

Umm Al-Qura University College of Applied Medical Sciences Laboratory Medicine Department



Course Overview - Diagnostic Parasitology Program (Female Students)

Course code	1701363-6				
Course title:	Documentation Skill for Diagnostic Parasitologists				
Level/semester:	3 rd year / 1 st and 2 nd semesters				
Credit hours:	6CU (6 hours)				
	Theoretical lectures / Thursday :10 am:12 pm				
	Laboratory lectures/ Monday 01 pm : 03 pm ; Wednesday 08am:10 am; Wednesday				
	10am:12 pm				
Course	Dr. Amr M. Mohamed – <u>amamohamed@uqu.edu.sa</u>				
Coordinator					
Instructors	Name	Office hours	Contact #	E.mail	
	Dr. Sabah A. Ibrahim	Monday (08:00-10:00) AM	00966599071881	saibrahim@uqu.edu.sa	
	Dr. Nawras M. Mowafy	Monday (08:00-10:00) AM	Ext.4406	nmmowafy@uqu.edu.sa	
	Dr. Anhar Elsayed	Monday (08:00-10:00) AM	Ext.4409	aasayed@uqu.edu.sa	

Course Overview

This course is designed to give, the third year Laboratory Medicine students, a basic knowledge about all aspects of parasitic infections; distribution, functional morphology, life cycle, modes of infection, pathogenesis, clinical picture and control. The course also affords detailed information about the diagnosis of parasitic diseases stressing on diagnostic stages of the common parasites and different diagnostic techniques. The student will gain enough knowledge and skills to do a proper, professional and real-time diagnosis of parasitic infections.

Course Objectives:

By the end of this course students will able to:

- 1) Identify and list the major parasitic infections in man.
- 2) Determine the best method to use in diagnosing a parasitic infection.
- 3) Apply different laboratory diagnostic techniques in parasitology.
- 4) Correlate parasitic infection with pathogenesis, pathology, signs and symptoms.
- 5) Know the mode of infection for each parasite.

List the different measures that can be applied to control a parasitic disease.

Course Description

1st Semester

W. #	Lectures Topics	Laboratory Topics	Quiz	Date
1	Introduction to Parasitology			8/11/1435
2	Introduction to Platyhelminths & Liver and Lung Flukes	Introduction to Parasitology Laboratory		15/11/1435
3	Intestinal Flukes	Study of Intestinal, Liver and Lung Flukes		22/11/1435
4	Blood Flukes	Study of Schistosomes		29/11/1435
5	Intestinal Cestodes	Indirect Haemaggltination Assay for Schistosomiasis		22/12/1435
6	Intestinal Cestodes (Cont.)	Study of Cestodes		29/12/1435
7	Tissue Cestodes	Stool analysis (Direct smear – wet mount)	Q1	6/1/1435
8	Introduction to Nematodes	Stool Analysis		13/1/1436
	& Enterobiasis	(Sedimentation Technique)		
9	Enterobiasis (cont.) & Ascariasis	Stool Analysis sis (cont.) & Ascariasis (Floatation Technique)		20/2/1436
10	Hookworms & Trichuriasis	Enterobius sp. and Scotch Tape Technique		27/1/1436
11	Capillariasis Strongyloidiasis & Dracunculiasis	Study of Intestinal Nematodes		5/2/1436
12	Blood & Tissue Nematodes	Kato-Katz Thick Fecal Smear	Q2	12/2/1436
13	Blood & Tissue Nematodes (cont.)	Study of Blood & Tissue Nematodes		19/2/1436
14	Visceral & Cutaneous Larva Migrans	Slides Revision		26/2/1436
15	Practical Exam.			3/3/1436
16				
17/1 8	Final Exam 8			17/3/1436 24/3/1436

2nd Semester

W. #	Lectures Topics	Laboratory Topics	Quiz	Date
1	Introduction to Protozoa	Introduction to Protozoology		TBS
2	Amoebiasis	Study of Intestinal Amoebae		TBS
3	Pathogenic Free Living Amoebae & Balantidiasis	Study of Intestinal & Urogenital Flagellates		TBS
4	Giardiasis & Trichomoniasis	Stool Ova and Parasites (O&P) Exam		TBS
5	Intestinal Sporozoa: Cryptosporidiosis, Cyclosporiasis	Modified Ziehel-Neelsen Technique		TBS
6	Tissue protozoa (Toxoplasmosis)	Study of Intestinal Sporozoa		TBS
7	Blood and Tissue Flagellates (Cutaneous & Mucocutaneous Leishmaniasis)	Serological Techniques in Parasitology & Immuno-diagnosis of Toxoplasmosis	Q1	TBS
8	Blood and Tissue Flagellates (Visceral Leishmaniasis)	Molecular Techniques in Parasitology (PCR)		TBS
9	Blood and Tissue Flagellates (Trypanosomiasis)	Study of Blood & Tissue Flagellates		TBS
10	Malaria	Thick & Thin Blood Films Techniques		TBS
11	Malaria (Cont.)	Study of <i>Plasmodium spp.</i> & Est. of Parasitaemia Level		TBS
12	Babesiosis	Quantitative Buffy Coat Technique (QBC)	Q2	TBS
13	Scabies & Myiasis	Slides Revision		TBS
14	Practical Exam.		TBS	
15/16				
17/18		Final Exam		TBS

TBS: To be specified at the beginning of the 2nd semester

Evaluation:

Schedule of Assessment Tasks for Students During the Semester				
Assessments	Assessment task	Week due	Proportion of Final Assessment	
1	Laboratory reports	Every Week	5 %	
2	Quiz	Designated weeks	25%	
3	Assignment	At the end of each semester	5 %	
4	Final practical exam	15 th Week	25%	
5	Final written examination	17/18 th Week	40 %	

Learning Resources

1. Required Text(s)

Diagnostic Medical Parasitology, Lynne Garcia. Pub by ASM Press; 5th edition (November 30, 2006). ISBN-10: 1555813801, ISBN-13: 978-1555813802.

2. Essential References

- Medical Parasitology. A Practical Approch, Elizabeth A. Zeibig. Pub by Saunders; 1st edition (January 15, 1997). ISBN-10: 0721651879, ISBN-13: 978-0721651873.
- Atlas of Human Parasitology, Lawrence Ash, Thomas Orihel. Pub by American Society for Clinical Pathology; 5th Edition (January 31, 2007). ISBN-10: 0891891676, ISBN-13: 978-

Good Luck