



# KOMAR UNIVERSITY OF SCIENCE AND TECHNOLOGY (KUST)

## Medical parasitology

Course Title	<b>Medical Parasitology</b>		
Course Code	MLS3320	No. of Credits	3
Department	Medical Laboratory Science	College	Science
Pre-requisites Course Code	Introduction to Microbiology and Lab MLS2405C	Co-requisites Course Code	
Course Coordinator(s)	Dr. Abdullah A. Hama		
Email	<a href="mailto:abdullah.hama@komar.edu.iq">abdullah.hama@komar.edu.iq</a>	IP No.	
Other Course Teacher(s)/Tutor(s)	Non		
Learning Hours	Sunday, Tuesday (8:00-9:30) –S1 Sunday, Tuesday (16:00-17:30) –S2		
Contact Hours	Sunday 9:30 – 11:30 Tuesday 15:00- 16:00		
Course Type	Departmental course		
Offer in Academic Year	Spring 2016		

### COURSE DESCRIPTION

The Medical Parasitology course provides an overview of the human parasites and their diseases. Topics include the basic concept of protozoan parasite classes, Sarcodina, Flagellate ciliate, sporozoa and medical helminthology. Special emphasis is placed on topics that related to humans health such as host-pathogen interactions and laboratory diagnostic methods.

### COURSE OBJECTIVES

#### **This course is designed to:**

The aim of the course is to develop basic knowledge and skill to identify the parasites, the diseases caused by them and emphasize on the laboratory diagnosis tool for detection of different stages of parasites.



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## COURSE LEARNING OUTCOMES

After participating in the course, students would be able to:

1. Define and classify the medically important parasites based on morphology, biology and clinical criteria
2. Describe the life cycle, morphology, infective stage stages, diagnosis stage, sources of infection and mode of transmission of each parasite with a view of prevention and control of parasitic diseases.
3. Identify the parasites at different stages of life cycle, their vectors and hosts by microscopic examination.
4. Identify the deferent larval stages of the parasites during life cycle and pathogenesis steps.
5. Apply suitable methods for parasites detection.
6. Use applicable tools for parasitic disease control and prevention.
7. Combine between vectors and parasitic disease to make a good control plan.

## GUIDELINES ON GRADING POLICY

Points	Percentage Scores	Grade
A	95–100	4.0
A-	90-94	3.7
B+	87–89	3.3
B	83-86	3.0
B-	80-82	2.7
C+	75–79	2.3
C	70-74	2.0
C-	65-69	1.7
D+	60–64	1.3
D	55-59	1.0
D-	50-54	0.7
F	0–49	0
I	Incomplete Course Work	
W	Official Withdrawal	



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## COURSE TEACHING AND LEARNING ACTIVITIES

This course is scheduled for 3 hours per week in two equal split over two different days. The complete semester composed of 15 instructional weeks followed by one week of final exam. Instructional methods will include:

- Lectures.
- Class discussions and presentations.
- Written activities.
- PowerPoint presentations and Videos.
- Online learning tools.

## COURSE ASSESSMENT Tools

Assessment Method		Assessment Weight
Quizzes	Students will take six quizzes over the course and the highest five quiz marks will be counted toward your final grade	10%
Class activity	Student's attendance and participation during the lecture including lecture presentation, asking/answering question, etc. will be considered and rewarded throughout the course.	5%
Homework	Students will prepare at least 2-3 reports along the entire course	10
Test (2)	During the course schedule, students will take two tests, one before and one after the Mid-term Exam.	20%
Midterm Exam	There will be no classes during this week. Students will take a central Mid-term Exam organized and supervised by the Exam Committee.	25%
Final Exam	The exam will be close book and no materials are allowed, except those permitted by the exam committee.	30%
<b>Total</b>		<b>100%</b>

**Grading: Passing Grade 65%**



**ESSENTIAL READINGS: (Journals, textbooks, website addresses etc.)**

**Textbooks:**

Name of the Textbook: Parasitology for medical and clinical laboratory professionals

Authors: John W. Ridley

Publisher: Delmar Cengage learn

ISBN: 978-1-4354-4816-2

Year: 2012

**References:**

**1.**Title: Medical Parasitology

Authors: Arora and Arora

Edition: Third

ISBN: 978-81-239-1850-1

Year:2011

**2.** Title: Medical Parasitology

Authors: Abhay R. Satoskar; Gary L. Simon;Peter J. Hotez;Moriya Tsuji

Edition:1<sup>st</sup>

ISBN:978-1-57059-695-7 Library

Year: 2009.

**3.** Title: Medical Parasitology

Authors: Dawit Assefa, Ephrem Kibru, S. Nagesh, Solomon Gebreselassie, Fetene Deribe, Jemal Ali  
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Edition:1<sup>st</sup>

ISBN: 9781570596957

Year: 2004

useful link: <http://www.cdc.gov/dpdx/freeLivingAmebic/dx.html>



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## COURSE POLICY (*including plagiarism, academic honesty, attendance etc*)

### **KUST Academic Policy:**

<http://sar.komar.edu.iq/files/Student%20hand%20Book%202013.pdf>

### **Attendance:**

- Students are expected to attend **all lectures** and must attend **all tests/examinations**, quizzes, and practical exercises.
- There is no make-up work for students who miss classes without official permission.
- Students who have official permission must arrange with the instructor to make-up the missed class/test
- Students are subject to the regulation and policies mentioned in the KUST Student Handbook.
- KUST guidelines for lateness are as follows: Three occasions of lateness count as one absence. You can be considered late after 5 minutes of the lecture time. More than 5 minutes lateness can be considered as absent but you may be allowed to sit in the class.

## GUIDELINES FOR SUCCESS

1. Work both independently and in groups of your peers, who can help you understand the course material.
2. Attend every lecture, discussion
3. Make every effort to interact with your class partner(s).
4. Try to stay active throughout the class period.
5. Don't hesitate to ask questions in class.
6. Put your fair share of efforts in preparing the term projects and the term paper.
7. Be cooperative at all times.
8. Spend at least 2-3 hours each day for studying and doing homework.



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Course Schedule					
Week	Lec.	Date	Topic	chapter	Assignments
1	1a	Sunday	Introduction to medical parasitology	1	
	1b	Tuesday	Protozoa and medically important classes		
2	2a	Sunday	Protozoa- Rhizopoda, Entamoeba histolytica	2 and 3	
	2b	Tuesday	Protozoa- Rhizopoda, Nonpathogenic amoeba		Quiz1
3	3a	Sunday	Protozoa – Rhizopoda, Free living pathogenic amoebae	3 and 12	
	3b	Tuesday	Protozoa- Ciliates, Blantidium coli		
4	4a	Sunday	Protozoa- Flagellates, Giardia lamblia		Quiz 2
	4b	Tuesday	Protozoa- Flagellates Trichomonas (urogenital flagellate)		
5		Sunday	<b>Test: Lecture 1a- 4b</b>		
	5a	Tuesday	Protozoa- Kinetoplastida, Leishmaniasis	4 and 12	
6	6a	Sunday	Protozoa- Kinetoplastida, Trypanosomes		
	6b	Tuesday	Protozoa- Sporozoa, Plasmodium (Malaria.)		Quiz 3
7	7a	Sunday	Protozoa- Sporozoa, Toxoplasma gondii	3 and 12	
	7b	Tuesday	Protozoa- Sporozoa, Cryptosporidium sp.		
<b>Midterm Exam</b>					<b>No class</b>
8	8a	Sunday	Introduction to medical helminthology	5	
	8b	Tuesday	Platyhelminthes- Cestodes ,T. sagenata and T. solium	7 and 12	
9	9a	Sunday	Platyhelminthes- Cestodes, Hymenolepis nana H. diminuta		Quiz 4
	9b	Tuesday	Platyhelminthes- Cestodes, Echinococcus granulosus and E. multilocularis		
10	10a	Sunday	Platyhelminthes- Cestodes Diphyllbothrium latum	8	
	10b	Tuesday	Platyhelminthes- Trematodes , Liver and Lung Flukes		Quiz 5
11	11a	Sunday	Platyhelminthes- Trematodes, Blood Flukes	6	
	11b	Tuesday	Nematoda- Entrobis vermicularis and Ascaris lambricoid lumbricoides		
12	12a	Sunday	Nematoda- Strongyloides stercoralis		
		Tuesday	<b>Test: Lecture 8a - 12b</b>		
13	13a	Sunday	Nematoda- Hook worm and Whipworm	6	
	13b	Tuesday	Nematoda- Filaria and filariasis		
14	14a	Sunday	Medically important arthropodes	10 and 11	Quiz 6
	14b	Tuesday	Arthropoda- Insects, medical important vectors		
15		Sunday	Revision week		
		Tuesday			
<b>Final Exam</b>					

**Hall: 112**