



# Paramedical Program

<b>Specialization</b>	<b>Medical Laboratories</b>
<b>Course Number</b>	<b>020807271</b>
<b>Course Title</b>	<b>Medical parasitology</b>
<b>Credit Hours</b>	<b>(3)</b>
<b>Theoretical Hours</b>	<b>(2)</b>
<b>Practical Hours</b>	<b>(3)</b>



**Brief Course Description:**

This course deals with the most common life style on earth: (parasitism) It is a broad survey of parasites of humans, domestic and wild animals, and marine organisms. It deals with major topics include ecological and evolutionary aspects of parasite-host interactions with emphasis on life cycles, anatomy and physiology of parasites, and immunological, pathological and clinical responses of hosts to parasitic infection. Moreover, it discusses the treatment and control of parasites.

**Course Objectives:**

Upon the completion of the course, the student should be able to:

- 1) To know different definitions in parasitology
- 2) Describe in details the life cycles of parasites.
- 3) To understand the ecological, biological and behavioral aspects of parasitism.
- 4) To recognize the epidemiology and role of parasitic disease on human life and history.
- 5) Be aware of attempts and strategies to control parasites world wide, chemotherapy, molluscicides and general sanitation.
- 6) Demonstrate practical skills in diagnosis of parasitic disease and interpret results.



**Detailed Course Description:**

<b>Unit Number</b>	<b>Unit Name</b>	<b>Unit Content</b>	<b>Time Needed</b>
1	Introduction	-Definitions in parasitology . -Classification of parasites.	
2	protozoa	<ul style="list-style-type: none"> <li>-1)Pseudopods: a) the pathogenic amoeba: <i>Entamoeba histolytica</i></li> <li>b)The non pathogenic amoeba: i.e., <i>Entamoeba hartmanni</i>, <i>Entamoeba coli</i>. <i>Entamoeba boski</i>.</li> <li>-2)The flagellates: a) (<i>Giardia lamblia</i>, b) <i>Chilomastix mesnili</i>,</li> <li>c)<i>Trichomonas</i>: 1)<i>T. hominis</i>, 2) <i>T. vaginalis</i> 3)<i>T. Tenax</i>.</li> <li>-3)The ciliates: (<i>Balantidium coli</i>)</li> <li>-4)The apicomplexa or sporozoa ( <i>Plasmodia</i> spp.).</li> <li>-The hemoflagellates (<i>Trypanosoma &amp; Leishmania</i> spp.)</li> <li>-The coccidia (<i>Toxoplasma gondii</i>)</li> <li>-The opportunistic amoeba (<i>Naegleria &amp; Acanthamoeba</i>)</li> </ul>	
3	Helminthes(Worms)	<ul style="list-style-type: none"> <li>-1)The Trematodes(flukes)=Flat Worms</li> <li>- a)Intestinal flukes <i>Fasciolopsis buski</i></li> </ul>	





		<p>-b)The liver flukes a. <i>Fasciola hepatica</i></p> <p>-c)The blood flukes a. <i>Schistosoma</i> spp.</p> <p>-d)The lung flukes:<i>Paragonimus westermani</i></p>	
		<p>2)The Cestodes:a) <i>Diphyllobothrium latum</i>, b) <i>Taenia</i> spp., c) <i>Echinococcus granulosus</i></p> <p>3)The Nematodes:a)The intestinal nematodes: <i>Ascaris lumbricoides</i>, <i>Enterobius vermicularis</i>, <i>Strongyloides</i>, <i>Trichuris tricchura</i> b) Hook worms: <i>Ancylostoma &amp; Necator</i>, -Blood and tissue nematodes: the filariae:a)Guinea worm(<i>dracunculus Medensis</i>) b) <i>Trichinella Spiralis</i></p>	
4	Arthropods and ectoparasites	<p>1)Classification, 2)Medical conditions related to arthropods: -fly related conditions -mosquito related conditions -lice related conditions -bug related conditions -Tick related conditions -Mite related conditions</p>	



**Evaluation Strategies:**

Exams		Percentage	Date
Exams	First Exam	20%	--/--/----
	Second Exam	20%	--/--/----
	Practical Exam	10%	--/--/----
	Final Exam	35%Theory 15%Practical	--/--/----

**Teaching Methodology:**

- ❖ Lectures
- ❖ Slides and posters
- ❖ Practice inside labs

**Text Books & References:****Reference**

- 1- Diagnostic Medical Parasitology . lynnes . Garcia .6th ed. 2016.ASM Press.
- 2- Parasitology: An Integrated Approach Alan Gunn and Sarah Jane pitt. 1st ed. 2012. Wiley – Black well.
- 3- Parasitology: A conceptual Approach Eric s. loker & bruce V.HOSKIN . 1st ed. 2015.Taylor &Francis.

