Course Specifications

General Information

Course name	Paracytology
Course number	BIOL3318
Faculty	
Department	
Course type	College Needs
Course level	3
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - Knowledge of parasitic diseases; causative parasites (helminthes,protozoa and arthropods), vectors of disease transmission and their pathophysiology.

2 - Skill of using the microscope efficiently to identify different helminthic,protozoal and arthropods stages especially the diagnostic and invective stages.

3 - Ability of diagnosis and management of parasitic diseases in an independent manner.

4 - Basic knowledge of epidemiological and environmental factors and local endemicity of parasites.

5 - Ability to design a simple control and prevention strategy and offer advice for protection against communicable parasitic diseases.

6 - Skills of search through the web and team work to conduct and present are search assignment in the area of “Medical Parasitology”.

Intended Learning Outcomes

Knowledge and Understanding	* Define terms related to medical parasitology. * Classify parasites of medical importance in its broad scientific taxonomic positions and their habitat in the human body. * List the Definitive host, intermediate host and reservoir host if found in case of parasitic infections and zoonosis.
Intellectual Skills	* Interpret the geographical distribution for areas where parasites are found (especially endemic areas) as a useful information in the patient history. * Select appropriate diagnostic methods (direct and indirect) of different parasites according to life cycle. * Correlate the structural and functional alteration due to different parasites with the clinical picture of diseases caused by them in terms of the host parasite relationship. * Construct a simple control and prevention strategy for different parasitic infections in relation to the weak links in the life cycle of the causative parasite.
Professional Skills	* Identify different stages of parasites using simple or compound microscope or diagrams and comment on diagnostic, infective stages or vectors of disease transmission. * Identify gross samples of some parasites (isolated or within human tissue). * Practice basics of safety procedures during laboratory classes. * Examine to identify pathogenic snails (intermediate hosts of some parasites) that can be of epidemiological importance.
General Skill	* Respect superiors and colleagues during practical classes and small group discussions. * Gather, organize and appraise information including the use of information technology where applicable. * Present the medical information in written, oral and electronic forms. * Communicate ideas and arguments effectively.

Course Contents

1 - Introduction
2 - Protozoa (Amoebae sp., Trichomonasvaginalis, Leishmania sp., Trypanosoma sp. Plasmodium sp., Toxoplasma gondii, Cryptosporidium parvum).
3 - {Nematodes (Ascarislumbricoides, Strongyloidesstercoralis, Hook worm sp., Trichuristrichiura, Wuchereia sp., Loa loa, Onchocerca volvulus, Dracunculus.)
4 - (Diphyllobothriumlatum, SparagnosisTaenia sp., Cysticercosis, Echinococcus sp., Hymenolepis nana, Dipylidiumcaninum).
5 - Trematodes (Fasciola sp., Heterophysheterophys, Schistosoma sp.).}
6 - Laboratory techniques of stool, urine and blood Examination.

Teaching and Learning Methods

1 - Lecture by teacher.
2 - Class discussion.
3 - Presentation by students
4 - Presentation by Projector "power point slides"
5 - Quizzes

Teaching and Learning Methods for the Disabled Students

1 - Revision lectures and tutorial classes outside schedule.
2 - Assignments.

Students Assessment

Assessment Method	TIME	MARKS
First hour exam	60minutes	20
Second hour exam	60minutes	20
Attendance and discussion		10
Final exam	120minutes	50

Books and References

Course note	Department lecture notes.
Essential books	Foundations of Parasitology, Roberts, Larry; Janovy, Jr., John 8th ed. 2009McGraw-Hill Higher Education Columbus. Medical parasitology Markell E and Vogue J. 9th ed. 2006 Saunders, Ltd,Toronto
Recommended books	Basic clinical parasitology, Franklin A. Neva, Harold W. Brown.6th ed. 1994Appleton & Lange in Norwalk Mansons Tropical Diseases, Cook GC, 22nd ed. 2009 Saunders, Ltd,Toronto
Other References (Periodical, web sites, ... etc.)	http://www.med-chem.com/para/index.htm http://pathmicro.med.sc.edu/book/parasit-sta.htm http://www.dpd.cdc.gov/dpdx/HTML/Para_Health.htm http://www.malaria.org/

Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
Introduction 2) Protozoa (Amoebae sp., Trichomonasvaginalis, Leishmania sp., Trypanosoma sp. Plasmodium sp., Toxoplasma gondii, Cryptosporidium parvum).	1-5	Define terms related to medical parasitology.	Interpret the geographical distribution for areas where parasites are found (especially endemic areas) as a useful information in the patient history	Identify different stages of parasites using simple or compound microscope or diagrams and comment on diagnostic, infective stages or vectors of disease transmission.	Respect superiors and colleagues during practical classes and small group discussions .
Helminthes a. Nematodes (Ascarislumbricoides, Strongyloidesstercoralis, Hook worm sp., Trichuristrichiura, Wuchereia sp., Loa loa, Onchocerca volvulus, Dracunculus.	6-8	Classify parasites of medical importance in its broad scientific taxonomic positions and their habitat in the human body.			
b. Cestodes (Diphyllobothriumlatum, SparagnosisTaenia sp., Cysticercosis, Echinococcus sp., Hymenolepis nana, Dipylidiumcaninum).	9-11				
c. Trematodes (Fasciola sp., Heterophysheterophys, Schistosoma sp.) 6. Laboratory techniques of stool, urine and blood Examination.	12-14	List the Definitive host, intermediate host and reservoir host if found in case of parasitic infections and zoonosis.	Select appropriate diagnostic methods (direct and indirect) of different parasites according to life cycle.		