medical Parasitology**
- **Code: TMED.03:04**
- **Department offering the course: Parasitology Department**
- **Program (s) on which this course is given: M.B.B.Ch**
- **Departments offering the program: All departments of Tanta Faculty of Medicine**
- **Academic year/ Level : 3rdyear of M.B.B.Ch**
- **Semester in which the course is given: All the academic year**
- **Date of specifications /revision: 9/8/2011**
- **Date of approval by department council :14/8/2011**
- **Date of approval by faculty council: /9/2011**
- **Taught hours:**
 - **Lectures: 60 (2 hours/ week)**
 - **Practical: 60 (2 hours/ week)**
 - **Total : 120**
 - **Others: Tutorial: 30**

2 – Overall Course Aims

- 1- To supply the students with knowledge concerning biological, epidemiological and ecological aspects of parasites causing diseases to humans.
- 2- To make the students fully aware of the pathogenesis, clinical presentations and complications of these parasitic infections.
- 3- To enable the students to select the diagnostic methods in order to reach the final proper diagnosis.
- 4- To enable the students to know the general outline of treatment, the best drug of choice, prevention and control of parasitic diseases.

- 4- To provide the students with fairly good knowledge about endemic parasitic problems and their impact upon health
- 5-

3- Intended learning outcomes (ILOs):

a- Knowledge and understanding:

By the end of the course the student should be able to

- a1.** Describe various aspects of parasites of medical importance (Geographical distribution, morphology and life cycle.
- a2.** State how the previous aspects could help in causation, propagation and maintenance of each parasitic infection in man and his environment.
- a3.** Describe the pathogenesis of parasitic infections and relate the stage of the life cycle to its pathogenesis and clinical signs and symptoms.
- a4.** List different clinical manifestations of parasitic diseases.
- a5.** Identify the conventional and up-to-date procedures needed to carry out accurate diagnosis of common parasitic disease.
- a6.** Outline the effective therapeutic measures of parasitic infections and also describe how to prevent and control diseases.
- a7.** Identify common arthropods of medical interest and know their medical importance and methods of combat.

b- Intellectual skills

By the end of the course the student should be able to

- b1.** Correlate the most important signs and symptoms of important parasitic infection in term of anatomic and functional diagnostic significance.
- b2.** Point out the most appropriate and cost effective diagnostic laboratory investigations for each parasitic infection to reach the proper final diagnosis within short time.
- b3.** Perform a differential diagnosis with prioritization of the common possibilities for each parasitic infection.

c- Professional & practical skills:

By the end of the course the student should be able to

- c1.** Examine mounted slides microscopically to identify and diagram parasites and their different stages (eggs, cysts, larvae, trophozoites) or any of their body parts (segment, hooks, scolices...etc).
- c2.** Examine some parasites or their stages (e.g. hydatid) macroscopically for their identification.
- c3.** Examine the whole body or any part of arthropods of medical importance (in boxes or mounted slide) in order to identify them.

d- General transferable skills

By the end of the course the student should be able to

- d1.** Provide health education in conjunction with prevention and control of parasitic diseases.

d2. Acquire self-learning & presentation abilities

d3. Participate in a team work and adopt ethical behavior.

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	11	12	23	6
Fasciola species	1			
Heterophyes heterophyes	1			
Paragonimus westermani	1			
- Schistosoma species & snails	2			
-Diphylobothrium species	1			
-Tanenia species and cystecercosis	1			
-Ecchinococcus species + hydatid disease	1			
-Multiceps multiceps + sparganosis	1			
-Hymenolepis species	1			
Dipylidium caninum	1			
Nematodes	13	18	31	9
- Entrobis vermicularis	1			
- Ascaris lumbricoides	1			
- Trichuris trichiura	1			
- Hook worms	1			
- Trichostrongylus colubriformis	1			
- Stongyloides stercoralis	1			
- Capillaria philippinensis	1			
- Trichinella spiralis	1			
- Dracanculus medinensis	1			

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- Filariae	3			
- Larva migrans	1			
Protozoa	18	16	34	8
- Amoebae	2			
- Balantidium coli	1			
- Giardia lamblia	1			
- Commensal flagellates + Dientamoeba fragilis	1			
- Cryptosporidium parvum	1			
- Sarcocystis species & Isospora belli	2			
- Trichomonas vaginalis	1			
- Plasmodium species	2			
- Babesia species	1			
- Leishmania species	2			
- Trypanosomes	2			
- Toxoplasma gondii	1			
- Potentially pathogenic free-living amoebae	1			
- Entomology	11	14	25	7
- Mosquitoes & their control	2			
- Phlebotomus papatsii	1			
- Muscidae, Calliphoridae & Myiasis	2			
- Fleas, Lice, Bugs,	2			
- Ticks & Mites	2			
- Cyclops	1			
- Control of arthropods & Insecticides	1			
- Immunology & molecular parasitology	2		2	
-As regards types of immunity, mechanisms, immunopathology of parasitic infections, parasite immune evasion and immunodiagnosis of parasitic infections. -Molecular parasitology as regards application of molecular technology in parasitology.	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 - The student are divided into two groups.

5.2 Practical classes: 2 hours / week - The students are divided into two groups.

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

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 and b1-b3
- .4- Research assignment: to assess d2 & d3

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 2012
2- Quiz	Once at the end of Protozoa chapter (March 2012)
3- Practical exam: Identification of parasites & their different stages by data show and microscopically + macroscopical identification of parasites in boxes and Jars	April/2012
4- Final exam: Three hours written examination composed of short essay questions, MCQs, explain why and case report, problem solving, drawing and labeling	Once at the end of academic year (May 2012)

c- Weighing of assessments (توزيع الدرجات)

Exam	Marks	% of Total
Mid term examination	22.5	15%
Final term examination	75	50%
Oral examination	20	13.33%
Practical/laboratory work	25	16.67%
Periodical examinations	3	2.0%
Semester work		%
Other types of assessment (research assignments & practical notebook)	4.5	3.0%
Total	150	100%

e) Grading system:

Examination	Topic	Description	Marks
First assessment Quiz (research assignments)	Data show presentations		Total marks 3 4.5
Mid-year Examinations	Written (-hour)	One-hour written examination composed of MCQs, true or false, matching, enumerate &, explain why, drawing & labeling...etc	Marks 22.5
Final Examination	Written (3-hours)	Three hours written examination composed of short essay questions, MCQs, explain why and case report, problem solving, drawing and labeling	75
	Practical exam (Identification of parasites & their different stages by data show and microscopically + macroscopical identification of parasites in boxes and Jars	Marks 25
	Oral exam (10 minutes)		20 Marks
Total			150

d) Attendance Criteria:

- 1.practical attendance: The minimal acceptable attendance is 75%
- 2.practical books: To be completed during the practical classes of the academic year

7- List of references

7.1 Course notes

- Department books
- Hand outs
- Self-evaluation book
- Practical notebook
- CD illustrating the microscopic slides of the lab.
- A colour atlas

7.2 Text books

- 1-Basic Clinical Parasitology By H.W., Brown, F.A. Neva
- 2- Medical Parasitology By E.K., Markell ; M.A., Marietta Voge and D.T., John.

7.3 Recommended books

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

2. Colour Atlas of Tropical Medicine and Parasitology

By W. Peters & H.M. Gillies

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

7.4 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.Iowa.edu>.

7- <http://www.parasitesonline.net>.

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

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

8-facilities for teaching and learning resources

Course coordinator

Name:

signature:

Date:

Head of department

Name:

signature:

Date:

)A (Intended learning outcomes of the course

University: ...Tanta..... /Academy

: Faculty:Medicine.....

:Department: Parasitology.....

<input checked="" type="checkbox"/> The name of course	Medical Parasitology
Code of course	TMED.03:04

Topics of the course	Total hours (lecture+practical) + research assignment	Knowledge & Understanding	Intellectu al Skills	Practical (Professio nal) skills	General transferable skills
Introduction, Trematodes and Cestodes	24	A1-a6	B1-b3	C1 &c2	d1
Nematodes	31	A1-a6	B1-b3	C1 &c2	D1
Protozoa	34	A1-a6	B1-b3	C1 & c2	D1
Entomology	25	A7		C3	D1
Immunology and molecular parasitology	2	A5	B2		
Diagnostic techniques	2	A5	B2		
Miscellaneous (parasites causing symptom complex as diarrhoea, dysentery, hepatosplenomegaly, meningoencephalitis, fever, anaemia...etc	2	A4	B1 & b3		
research assignment (project)					2d &3d
Total		%100	%100	%100	%100

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

Course coordinator:

Head of the department:

Intended learning outcomes of the program

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

University: Tanta
Faculty: Medicine
Department: Parasitology

Topics of the course	Total hours (lecture+practical)+ research assignment	Knowledge & Understanding	Intellectual Skills	Practical (Professional) skills	General transferable skills
Introduction, Trematodes and Cestodes	24	A3, 4, 7, 12	B1, 10, 13	c3	d10
Nematodes	31	A3, 4, 7, 12	B1, 10, 13	c3	d10
Protozoa	34	A3, 4, 7, 12	B1,10,13	c3	d10
Entomology	25	A3	D10	C3	
Immunology and molecular parasitology	2	A12	B1		
Diagnostic techniques	2	A12	B1		
Miscellaneous (parasites causing symptom complex as diarrhoea, dysentery, hepatosplenomegaly, meningoencephalitis, fever, anaemia...etc	2	A7			
research assignmen					D10

The course subjects achieve the following of the program ILOs: - 12.9 % (a1, 4, 7 & 12) of program knowledge & understanding.

- 23.08 % (b1, 10 & 13) of program intellectual skills
- 4.2 % (c3) of professional & practical skills
- 5 % (d10) of general & transferable skills

Course coordinator:

Head of the department:

(B) Intended learning outcomes of the program

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

University: Tanta
Faculty: Medicine
Department: Parasitology

Topics of the course	Total hours (lecture+practical)+ research assignment	Knowledge & Understanding	Intellectual Skills	Practical (Professional) skills	General transferable skills
Introduction, Trematodes and Cestodes	24	A3, 4, 7, 12	B1, 10, 13	c3	d10
Nematodes	31	A3, 4, 7, 12	B1, 10, 13	c3	d10
Protozoa	34	A3, 4, 7, 12	B1,10,13	c3	d10
Entomology	25	A3	D10	C3	
Immunology and molecular parasitology	2	A12	B1		
Diagnostic techniques	2	A12	B1		
Miscellaneous (parasites causing symptom complex as diarrhoea, dysentery, hepatosplenomegaly, meningoencephalitis, fever, anaemia...etc	2	A7			
research assignmen					D10

The course subjects achieve the following of the program ILOs: - 12.9 % (a1, 4, 7 & 12) of program knowledge & understanding.

- 23.08 % (b1, 10 & 13) of program intellectual skills
- 4.2 % (c3) of professional & practical skills
- 5 % (d10) of general & transferable skills

Course coordinator

Head of the department: