



وكالة الجامعة للشؤون التعليمية
البرامج الدراسية والتطوير

(5)

مختصر توصيف ا

(Course Syllabus)

Mycology

الفطريات	:
BIOL-333	:
الأحياء الدقيقة العامة BIOL-231	:
-	:
3	:
Module Title:	Mycology
Module ID:	BIOL-333
Prerequisite (Co-requisite) :	General microbiology, BIOL-231
Co-requisite :	-
Course Level:	5 th
Credit Hours:	3

:(Course Information) *

Module Description

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1. Summary of the main learning outcomes for students enrolled in the course.

This course give an introduction to mycology, Fungi structures, growth characteristics and classification of fungi. This course also explain in details about various fungal disease of plants, human and animals. This course will highlight the economic importance of fungi.

Module Aims

أهداف المقرر :

1	To describe fungi from a morphological and structural point of view.	1
2	To describe different groups of fungi	2
3	To explain biological activities and mycotoxins	3
4	To explain various diseases caused by fungi to plant, human and animals	4
5	To describe the economic importance of fungi	5

Learning Outcomes:

مخرجات التعليم:

1	Knowledge of different environmental fungi and pathogenic fungi	1
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2	Knowledge of fungal diseases to plants, human and animals, Study about fungal toxins and food spoilage.	2
3	Gaining knowledge of application of fungi in food, pharmaceutical and agricultural industries	3
4	Hands on experience of identification of unknown fungi	4
5	Operate certain equipment's and instruments used in mycology to examine and diagnose the different fungi	5

Course Contents:

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ريس (Hours)	الأسابيع (Weeks)	(Subjects)
2	1	The General Introduction
2	1	Morphological and histological structure of fungi
2	1	Fungi growth and Nutrition
6	3	Classification of fungi – Based on colony morphology, reproduction. Systemic classification – Groups of fungi
2	1	Plant diseases
6	3	Medical Mycology – Human and animal diseases, Antifungal drugs
4	2	Fungal Toxins, Food spoilage
6	3	Economic importance of fungi -Bio fertilizers, Antibiotic Ethanol, Organic acids, Enzymes production
30	15	Total
30	15	Practicals: Laboratory safety, Media preparation, Isolation and identification of fungi from environmental, clinical samples, Yeast and mould identification, Microscopic techniques, Industrial application of fungi, Demonstration of food spoilage.

Textbook and References:

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ISBN	Publishing Year	Publisher	اسم المؤلف (رئيسي) Author's Name	Textbook title
ISBN-13 978-0-521-80739-5	2007	Cambridge University Press	John Webster, Ronald WS Weber	Introduction to Fungi
ISBN 9780824756550	2004	CRC Press Taylor & Francis Group	Zhiqiang An	Handbook of Industrial Mycology
ISBN 9781498714211	2015	CRC Press Taylor & Francis Group	Mehdi Razzaghi-Abyaneh, Masoomeh Shams-	Medical Mycology: Current Trends and

			Ghahfarokhi, Mahendra Rai	Future Prospects
ISBN 9780849398186	2007	CRC Press Taylor & Francis Group	<u>Robert A. Samson</u>	Food Mycology: A Multifaceted Approach to Fungi and Food
ISBN-10: 9350908433	2008	Jaypee Brothers Medical Publishers (Pvt) Ltd., India.	Lalitha, P., Vijayakumar, R., Prajna, N.V., Srinivasan, M.	Atlas of Fungal Corneal ulcer – Clinical features & Laboratory Identification Methods
	Publishing Year	Publisher	اسم المؤلف (رئيسي) Author's Name	Reference

