

## In the Name of God

**Islamic Republic of Iran  
Ministry of Health and Medical Education  
Deputy of Education**

**Medical Mycology  
Master of Science (MSc)**

### Total Course Credits

- Core:20
- Non-core (Elective):4
- Thesis:8

### Program Description

The field of Medical Mycology is a branch of the medical sciences whose MSc graduates learn more about human fungal infections, diagnosis, treatment and prevention of these infections and the importance of fungi from medical and health perspectives.

The graduates help in teaching practical medical mycology to undergraduates, advancing the frontiers of knowledge, and promoting public health by providing laboratory diagnosis of fungal infection and take part in relevant research projects.

The main mission of the course is to train committed, knowledgeable and competent individuals in Medical Mycology.

### Admission Requirements

- Having a Bachelor of Science (BSc) degree in one of the fields of clinical laboratory sciences, microbiology, biology (in microbiology, cellular and molecular, and zoology branches), awarded by one of the home or foreign universities approved by the Ministry of Health, Treatment and Medical Education
- Being eligible for entering the program according to the MSc educational rules and regulations

\*N.B.: These general conditions do not necessarily exclude specific conditions of each institute or university.

### Expected Competencies at the End of the Program

#### General Competencies\*

#### Specific Competencies and Skills

At the end of the program learners will be competent in the following skills:

- Keeping the physical and psychological environment as well as the workplace healthy
- Using specialized equipment
- Working in professional environments

- Handling the bio-signal equipment and data processing
- Interpreting the test results

## Educational Strategies, Methods and Techniques

### Student Assessment (Methods and Types)

- Formative (Quizzes and Midterm Exam)
- Summative (Final Exam)
- Methods of assessment: oral, written, OSLE, and Logbook

### Ethical Considerations\*

\***Note:** The related document(s) can be found at <http://hcmep.behdasht.gov.ir/>

## Tables of the Courses

**Table1.CompensatoryCourses**

Code of Courses	Title of the Course	Credits			Teaching Hours			Prerequisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
01	Medical Information Systems*	0.5		0	9	17	26	
02	Cellular and Molecular biology	2		-	34	-	34	
02	Immunology	2		-	34	-	34	
04	Biochemistry	1	1	2	51	34	85	
05	Using Computer for the Health Data Analysis*	1	1	2	51	34	85	
06	Principles of health services	2		-	34	-	34	
	<b>Total</b>	<b>8.5</b>		<b>2</b>	<b>1</b>	<b>8</b>	<b>230</b>	

These courses are basic for the MSc but have not been completed previously. Students have to pass at least 4 compensatory credits (Table 1) as specified by the Department of Education and approved by the Postgraduate Education Council.

\*Completing these courses is obligatory for those who have not completed them before.

**Table 2. Core Courses**

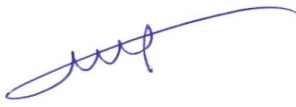

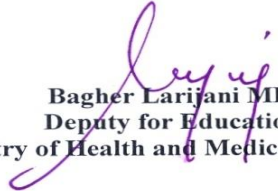
Code of the Course	Title of the Course	Credits			Teaching Hours			Prerequisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
07	Advanced Biostatistics	3	-	3	51	-	51	
08	Care and Use of Laboratory Animals	-	1	1	-	34	34	
09	Immunology of the Fungal Disease	1	1	2	17	34	51	0.3
10	Introduction to Medical Mycology	2	1	3	34	34	68	
11	Superficial and Cutaneous Fungal Diseases	2	1	3	34	34	68	10
12	Subcutaneous and Mucosal Fungal Diseases	1	1	2	17	34	51	10
13	Systemic Fungal Diseases	2	1	3	34	34	68	10
14	Seminars	-	1	1	-	34	34	11,12
15	Clerkship in the Laboratory*	-	2	2	-	102	102	10,11,12,13
	<b>Total</b>	11	9	20	187	340	544	

\*Completing this course for 102 hours will be programmed by the corresponding department during one semester.

**Table3. Non-Core Courses**

Code of the Course	Title of the Course	Credits			Teaching Hours			Prerequisite or Concurrent Courses
		Theoretical	Practical	Total	Theoretical	Practical	Total	
16	Epidemiology and Principles of Prevention of Diseases	2	-	2	34	-	34	
17	Research Methods in Health Sciences	1	1	2	17	34	51	
18	Genetics of Fungi	1.5	0.5	2	26	17	43	02, 10
19	Medical Bacteriology	1	1	2	17	34	51	
20	Preliminary protozoology	1	1	2	17	34	51	
21	Hematology	1	1	2	17	34	68	
	<b>Total</b>	7.5	4.5	12	128	153	247	

\*Students have to pass 4 credits as specified by the corresponding department.

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