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# UNIVERSITY DEVELOPMENT CENTER

### Template for Course Specifications 2015-2016

**Faculty:** Medicine

**Department:** Medical Parasitology

#### **Course Specifications**

Programme(s) on which the course is given: M.B.B.ch Major or minor element of programmes: major

Department offering the programme : Faculty of Medicine

Department offering the course: Medical Parasitology Department

Academic year / level: 3<sup>rd</sup> year medical students

Date of specification approval: 4/2016

A- Basic information

Title: Medical Parasitology Code: PAR

Lecture: 2 h Tutorial ½ h Practical 2 h Total: 4½ h (hour/week)

Total hours: 120 hours

#### B- Professional Information

#### 1 - Overall Aims of Course

The main aim of medical parasitology course is to provide the student with:

- -Knowledge essential for the general practitioner related to parasites of medical significance regarding their biology and life cycle; host parasite relationship; environmental and host factors regulating parasitic diseases transmission pattern and how to prevent it; parasites causing alternation in the structure and function of human organs and the different methods of management and control of parasitic diseases.
- <u>Skills and attitude</u> of observation, interpretation and integration of data needed to diagnose human parasitic infections.

### 2 – Intended Learning Outcomes of Course (ILOs)

## a- Knowledge and Understanding

- **a.1.** Describe the morphological characteristics, life cycles, methods of transmission of medically important helminthes.
- **a.2.** Recognize the morphological characteristics, life cycles, methods of transmission of medically important Protozoa.
- **a.3.** Describe the morphological characteristics, life cycles and recognize diseases caused or transmitted by medically important Arthropods.
- **a.4**. Illustrate the geographical distribution of important parasites.
- a.5. Explain how parasites harm their hosts and the major immunological responses underlying this.
- **a.6.** Discuss clinical picture associated with parasitic infections.
- **a.7.** List the different diagnostic techniques for detecting parasites.
- a.8. Describe the plan of treatment of each parasitic disease.
- **a.9**. List the preventive measures to avoid parasitic infections..

#### **b- Intellectual Skills**

- b1- Interpret different clinical presentations and correlate them to suspected parasites
- b2 Choose the suitable diagnostic techniques concerning the parasitic problems encountered (microscopy, serology or molecular.. etc)
- b3- Differentiate and compare similar stages of different parasites.
- b4- Plan a control program for a particular parasitic disease

#### c-Professional and Practical Skills

c1- Manage infectious material in a lab and apply the proper measures of infection control

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- c3 Elicit findings in mounted slides and identify different parasites
- c3- Elicit findings in laboratory specimens.
- c4- Interpret the results of examination of parasitic specimens.

#### **D-General and Transferable Skills**

- d1 Retrieve recent data from web sites
- d2 Acquire presentation skills
- d3 Work productively in a team.
- d4 Communicate effectively and respectively with colleagues, supervisors and staff members

# 3 – Contents

Topic	No. of	Lecture	Tutorial/Practical
	hours		
Introduction	3	2	1
Trematodes		7	8
<ul> <li>Liver fluks</li> </ul>	6		
<ul> <li>Heterophyes + lung fluks</li> </ul>	4		
<ul> <li>Schistosomes</li> </ul>	5		
Cestodes		5	6
Diphyllobothrium	1		
<ul> <li>Sparganosis</li> </ul>	2		
• Taenia	1		
• cysticercosis	2		
Hydatid disease	2		
Coenurosis	1		
Hymenolepis	1		
• Dipylidum	1		
Nematodes		12	16
Ascaris+ Toxocara	5		
Hook worms + Enterobius	5		
• Strongyloides + Larva Migrans	5		
• Trichuris+capillaria	5		
Trichinella	3		
Filaria	5		
Protozoa		16	16
Amoeba	10	10	10
• flagelates	10		
<u> </u>	10		
<ul><li>Apicomplexia</li><li>Cilliates</li></ul>	2		
	<del>  -</del>	10	11
Arthropods	7	10	
• Insecta	7		
• Archnida	7		
Crustacea  Improved by a fragacitic discasses.	2	2	
Immunology of parasitic diseases.  Zoonoses	1	1	
Nosocomial and opportunistic parasitic	1	1	
infections	1	1	
Molecular parasitology	2	2	
Laboratory techniques	4	2	2
Laboratory techniques	T	<u> _</u>	<i>≟</i>

### 4 – Teaching and Learning Methods

- 4.1- Lectures.: small group teaching
- 4.2- Practical lessons
- 4.3- Tutorial sessions after the practical lessons
- 4.4- Enhancing self learning of students (students' presentations)

# <u>5 – Student Assessment Methods :</u>

	A			В		C			D												
	A1	A2	A3	<b>A4</b>	A5	<b>A6</b>	A7	<b>A8</b>	A9	B1	<b>B</b> 2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
Written Exams: (Short Essays)	✓	✓	<b>√</b>	✓	✓	✓	✓	✓	<b>√</b>	✓	✓	✓	<b>√</b>								
Written Exams: (MCQ)	<b>✓</b>	✓	<b>✓</b>	✓	<b>√</b>	✓	<b>✓</b>	✓	<b>√</b>	✓	✓	✓									
Structured Oral Exams	<b>√</b>	✓	<b>√</b>	✓	✓	✓	✓	✓	✓				✓								
Objective Structured Practical Exams (OSPE)	<b>✓</b>	✓	<b>✓</b>							✓	✓	✓			✓	✓	✓				<b>✓</b>
Student presentation														✓				✓	✓	✓	✓

#### **Assessment Schedule**

Assessment 1 Mid Term exam: at the end of the 1<sup>st</sup> term
Assessment 2 Final written exam: at the end of the year
Assessment 3 Structured Oral exam: at the end of the year

Assessment 4 Objective Structured practical exam: at the end of the year

Assessment 5 Semester work (student presentation) and log book

Weighting of Assessments (Mark+ percentage)

Mid-Term Examination	(25 marks )	16.7%
Final-Term Examination	75 marks	50%
MCQs	25 marks	33%
Short essay questions	50 marks	67%
Structured Oral Examination	15 marks	10%
Objective Structured Practical Exams (OSPE)	30 marks	20%
Semester work and log book	5 marks	3.3%
Total	150 marks	100%

### 6 – List of References

6.1- Course Notes 1- Practical notes

2- MCQ and clinical cases notes

6.2- Essential Books (Text Books) Department book

Clinical Parasitology . A Practical Approach, 2013

6.3- Recommended Books a-Basic clinical Parasitology (Brown and Neva)

b- Colored Atlas of Parasitology

c- Medical Parasitology (Markell, vogue, and John)

d- Tropical medicine and Parasitology (peters and Gills)

6.4- Periodicals, Web Sites, ...etc -Parasitology today (Trends in Parasitlogy) Journal.

- Advanced pubmed web sites.

- CDC website.

# 7 - Facilities Required for Teaching and Learning

- 1- Microscopes (binocular).
- 2- Microscopic slides.
- 3- Data-show projector.
- 4- Smart board.

# **Course ILOs matrix**

# a. Knowledge and Understanding

	a1	a2	a3	a4	a5	a6	a7	a8	a9
Introduction	<b>✓</b>	✓	✓	✓	✓	✓	✓	✓	✓
Trematodes	<b>✓</b>			✓					
Cestodes	✓			✓					
Nematodes	<b>✓</b>			✓					
Protozoa		✓		✓					
Arthropods			✓	✓					
Immunology of							✓		
parasitic diseases.									
Zoonoses									✓
Nosocomial and									✓
opportunistic parasitic									
infections									
Molecular							✓		
parasitology									
Laboratory techniques									✓

### **b. Intellectual Skills:**

	b1	b2	b3	b4
Introduction				✓
Trematodes	✓	✓	✓	✓
Cestodes	✓	✓	✓	✓
Nematodes	✓	✓	✓	✓
Protozoa	✓	✓	✓	✓
Arthropods	✓	✓	✓	✓
Immunology of parasitic diseases.	✓	✓	✓	✓
Zoonoses	✓	✓	✓	✓
Nosocomial and opportunistic parasitic	✓	✓	✓	✓
infections				
Molecular parasitology			✓	✓
Laboratory techniques			✓	✓

### c. Professional and Practical Skills

	C1	C2	C3	C4
Introduction				
Trematodes		✓	✓	$\checkmark$
Cestodes		✓	✓	✓
Nematodes		✓	✓	✓
Protozoa		✓	✓	✓
Arthropods		✓	✓	✓
Immunology of parasitic				
diseases.				
Zoonoses				✓
Nosocomial and opportunistic				
parasitic infections				
Molecular parasitology			✓	<b>√</b>
Laboratory techniques	<b>✓</b>		✓	✓

## d- General and Transferable Skills

	D1	D2	D3	D4
Introduction			✓	
Trematodes	$\checkmark$			
Cestodes				
Nematodes	$\checkmark$			
Protozoa	✓			
Arthropods	$\checkmark$			
Immunology of parasitic				
diseases.				
Zoonoses	$\checkmark$	✓	✓	
Nosocomial and	$\checkmark$		✓	
opportunistic parasitic				
infections				
Molecular parasitology	$\checkmark$			
Laboratory techniques	$\checkmark$	$\checkmark$	$\checkmark$	✓

Course Coordinator: Dr. Nora Ibrahim

Head of Department: Prof. Dr. Hala Ahmed Elnahas