Benha University
Faculty of Medicine
Department of Parasitology.

Course Specifications

Course title: Medical parasitology

(Code):0708

Academic Year (2010 – 2011)

- **Department offering the course: Medical Parasitology**
- **Academic year of M.B.& B.Ch. program: Third year.**
- **Date of specification approval: Department council date:25/7/2010**
  Faculty council date:

A) Basic Information:

- **Allocated marks:** 150 marks
- **Course duration: 30** weeks of teaching
- **Teaching hours:** 4 hours/week = 120 total teaching hours

	Hours / week	Total hours
1- Lectures	**2x30**	**60**
2- Small group teaching / tutorials	**1x20**	**20**
3- Practical	**2x20**	**40**
4- Others	**1x20**	**(20 hours) pending until the required time is provided.**
Total	**5**	**120**

B) Professional Information:

1- Overall Aim of the Course:

The different parasitic and vector-born diseases are forming a major health problem in many countries including Egypt which is a hindrance to the regional development. Hence, the aim of this course is to:

1.1. Achieve national and international standing in education in the field of Medical Parasitology.

1.2. Focus on: applied clinical Parasitology, diagnosis, prevention and control of the different parasitic infections.

1.3. Be aware of basic epidemiological and environmental factors in relation to parasitic infections with special emphasis on local endemicity.

1.4. Provide diagnostic educational laboratory to the student.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

2.1.1. Describe basic concepts and principles of parasitism; terminology of parasite nomenclature, geographical distribution, different hosts, parasitic zoonosis, morphology, life cycles, transmission, pathology, pathogenesis, clinical picture, host-parasite relationship, immunity, diagnosis (direct & indirect) , treatment, prevention and control.

2.1.2. Classify parasites.

2.1.3. Point out clinical presentations of parasitic infections.

2.2. Professional and practical skills:

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

2.2.1. Perform different methods of urine and stool examination, thin and thick blood films, some staining procedures.

2.2.2. Use laboratory equipments safely and carefully.

2.2.3. Do identification of different parasitic stages, preserve fresh specimens, identify infected snails and apply safety precautions

2.3. General and transferable skills:

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

2.1. Communicate in group working and problem solving

2.2. Respects the role of the staff and costaff members regardless of degree or occupation.

2.3. Computing skills for research work.

2.4. Communication skills:

By the end of the program the graduate will be able to:

2.4.1. Communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

2.4.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).

2.4.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.

2.4.4. Cope up with difficult situations as breaking news.

2.4.5. Respect patients and their relatives, superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

2.5.1. Analyze any given data in a laboratory report or case study and relate it to causative parasite.

2.5.2. Interpret the most important signs and symptoms of important parasitic infections of endemic character.

2.5.3. Solve problem

3- Course contents:

Subject	Lecture In hours	Tutorial / Small	Practical (hrs)	Total (hrs)	%Total (hrs)

		group discussion (hrs)			
1-General Introduction	**1 h r**			**1**	**0.83**
2-Helminthology **2a-Trematodes:** **· General characters** **· Fasciola species** **· Fasciolopsis buski** **· Heterophyes & Metag** **· Paragonimus** **· Schistosoma species** **· Molluscs** **· Urine examination**	**10 hrs** **1 hr** **1 hr** **1 hr** **1 hr** **4 hr** **1 hr** **----------**	**4 hrs**	**8 hrs** **2 hrs** **2 hrs** **2 hrs**	**22**	**18.3**
2b-Cestodes: **· General characters, Diphyllobothrium sp. & sparganosis** **· Taenia saginata** **· Taenia solium & cysticercosis** **· Echinococcus sp. & hydatid disease** **· Hymenolepis sp. & Dipylidium**	**5 hrs** **1 hr** **1 hr** **1 hr** **1hr** **10 hrs**	**2hrs** **4 hrs**	**6hrs** **2 hrs** **2 hrs** **2 hrs** **2 hrs** **8hrs**	**13** **22**	**10.3** **18.3**
2c-Nematodes: **· General characters** **· Ascaris lumbricoides** **· Toxocara sp. & visceral larva**	**1 hr** **1 hr** **1 hr**		**2 hrs**		

migrans **· Hook worm sp.& cut. larva migrans** **· Strongyloides stercoralis** **· Enterobius & Trichuris** **· Trichinella spiralis** **· Wuchereria species** **· Loa loa & Onchocerca** **· Dracunculus medinensis** **· Stool examination**	**1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr** **1 hr**		**2 hrs** **2 hrs** **2 hrs**		
3-Protozoology **· Amoebae species** **· Free-living amoebae** **· Balantidium coli** **· Giardia lamblia &Trichomonas vaginalis** **· Leishmania species** **· Trypanosoma species.** **· Plasmodium species & Babesia species**	**15** **2 hrs** **1 hrs** **1hr** **1hr** **2hr** **2hr** **3 hrs**	**4 hrs**	**8 hrs** **2 hrs** **2 hrs** **2 hrs**	**27**	22.7

· Toxoplasma gondii	**2 hrs**				
· Cryptosporidium parvum	**1 hr**		**2 hrs**		
· Blood examination	**----------**				
				22	18.3
4-Entomology	**12 hrs**	**4 hrs**	**6 hrs**		
· General characters	**1 hr**				
· Mosquito species	**2 hrs**				
· Phlebotomus, Simulium & Culicoides	**1 hr**		**2 hrs**		
· Musca, Stomoxys & Glossina	**1 hr**				
· Metallic, Flesh flies & myiasis	**1 hr**		**2 hrs**		
· Bugs	**1 hr**		**2 hrs**		
· Lice	**1 hr**				
· Fleas	**1 hr**				
· Ticks, Mites & Cyclops	**3 hrs**				
	----------			6	5
5- Revisions	**3 hrs**	**2 hrs**	**4 hrs**		
6- Immunity to parasitic infections	**3 hrs**		**---------** **---------**	3	2.5
7- Clinical presentations of parasitic diseases.	**1 hr**		**---------**	3	2.5
8- Diagnosis of parasitic infections				1	0.83

Total				**120**	**(100%)**

4- Teaching and learning methods:

METHODS USED:

1. Lectures
2. Small group discussions
3. Tutorials
4. Practical classes
5. **Assignments.**

TEACHING PLAN:

Lectures: 60
Tutorials:20

Practical classes:40

Time plan:

Item	Time schedule	Teaching hours	Total hours
Lectures	2 times/week; one hour each between to	60	60
Practical	2 hours / 20 week	40	40
Tutorial	1 hours / 20 week	20	20
Total	**5/week**	**120**	**120**

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA: Faculty bylaws

1. Practical attendance
2. Small group attendance
3. Log book

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge , understanding and skills
Oral examination	To assess knowledge, skills and intellectual functions, and attitude.
Practical examination	To assess knowledge, professional skills and attitude.

5-C) <u>TIME SCHEDULE</u>: Faculty bylaws

Exam	Week
1- First half of the academic year	7th
2- Mid-year exam	15th
3- Second half of the academic year	22
4- Practical exam	25
5- Final exam	30

5-D) <u>Weighting System:</u>

Examination	Marks allocated	% of Total Marks
1- Shock exams	----------	0
2- First half	5	3.33%
3- Mid-year	20	13%
4- Second half	5	3.33%
5- Final exam: a- Written b- Practical c- Oral	 60 30 15	 40% 20% 10%
6- Assignments & other activities	15	10%
Total	**150**	

N.B. The total marks of the parasitology examination should be increased to accommodate the increase load of work required from the students (e.g. Quizes, research assignment and boosters).

- The minimum passing & Passing grades (Faculty bylaws).

FORMATIVE ASSESSMENT:
Student knows his marks after the Formative exams.

5-E) <u>Examinassions description:</u>

Examination	Description
1- Shock exams	Quizzes
2- First half	Objectively structured questions
3- Mid-year	Case study and MCQs
4- Second half	Objectively structured questions
5- Final exam: a- Written b- Practical c- Oral	(MCQs) ,Short essay questions, case report, drawings. Identify microscopic slides, boxes, snails, give reasons. two sessions.
6- Assignments & other activities	Assignments, projects, practical books etc
Total	**150**

6- List of references:

6.1- Basic Materials:

-Medical Parasitology-Lecture Notes, authorized by the Department.

-Parasitology Atlas.

-CD for practical course.

6.2- Essential books:

- Gerald (2007): Parasites and infectious diseases.

- Barbra D.(2008): Molecular mechanism of parasite invasion.

- David M.(2008): Advances in parasitology control of human parasitic diseases.

6.3- Recommended books:

- Manson's Tropical Diseases, Cook GC (ed), 21st edition. London: WB Saunders, 2003.

6.4- Websites:

- http://www.epu-eg.com/
- http://www.parasitesonline.net/
- http://pathmicro.med.sc.edu/book/parasit-sta.htm

- http://www.dpd.cdc.gov/dpdx/HTML/Para_Health.htm
- http://www.malaria.org/

7- Facilities required for teaching and learning

- Proper lecture rooms.
- Computers and data show.
- Electronic White Board and its requirements.
- Laser points.
- Well equipped laboratories.
- Sixty binocular microscopes with planachromate lenses 6x, 10x, 40x and 100x.
- Four sets of microscopic slides for demonstration.
- Refrigerator and deep Freezer.
- Four centrifuges.
- Well equipped Video rooms and Video films, slide projector and projector slide sets.
- All laboratory requirements for performing the practical work (including chemicals, stains, disposable materials, glass wares, gloves and disinfectants) in sufficient amounts for the use of the huge number of students (500 students).
- In addition to, providing **ample time** and **more grades** to be allocated for the new activities (e.g. research assignment and additional practical work) for the execution of all the goals.

Course coordinator: Prof.Dr /Amany Farouk Mohamed El Fakahany

Head of the Department: Prof.Dr /Amany Farouk Mohamed El Fakahany.

Date: 2010-2011.

TEMPLATE FOR COURSE REPORTS

Benha University
Faculty of Medicine
Department of Parasitology

Course Report

Academic Year 2009 – 2010

A-Basic Information:

1- Course title and code:Medical parasitology

2- Third year of M.B. & B.Ch. Program

3- Allocated marks150

4- No. of hours: 120

5- Teaching staff:

a- Number of teaching staff categories (12 Professors , 2Assistant professors, 5Lecturers and assistant staff (5 Assistant lectures and 7demonstrators).

b- Student / staff / course Ratio (Academic year or round for clinical departments)

6- Course coordinator: Professor Doctor Amany Farouk Mohamed El Fakahany.

7- External evaluator: Professor Doctor Nashaat abd El Monsef, Faculty of Medicine,Menofia University.

B- Statistical Information:

Number of students starting the course		482
Number of students completing the course		482 (100% of starting No.)
Number of fail students		10 (% of completing), 22postpones
Number of pass students		450 (% of completing)
Grades	Excellent	101 (% of pass)
	Very good	190 (% of pass)
	Good	119 (% of pass)
	Fair	40 (% of pass)

C- Professional Information:

1- Course topics taught:

A) Lectures:

Topics Actually taught	No of hours	Lecturer
1- Introduction to Parasitology	1	Prof. Ali El-Said Ali
2-Helminthology (Trematodes and Cestodes)	15	Prof. Mona Nasr Prof. Ali El-Said Ali Proff. Azza El-Hamshary A.Prof. Amina Ibrahim
3- Helminthology(Intestinal &Tissue Nematodes).	10	Prof. Mohammad Saad Younis Prof.Dr. Samia Rashed
4- Protozoology(Intestinal, Urogenital, Blood and Tissue).	15	Prof. Karim Fetouh Abdallah Dr. Khaled Gaith Dr. Maysa Ahmad Eraky
6-Immunology and Molecular Parasitology	7	Prof. Amany El-Fakahany
7-Entomology	12	Prof. Ibrahim A. El-Haiwan Prof.Dr. Ibrahim Maged Nagaty. Dr. Maysa Ahmad Eraky

- Percent of specified topics actually covered (> 90%)

B) Practical:

Topics	Specified hours	Actual **hours**	Lecturer
2-Helminthology (Trematodes and Cestodes)		8	Prof. Ali El-Said Ali Proff. Azza El-Hamshary

			A.Prof. Amina Ibrahim
3- Helminthology(Intestinal &Tissue Nematodes).		6	Prof. Mohammad Saad Younis Prof.Dr. Samia Rashed Prof.Mona Nasr
4-Diagnostic techniques		2	Prof. Ali El-Said Ali Prof. Azza El-Hamshary Prof.Maged Nagaty
5- Protozoology(Intestinal, Urogenital, Blood and Tissue).		8	Prof. Karim Fetouh Abdallah Dr. Khaled Gaith Dr. Maysa Ahmad Eraky
6-Immunology and Molecular Parasitology		2	Prof. Amany El-Fakahany
7-Entomology		6	Prof. Ibrahim A. El-Haiwan Prof.Dr. Ibrahim Maged Nagaty. Dr. Maysa Ahmad Eraky

- Percent of specified topics actually covered (> 90%)-

C) Tutorials / small group discussions:

Topics	Specified hours	Actual hours	Lecturer
2-Helminthology (Trematodes and Cestodes)		4	Prof. Ali El-Said Ali Proff. Azza El-Hamshary A.Prof. Amina Ibrahim
3- Helminthology(Intestinal &Tissue Nematodes).		2	Prof. Mohammad Saad Younis Prof.Dr. Samia Rashed Prof.Mona Nasr

4-Diagnostic techniques		1	Prof. Ali El-Said Ali Prof. Azza El-Hamshary Prof.Maged Nagaty
5-Protozoology(Intestinal, Urogenital, Blood and Tissue).		4	Prof. Karim Fetouh Abdallah Dr. Khaled Gaith Dr. Maysa Ahmad Eraky
6-Immunology and Molecular Parasitology		1	Prof. Amany El-Fakahany
7-Entomology		4	Prof. Ibrahim A. El-Haiwan Prof.Dr. Ibrahim Maged Nagaty. Dr. Maysa Ahmad Eraky

- **Percent of specified topics actually covered (> 90%)**

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2- Teaching and learning methods:

Method specified	Applied or not	Comments
1- lectures	+	
2- Practical	+	
3- Tutorials	+	
4- Assignments	+	

3- Student assessment:

a- Methods of assessment

Method specified	Total Marks (% of Total Marks)	
	Specified	Actual
1- Written examination	75	75
2- Oral examination	15	15
3- Practical	30	30
4- Mid year and others	30	30
Total	150	150

- Justify any deviation from specified

b- State the rules applied for the selection of the examination committee.
Two professors in addition to head of the department.

State the names of the members of the examination committee.

Prof. Dr Amany farouk El Fakahany

Prof.Dr Samia Rashed.

Prof.Dr Mona Nasr

c- State the involvement of the external evaluator in:

- The match between the examination and the topics taught. Very good.
- The existence of grading criteria in examination sheets Exists
- The allocation and distribution of marks and weighting Present
- Effectiveness of the overall assessments in measuring the achievement of the intended learning outcomes (ILOs). Highly effective

4- Facilities and teaching materials:

Facilities & Teaching Materials	Totally Adequate	Partially Adequate	Inadequate	Impact on Delivery of the course Or achieving ILOs
1- Lecture halls		√		
2- A-V aids			√	
3- Laboratories	√			
4- Equipments		√		
5- Specimens			√	
6- Library		√		
7- etc				

Identify inadequacies, together with any problems in the delivery of the course or achieving the ILOs.

5- Administration constraints:all the following

State any administrative constraints related to teaching and learning e.g. lack of:

- Some facilities or funds
- Teaching aids
- Site visits
- Qualified personnel for laboratory and administration
- Management problems or regulations, which impeded the delivery of the course and the achievement of the ILOs.

6- Results of course evaluation by students:

- Method used e.g. Questionnaires.
- 50% of the students agreed that satisfied by the way of exam.
- 95% of the students found that the practical course help them to acquire some research skills and getting information independently from the net
- 37% of the students agreed that the lecturers suggested some references or Web sites used for getting medical information
- Response to any criticisms by the faculty members delivering the course, together with their proposals for dealing with those issues.

7- External evaluator's comments:

- State the issues raised by the external evaluator
- Responses from the faculty members delivering the course, together with their proposals for dealing with those issues.

8- Course enhancement:

a- Previous Action Plan

Specified Action	Status Completed or Not	Reasons for non-completion
1- Using Data show in Practical lessons	Not completed,	the device still un available
2- introduce concept of self education	Not completed,	Publishing of electronic book

Write the issues not handled from those raised in the previous report and the reasons for overlooking such issues.

b- Action plan for program enhancement over the next academic year (2010 – 2011):

Action Required	Completion date Or Time Schedule	Person Responsible
1- Using Data show in Practical lessons	2011	Faculty leaders
2- Publishing of electronic book	2010	Electronic education unit

- **Add actions not completed in the previous action plan.**
- **The action plan is fundamental to the success of the quality system.**
- **It appears at the end of the report, because it is the result of all of prior analysis.**
- **Enhancement can only take place if issues are identified and then acted upon and resolved.**
- **The action plan identifies the issues, prioritizes them and dictates the necessary action to be taken.**
- **It is also clearly places the responsibility for the implementation of the action and the resolution of the associated issues, in a given time scale on named individuals.**

Course Coordinator: Prof.Dr /Amany Farouk Mohamed El Fakahany.

Signature Prof.Dr /Amany Farouk Mohamed El Fakahany.

Date: / / 200