# Parasitology Course Specifications

### Second year of MD. Program

Department offering the course: Parasitology and Mycology

Course coordinator: Professor Hossein Yousofi Darani

#### **Overall aims:**

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

# **Intended learning outcomes:**

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

Describe the morphology and life cycle of parasites of medical importance

Describe pathogenesis, clinical signs and symptoms and complications of parasitic infections

Mention treatment, the methods of diagnosis, prevention and control of infection on individual and community levels

#### Intellectual skills

By the end of the course, students should be able to: Interpret specific symptoms and signs caused by certain parasitic infection

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

Choose the most suitable method for control of a parasitic infection in the community

#### Professional and practical skills

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

1-Use the simple microscopes

2- identify the microscopic morphology of parasites and their larval stages in fixed stained smears

### **Times:**

**Lectures: Mondays: 8-10** 

**Practical sessions: Mondays 10-12** 

## **Student assessment Methods:**

- 1-Multiple choice questions to assess Knowledge and understanding and intellectual skills
- 2- Practical exam to assess professional and practical skills

#### **Assessment schedule:**

- 1-Midterm exam after the seventh week.
- 2-Final exam according the university exams schedule.
- 3-Practical exam: following the last session
- 4-Quizzes During the academic Term

#### Weighting of assessments:

Midterm exam: 6/20

Final exam: 8/20

Quizzes: 2/20

Practical exam: 4/20

## **References:**

Markell, John, Krotoski, Medical parasitology, 1999; W.B. Saundders Company, USA

# **Course contents (lectures):**

Row	Date	Time	Title	Professor
1	31/6	8-10	Introduction to parasitology, Terms and definitions	Dr. Yousofi
2	7/7	8-10	Ascaris lumbricoides, Hook worms, Strongyloides stercoralis	Dr. Yousofi

3	14/7	8-10	Trichostrongylus spp., Trichinella spiralis, Trichuris trichiura, Entrobious vermicularis	Dr. Yousofi
3	21/7	8-10	Larva migran, Filaria	Dr. Yousofi
5	28/7	8-10	Termatoda, Fasciola hepatica and other hepatic flukes, Intestinal flukes, Paragonimus westrmani	Dr. Yousofi
6	5/8	8-10	Schistosoma, Cestoda, Taenia saginata and taenia solium	Dr. Yousofi
7	12/8	8-10	Echinococcus spp., Dipylidium caninum, diphylibothrium latum, Hymenolepis nana	Dr. Yousofi
8	19/8	8-10	Introduction to protozoa, Entamoeba spp, other Eomeba	Dr. Pestechian
9	26/8	8-10	Giardia lambilia, Trichomonas vaginalis	Dr. Pestechian
10	3/9	8-10	Intestinal sporosoa and microspora	Dr. Pestechian
11	10/9	8-10	Leishmania	Dr. Pestechian
12	17/9	8-10	Trypananosma	Dr. Eslami
13	24/9	8-10	Toxoplasma	Dr. Eslami
14	1/10	8-10	Plasmodium spp.	Dr. Eslami
15	7/10	8-10	Arthropoda	Dr Abtahi
16	14/10	8-10	Arthropoda	Dr. Abtahi

# **Course contents (Practical):**

Row	Date	Time	Practical works	Groups	Professor
	Monday				
1	12/8	2-4	Laboratory diagnosis of parasitic diseases	1	Dr. Yousofi
2	19/8	2-4	Different stages of some Nematoda	2	Dr. Eslami
			(demonstrations)		
3	26/8	2-4	Different stages of some Termatoda and	1	Dr. Eslami
			Cestoda (demonstrations)		
5	10/9	2-4	Intestinal protozoa (demonstrations)	1	Dr. Pestechian
7	24/9	2-4	Blood and tissue protozoa (demonstrations)	1	Dr. Pestechian
9	1/10	2-4	Arthropoda (demonstrations)	1	Dr. Abtahi