Office for the Development of Medical Education, School of Medicine

In collaboration with The Office of Education and Research, International Affairs

Shahid Beheshti University of Medical Sciences

Department of Medical Parasitology, Mycology and Entomology

Course Plan of Medical Parasitology for the MBBS Students

Field Description			
Course Code	128		
Course Name	Medical Parasitology		
Course Phase	Semester		
Prerequisite Courses	-		
Course Type	Theoretical	Practical	Total
Educational unit	1/6	0.4	2
Instructional Hours	28 hours	12 hours	42 hours
General Objectives	It is expected that at the end of this course, the students will be familiar with the parasitic agents that cause human diseases. They will be known with important pathogenic protozoan and helminthic parasites. They learn about morphology, pathogenesis, clinical symptoms, life cycles, transmission routes, reservoirs, hosts of the parasitic disease as well the role of the arthropods as biological and mechanical vectors of different microorganisms. The students will be aware of the geographical distribution of each of the parasitic infections, their incidence and prevalence, especially in different regions of the world. Also, they know the methods of prevention and control of each of the parasitic diseases.		
Course Description	In this course, students are familiar to etiological factors, life cycle, transmission route, pathogenesis, sampling methods, laboratory test and diagnosis, methods of prevention and control of parasitic and arthropod - related diseases (including their clinical cases).		
Theoretical Parasitology Content	1- General Parasitology 2- General Protozoology 3- Intestinal and urogenital protozoan parasites 4- Common intestinal protozoa in human Such as: Amoeba, Giardia, Trichomonas, Balantidium, coccidian, some important free living amoeba and etc. 5- Blood and Tissue Protozoal diseases 6- Common blood and tissue Parasites in human Such as: Toxoplasma, Leishmania, Plasmodium and etc. 7- General Helminthology 8- Intestinal and tissue Trematodes 9- Intestinal and tissue Cestodes 10- Intestinal and tissue Nematodes 11- Common Helminthes in human Such as: Fascilola, Hydatid cyst, Taenia, Ascaris, Enterobious, Necator, Ancylostome and etc. 12- Introduction to Arthropods 13- Common medically important arthropods belonging to different orders like Diptera, Phthiraptera, Siphonaptera, Acarina, etc. 14- Introduction to vector control methods		

Practical Parasitology Topics	1- Methods of sampling, preparation of microscopic slides and parasites examination methods 2- Microscopic observation of common parasites and arthropods in humans (permanent slides of Protozoan parasites, Helminthes and arthropods).
Responsible Educational Group	Medical Parasitology, Mycology and Entomology

Course Management Responsible	
Name of Course Director	Prof. Ali Haghighi
Contact Number	021-23872564
Email	ahaghighi1338@gmail.com

Course Instructors		
Instructor Name	**Department**	**% Contribution**
Dr. Ali Haghighi	Medical Parasitology, Mycology and Entomology	
Dr. Seyyed Javad Seyyed Tabaei	Medical Parasitology, Mycology and Entomology	
Dr. Soheila Rouhani	Medical Parasitology, Mycology and Entomology	
Dr. Farid Tahvildari	Medical Parasitology, Mycology and Entomology	
Dr. Maryam Niyati	Medical Parasitology, Mycology and Entomology	
Dr. Zohreh Lasjerdi	Medical Parasitology, Mycology and Entomology	
Dr. Maryam Ebrahimi	Medical Parasitology, Mycology and Entomology	
Dr. Reza Saberi	Medical Parasitology, Mycology and Entomology	
Dr. Vahideh Moin Vaziri	Medical Parasitology, Mycology and Entomology	
Dr. Mona Koosha	Medical Parasitology, Mycology and Entomology	
Dr. Niloofar Taghipour	Medical Parasitology, Mycology and Entomology	

Practical Technicians		
Name	**Department**	**% Contribution**
Mrs. Farideh Naderi	Medical Parasitology, Mycology and Entomology	30
Mrs. Mahdieh Mirghafoori	Medical Parasitology, Mycology and Entomology	100
Ms. Shiva Zeinali	Medical Parasitology, Mycology and Entomology	100

Instructional Strategy		
Educational strategy	**Allocated Hours**	**Notes**
Class with a lecture approach	28 hours	
Laboratory training	14 hours (for Each group)	Each group consist of 20 students
Practical review	2 hours (for Each group)	Each group consist of 20 students
Preparing theoretical questions for Midterm and Final exam	30 hours	3 hours for each professors
Preparing practical question and final exam	15 hours	For All professors and Technicians

Theoretical references for the course	
1	Medical parasitology , Markel and Voges, 2006 or 2020
2	Lectures presented in class
3	Medical entomology for students, Mike Service, 5th edition

Student Responsibilities	
1	Attendance at all theoretical classes
2	Active attendance and participation in all practical classes
3	Completing assigned tasks in theoretical and practical lessons, answering questions, conducting experiments and drawing parasite shapes on educational slides in the practical class

Student Assessment Methods	
Assessment Method	**Total score that belongs to this method**
Multiple choice tests	100 multiple-choice questions in two sections: midterm and final exam
Written descriptive test	-
Oral exam	-
Student attendance and participation in the course	Active participation in theoretical and practical classes
Evaluation of student reports	Part of the written exam score by some professors
Practical exam	20 written explanation questions with microscopic observation of slides
Conducting or collaborating in research	-

Other Course-Related Regulations

Students' Attendance Regulations

- ✓ While teacher is teaching (Both in theoretical and practical class), Students should not enter the class and do not leave the class without permission.
- ✓ Moral principles should be observed in practical and theoretical classes.
- ✓ Wearing medical gown is mandatory in the practical classes.
- ✓ Attendance in the practical class will be checked by students' card and being late to the class is considered as an absence.
- ✓ In case of medical absence, International education office (service desk) is responsible to confirm the related medical documents. Medical Parasitology and Mycology group does not accept any medical certificate.
- ✓ In case of being more than 4 absent out of 17 sessions in theoretical class (up to the end of the semester), the student is not allowed to participate in the final exam.
- ✓ In practical class, in case of having more than 2 absences in parasitology course and one absence in mycology course (up to the end of the semester), students are not allowed to participate in the final exam.
- ✓ In case of re-selection of the parasitology or mycology courses due to the absence in the previous semester, attending in new semester is mandatory

Exam Regulation

- ✓ Midterm exam only for theoretical parasitology is possible.
- ✓ Our Department will only consider the students' requests, if it is submitted to the group secretary by the student's representative.
- ✓ The requests for extra score (even 0.5 score), re-exam or etc. will not be accepted in the Department of Parasitology and Mycology under any circumstances. None of the department professors or even the head of the department be able to respond to the personal problems or unrelated requests to the group regulations.
- ✓ Therefore, please do not refer to the group's professors or staffs. You or your representative can only submit any written request to the secretary of the Department.
- ✓ Re-exam is not possible, in case of failing in parasitology or mycology courses. Even in the conditions of having the basic science exam (Oloom-payeh).

Practical exam

- ✓ The practical exam consists **20** microscopic slides: **8** Protozoology, **8** Helminthology,
- ✓ **4** Entomology.
- ✓ Students should Pay attention to each microscope slide and not to write more or less than what is requested.
- ✓ Each parasitology question has 1 score, if it is written complete and correct.
- ✓ In the answer sheet, the scientific name (genus of the parasite and its species) must be written correctly.
- ✓ In addition, the life cycle stage of the parasites (cyst or trophozoite in protozoa, egg, larva or adult in worms or arthropods) must be written completely. For example: *Entamoeba coli* (cyst or trophozoite) or *Strongyloides stercoralis* (egg, larva or adult).

- ✓ If the answer is written incomplete or wrong, the score will be reduced to 0.5 or zero. For example: if it is written incomplete name of the parasites and do not mentioned stage of their life cycle.
- ✓ In case of some parasites that their genus name is enough to write, full score is given. For example, *Acanthamoeba* (cyst or trophozoite).
- ✓ Written complete name of parasites (genus + species, without their life cycle stage for those parasites that have specific stage), Half a mark will be given. For example: *Ascaris lumbricoides* or *Entamoeba coli* or *Strongyloides stercoralis*.
- ✓ If only the stage of life cycle is written (cyst, trophozoite, etc.) and the genus + species of the parasite are not mentioned, the score will be zero.
- ✓ Therefore, if more is written than is asked, students will lose their time to answer the rest of the questions. There are no additional points for additional explanations, but if written incorrectly, the score will be reduced.
- ✓ It is strongly recommended to pay attention to the explanations and educational slides given by the teachers during the practical courses,
- ✓ We recommend to students to draw the microscopic shape of the parasites in the notebook to be learn well as well as to get good score in the final exam.