



Faculty of Medicine
Quality Assurance Unit



Assiut University
Faculty of Medicine

Parasitology

Course Specification

Code: AMED 013

Third year of M.B.B.Ch. Program
2016-2017



University: Assiut
Faculty: Medicine
Department: Medical Parasitology

1- Basic course information

Course title: Parasitology **Code:** Amed013
Academic year / Level: Third year
Program on which the course is given: M.B.B.Ch. program
Department offering the course: Department of Medical Parasitology
Lecture: 60 hours **Tutorial/Practical: 60**
Total: 120 hours
Date of specification approval: 10-2016

2- Overall aims

- To provide students with adequate knowledge about endemic parasites, national parasitic problems and common parasites worldwide
- To provide student with knowledge concerning biological, epidemiological and ecological aspects of parasites causing diseases to humans
- To enable students to understand the pathogenesis, clinical presentations and complications of parasitic infections
- To enable students to know basic diagnostic features, general outline of treatment and prevention and control of these diseases

3- Intended learning outcomes (LOs)

A- Knowledge and understanding

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

- A1- Describe the morphology and life cycle of parasites of medical importance.
- A2- Illustrate pathogenesis, clinical signs and symptoms and complications of parasitic infection.
- A3- Describe treatment for various parasitic infection and various methods of prevention and control of infection on individual and community levels.
- A4- List common arthropods of medical interest and explain their medical importance and methods of combat.
- A5- Mention the fundamentals of immune reaction and immunodiagnosis of different parasites.

A6. Identify complications associated with manipulation of infectious materials, relevant to parasitology, especially in the hospitals.

A7- Adopt the principles of life long learning.

B- Intellectual skills

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

B1- Comprehend specific symptoms and signs caused by certain parasitic infection

B2- Apply the best laboratory investigation to verify the presence of certain parasite and interpret the clinical and laboratory findings to reach a proper diagnosis

B3- Apply the most suitable method for control of a parasitic infection in the community

B4- Create a plan for differential diagnosis with prioritization of the common possibilities for each parasitic infection

C- Professional and practical skills

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

C1- Examine grossly some parasites and arthropods of medical importance, their larval stages and lesions in different organs in jars.

C2- Examine the microscopic diagnostic morphological structure of adult parasites and their larval stages in fixed stained smears.

D- General skills

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

D1- Use the simple and compound microscopes

D2- Use the sources of information technology (IT) to remain current with the advances in knowledge and practice.

4- Course contents

Topic	No. of Hours	Lecture	Tutorial / Practical
Introduction	4	2	2
Hepatic flukes	4	2	2
Intestinal flukes	6	4	2
Blood flukes & snail intermediate host	4	2	2
Introduction to cestodes and Pseudophyllidae	4	2	2
Taenia sp.	4	2	2
Cysticercosis & Hydatid	4	2	2
Dipylidium & Hymenolepis	4	2	2
Introduction to nematodes & Ascaris	4	2	2
Enterobius & Trichinella	4	2	2
Trichuris & Capillaria & Strongyloides	4	2	2
Hook worms	4	2	2
Filarial worms	4	2	2

Introduction to protozoa & Endamoebidae Giardia & Trichomonas & Balantidium	10	4	6
Trypanosomatidae	8	4	4
Introduction to Apicomplexa & Cryptosporidium & Isospora	4	2	2
Toxoplasma & Sarcocystis	4	2	2
Malaria & Babesia	4	2	2
Introduction to arthropods Mosquitoes	4	2	2
Sand fly & Simulium & Biting midges & Brachycera Musca & Stomoxys & Glossina	4	2	2
Sarcophagidae & Calliphoridae & myiasis	6	2	4
Fleas & Lice & Bugs	6	2	4
Ticks & Mites	4	2	2
Principles of immunoparasitology	2	2	0
Diagnostic parasitological technique	2	2	0
Revision	10	4	6
Total	120	60	60

5- Teaching and learning Methods

1. Lectures

2. **Practical sessions:** Use of Data show to explain the diagnostic morphology of different parasites in each stage and exposing some clinical picture of some parasitic disease to be discussed in case study sessions.

3. **Office hours:** (Students were asked to produce mini-card about different parasitic stages and other were asked to arrange a poster about different parasite life cycle or disease).

4-E-Learning system interactive discussions.

Facilities required for teaching and learning

Projecting microscope

E-Learning

6- Teaching and learning Methods for students with learning difficulties:

1- Lectures

2- Practical sessions

4- Office hours

5- Special classes outside the teaching schedule

7- Student assessment

A- Methods

- 1- M.C.Qs to assess knowledge and understanding and intellectual skills (a1-a7, b1-b4)
- 2- Practical exam to assess professional, practical and transferable skills (c1-c2, d1)
- 3- Written essay exam to assess Knowledge and intellectual skills (a1-a7, b1-b4)
- 4- Oral exam to assess Knowledge and understanding and intellectual skills (A1-a7, b1-b4)

B- Assessment schedule

Assessment 1: Mid term examination (MCQ and practical) by the end of the 4th month.

Assessment 2: Final Practical examination by the end of the year

Assessment 3: Final written (essay) examination by the end of the year

Assessment 4: Final Oral exam by the end of the year

C-Weighting of assessments

Method of assessment	Marks	Percentage of total
Final written examination	75	50%
Final oral examination	25	16.6%
Final Practical	20	13.4%
Mid year exam	30	20%
Total	150	100%

8- List of references

1- Department course notes.

2- Essential books:

- Foundations of Parasitology by [Larry S. Roberts](#), [John Janovy](#) (Authors), 9th edition 2013
- Diagnostic Medical Parasitology. Garcia, L.S., 2016, 6th edition ASM Press, Washington, DC.
- Human Parasites: Diagnosis, Treatment, Prevention Authors: Mehlhorn, Heinz (2016).
- A manual of Laboratory and Diagnostic Tests 9th edition 2015
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3- Recommended books

- Colour Atlas of Tropical Medicine and Parasitology By W. Peters & H.M. Gillies.

4- Periodicals and web sites:

- Parasitology
- Journal of Tropical Medicine and Hygiene
- Annals of Tropical Medicine and Parasitology
- American Journal of Tropical Medicine
- Journal of Parasitology
- Journal of Helminthology

web sites

- www.asp.uni.edu
- www.parasitology.org.uk
- www.dpd.cdc.gov/dpdx
- www.cvm.okstate.edu/~users/icfox/htdocs/clinpara/index.htm
- www.parasite.biology.Iowa.edu

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Date: 10-2016