هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	Mycology and Plant Pathology
Course Code:	333 Mic-3
Program:	Bachelor of Science in Biology
Department:	Biology
College:	Science
Institution	Jazan University

Table of Contents

A. Course Identification

1. Credit hours:3 -hours
2. Course type **a.** University ☐ College ☐ Department ■ Others ☐ **b.** Required ■ Elective ☐
3. Level/year at which this course is offered: Year-3 and Level-5
4. Pre-requisites for this course (if any)**: Non**
5. Co-requisites for this course (if any)**: Non**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	-	-
2	**Blended**	-	-
3	**E-learning**	-	-
4	**Distance learning**	30 hrs	100%
5	**Other**	-	-

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	**30**
2	**Laboratory**	**30**
3	**Tutorial**	**-**
4	**Others** (specify)	-
	Total	**60**

B. Course Objectives and Learning Outcomes

1. Course Description

Course Title	Course No.	Credit Units			Year	Level	Pre-Requisite
		Theoretical	Practical	Total			
Mycology and Plant Pathology	333MIC	2	1	3	3rd	5th	Non

1) Course Objectives:

Characteristics of the kingdom of fungi, their major taxonomic groups, methods of sexual and asexual reproduction and plant diseases caused by these microorganisms and their control

2) Course Contents:

Introduction to Fungi - ecological and economic importance
Fungal morphology and fungal reproduction
Major taxonomic groups of fungi
Introduction to Plant Pathology - defining disease and disease symptoms- classification of diseases
Examples of some plant pathogenic fungi affecting some economical crops, symptoms appear on the infected plants, disease cycle and control managements applied

3) Practical:

Methods of isolation and identification of fungi and maintain them in pure cultures; field trips to collect plant samples representing different disease syndrome. Application principles of plant pathology in the control of plant disease

4) Assessment:

Exams: Essay/Objective, oral, class work, research work, translations
Practical: Identifying samples and slides, drawings.
Quiz 20%
Practical 30%
Final 50%

5) Teaching Methods:

Lectures, field trips, photographs, slides, multimedia, web-based learning. Samples, light microscopes, glassware, chemicals.

6) Text Books:

- Agrios,G.N. 2005 Plant Pathology. Elsevier Academic Press, San Diego, USA.

7) References:

- Alexopoulos, C.J., Mims, C.W., Blackwell, M. (1996) Introductory Mycology, Wiley, New York.
- Agrawal, A.A., Tuzun, S., Bent, E. (1999) Induced Plant Defenses Against Pathogens and Herbivores. APS Press, St. Paul.

2. Course Main Objective

Characteristics of the kingdom of fungi, their major taxonomic groups, methods of sexual and asexual reproduction and plant diseases caused by these microorganisms and their control.
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3. Course Learning Outcomes

CLOs		Aligned PLOs
1	**Knowledge and Understanding**	
1.1	Demonstrate structures, features, and processes related to fungi	K1
1.2	Identify items and their related functions on diagrams.	K2
1.3	State hypotheses and theories related to Fungi.	K3
2	**Skills :**	
2.1	Explain aspects, theories, and processes relevant to fungi	S1
2.2	Compare different structures and features related to fungi,	S2
2.3	Interpret experimental data.	S3
3	**Values: By the end of the course the students will be able to:**	
3.1	Illustrate ability to work in groups and responsibility,	V1
3.2	Demonstrate risk Assessment and Safety in Mycology Labs.	V2

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to the Kingdom fungi.	4
2	Economic importance of fungi	6
3	Fungal morphology and fungal reproduction	4
4	Major taxonomic groups of fungi	4
5	Introduction to Plant Pathology - defining disease and disease symptoms	6
6	Examples of some plant pathogenic fungi affecting some economical crops, symptoms appear on the infected plants, disease cycle and control managements applied.	6
Total		30

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		
1.1	Demonstrate structures, features, and Processes related to fungi.	Lectures	Quizzes, Short Answer Question, MCQs
1.2	Identify the items and their related Functions on the diagram.	Lectures, Lab Work	Quizzes, Short Answer Question, MCQs
1.3	State hypothesis and theories related to Fungi.	Lectures-Group Discussion	Assignments
2.0	**Skills**		
2.1	Explain aspects relevant in fungi	Lectures-	Quizzes, Short Answer Question, MCQs
2.2	Compare the different structures and features related to fungi.	Lectures-Group Discussion	Quizzes, Short Answer Question, MCQs
2.3	Interpret experimental data.	Lab Work	Assignments

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
3.0	**Values**		
3.1	Illustrate ability to work in groups and	Illustrate ability to work in groups.	Illustrate ability to work in groups and
3.2	Demonstrate risk assessment and safety	Demonstrate risk assessment and safety	Demonstrate risk assessment and safety
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2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Written Assignment	3	5
2	Group Assignment	4	2
3	Theoretical quiz	5	5
4	Midterm exam	7	10
5	Practical Midterm exam exam	9	10
6	Practical Assignment	11	3
7	Final Practical Assignment	13	15
8	Final exam	15	50

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

10 Office hours/faculty/week.

Online student advising for semester 2021-1 because of world pandemic Covid-19.

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	كتاب " الفطريات" اميرة العبد العال 2010 - جامعة الدمام، دار المتنبي للنشر.
Essential References Materials	أساسيات علم الفطريات عبد الله ناصر الرحمة 2013 جامعة الملك سعود للنشر. N.Agrios,2005 .Plant Pathology the fifth edition.
Electronic Materials	https://www.apsnet.org/about/history/Centennial/.../Pages/Mims.aspx Skip Navigation Links APS > About APS > History > 2008 Centennial > Perspectives from Plant Pathologists > **Mycology and Plant Pathology** , https://www.biodiversitylibrary.org/bibliography/28996.
Other Learning Materials	Other learning material such as computer-based programs/CD, professional standards or regulations and software.--

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	1 Lecture room(s) for groups of 50 students. 1 Laboratory for group of 25 students.
Technology Resources (AV, data show, Smart Board, software, etc.)	AV, data show, Smart Board.
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Light microscopes, glassware, chemicals, consumables, dissection tools

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Course Contents		
Course Facilities		
Teaching Methodology		
Assessment Quality		
Assessment Methodology		

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	
Reference No.	
Date	