هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

T-104
2022

Course Specification

Course Title:	**Mycology and Plant Pathology**
Course Code:	**333 MICR**
Program:	**Bachelors (BSc)**
Department:	**Biology**
College:	**Biology**
Institution:	**Jazan University**
Version:	**4**
Last Revision Date:	*Pick Revision Date.*

Table of Contents:

A. General information about the course:

Course Identification					
1. Credit hours:	3Hours				
2. Course type					
a.	University ☐	College ☐	Department☒	Track☐	Others☐
b.	Required ☒	Elective☐			
3. Level/year at which this course is offered:		7th Level/3th Year			
4. Course general Description: - This course provide the students complete knowledge about all physiological process occurring in plants that includes knowledge about mechanism, role, types and classification of enzymes, different theories suggested by Scientists on the mode of action of enzymes, Kinetics of enzymes, Photosynthesis (structure of chloroplast, light reaction/dark reaction) Respiration (aerobic and anaerobic) along with the response of plants towards different biotic and abiotic stresses that plant encountered on daily basis, mechanism that plants adopt to survive in harsh environmental conditions, along with the response of different plants (C3, C4, CAM plants) towards steresses..					
5. Pre-requirements for this course (if any): BOTN 241 Plant Morphology and anatomy					
6. Co- requirements for this course (if any): None					
7. Course Main Objective(s):- 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					

1. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1.	Traditional classroom	44	100%
2.	E-learning		0%
3.	Hybrid • Traditional classroom • E-learning		0%
4.	Distance learning		0%

2. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	Lectures	22
2.	Laboratory/Studio	22
3.	Field	
4.	Tutorial	
5.	Others (specify)	
	Total	44

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	Knowledge and understanding			
1.1	Define all principals, concepts, theories, and aspects concerning plant Pathology	K1.1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False, Quiz Midterm, Final examination
1.2	Differentiate between different mechanisms, functions, practices, and processes related to Plant Pathology	K2.1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False. Compare, Midterm Final examination
2.0	Skills			
2.1	Debate the plant physiology theories, principals, and processes.	S2.1	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False, Quiz, Midterm, Final Examination
2.2	Set-up experiment, investigation and research project for complex issues and problems in Plant Pathology	S2.2	Interactive lectures. Classroom discussions Tutorials. Self-learning activities.	MCQs. Short answer questions. True/False, Final examination
3.0	Values, autonomy, and responsibility			
3.1	Illustrate awareness of risk assessment and safety observation when	V3.2	Interactive lectures. Classroom discussions Tutorials.	Group Assignment. Observation.

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	dealing with various equipment at various fields.		Self-learning activities.	Group Discussion. Oral exam. Laboratory work.

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.	4
	Introduction to the Kingdom fungi.	4
Total		32

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Theoretical quiz	4	5
2.	Mid-term exam	6	10
3.	Practical quiz	5	5
4	Practical assignment	6	5
5	Final practical exam	11	20
6	Final Exam	12	50

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.)

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	"الفطريات" اميرة العبد العال 2010 - جامعة الدمام، دار المتنبي للنشر.
Supportive References	.N. Agrios,2005. Plant Pathology the fifth edition

	للنشر. أساسيات علم الفطريات عبد هللا ناصر الرحمة 2013 جامعة الملك سعود
Electronic Materials	https://www.apsnet.org/about/history/Centennial/.../Pages/Mi m s.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	Contents uploaded on Blackboard system, Power-point presentations given by the instructors practical and theoretical

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	1 Lecture room(s) for groups of 25 students. 1 Laboratory for group of 15 students.
Technology equipment (Projector, smart board, software)	Internet connection, data show or smart board
Other equipment (Depending on the nature of the specialty)	Light microscopes, microscopic slides for the course subjects, models of different stages of plant growth and development, consumables, incubators, chemicals, and glassware's.

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Peer to peer Reviewer, students	Indirect (Surveys)
Effectiveness of student's assessment	Program quality committee, Program leader, peer reviewer	Direct (Cross Check), Indirect (Surveys)
Quality of learning resources	Students	Indirect (Surveys)
The extent to which CLOs have been achieved	Course coordinator	Excel sheet of CLOs assessment (direct), Surveys (indirect)
Other	Peer to peer Reviewer, students	Indirect (Surveys)

Assessor (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

G. Specification Approval Data

COUNCIL /COMMITTEE	BIOLOGY PROGRAM BOARD
REFERENCE NO.	BIO2214
DATE	20/9/2022AD