



The University of Jordan
Dept. of Biological Sciences
First Semester 2011-2012

Medical Mycology (0334354)
3 credit hrs; 2 lectures +3 hrs lab weekly
Lecturer: Dr. Basem Jaber
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Office: B113
Office hours: Mon 12:30-1:30
Tue 9:00-10:00

COURSE OBJECTIVES:

- To increase students understanding of pathogenic fungi by learning the following;
- 1) The important features of the organisms including morphology and structure
 - 2) The strategies used by the organisms to establish and maintain infection and pathogenicity
 - 3) The host defenses that protect against infection
 - 4) The epidemiology associated with infections
 - 5) The different therapeutic strategies and diagnostic methods used

TEXT BOOKS:

MAIN BOOKS

- Jennings, D.H. and Lysek G. 1996. Fungal Biology: Understanding the fungal life style. 1st ed. BIOS Scientific Publisher Limited. Oxford. UK.
- Joklik, W. K., et al. 1992. Zinsser Microbiology. 20th ed. Prentice-Hall International Inc. Engelwood Cliffs, NJ, USA.
- Kwon Chung K.J. and Bennet J.E. 1992. Medical Mycology. Lea & Febiger. Philadelphia, PA, USA.
- Selected handouts of recent publications

WEBSITE

- www.doctorfungus.com

TOPICS COVERED IN LECTURES

Date	Chap. NO.	Topic
19/9		Introduction to the course
		Fungal Biology: Part I: The Fungal Life Style
21/9	1	Hyphae and hyphal extension
26/9	1	Hyphae and hyphal extension
28/9	2	The mycelium
3/10	2	The mycelium
5/10	3	The substrate
10/10	3	The substrate
		Fungal Biology: Part II: The Environment
12/10	5	Oxygen and lack of it
17/10	6	Competition: living with neighbours
		Fungal Biology: Part III: Reproduction
19/10	10	Nuclear relationships
24/10	12	Spores: dispersive propagules
26/10	13	Spores germination: starting a new colony
		Zinsser Microbiology : Medical Mycology
31/10	81	Principles of fungal disease and diagnosis
		Systemic Mycoses
2/11	82	Midterm
5-9/11		<i>Eid Al-Adha Holiday</i>

14/11	82	Coccidioidomycosis
16/11	82	Histoplasmosis
121/11	82	Blastomycosis
23/11		Paracoccidioidomycosis
		Subcutaneous Mycoses
28/11	83	Sporotrichosis
30/11	83	Chromomycosis
5/12	83	Phaeohyphomycosis
7/12	83	Mycetoma & Rhinosporidiosis
12/12	83	Rhinoentomophthoromycosis & Lobomycosis
		Dermatophytosis and Other Cutaneous Mycoses
14/12	84	Pityriasis Versicolor
19/12	84	Tinea Nigra & Mycotic Keratitis
		Opportunistic Mycoses
21/12	85	Candidiasis-I
26/12	85	Candidiasis-II
28/12	85	Cryptococcosis
2/1	85	Aspergillosis
4/1	85	Mucormycosis

LAB INSTRUCTOR

Mr. Omar Abu Yaman

TOPICS COVERED IN LAB.

Week	Lab No.	Topic
18/9	1	Introduction to lab safety and writing reports
25/9	2	Microscopy of different fungi
2/10	3	Isolation of fungi from the environment-I
9/10	4	Isolation of fungi from the environment-II
16/10	5	Preparation of pure culture/Spores preparation & microscopy
23/10	6	Animal inoculation-I
30/10	7	Animal inoculation-II
6/11	8	<i>Eid Al-Adha Holiday</i>
13/11	9	Fungi Staining
17/11		Midterm
20/11	10	Biochemical analysis-I
27/11	11	Biochemical analysis-II
4/12	12	PowerPoint presentation by instructor-I
11/12	13	PowerPoint presentation by instructor-II
18/12	14	Microscopy of different fungi
25/12		Lab Final Week

GRADING POLICY:

LECTURE

Midterm Exam	30
Final Exam	35

LABORATORY

Midterm	15
Final Exam	15
Evaluation.	5
TOTAL	100