

## Course Description Form Plant diseases

1. Course Name:

Plant diseases

2. CourseCode:

PLDI319

3. Semester /Year:

First semester/third stage, plant protection/2023-2024

4. DescriptionPreparation Date:

1/2/2024

5. Available Attendance Forms:

Attendance

6. Number of Credit Hours (Total) / Number of Units (Total)

75 hour/ 3.5 units

7. Course administrator's name(mention all,if more than one name)

Name:Alaa Hamed Mohamed  
Ahamed Younis Khalil

8. Course Objectives

1. The learner will be able to understand the disease and the information that must be available in naming the pathogens
2. YRowillnessesPlant and identify the stages of disease development and the relationship of the parasite to the host
3. Distinguishing between types of plant pathogens
4. Full knowledge of the ways in which pathogens attack their plant hosts
5. Identify the defenses used by plants against pathogens
6. Recognizes the physiological functions that are affected by pathogen attacks
7. Choosing the suitability of environmental factors on the spread of pathogens
8. EnumerateWaysEpidemiological causes illnessenthe plant
9. A comprehensive study of various typesBiological and chemical controlAnd agriculturalto pathogensthe plant

9. Teaching and learning strategies

- Interactive lecture
- Brainstorming
- Dialogue and discussion
- Field Training
- Practical exercises



- Field project
- Self-education

### Course Structure .10

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theoretical	a2:The student is introduced to the concept of the history of plant diseases	History of plant diseases	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	a2:The student learns about the laboratory, equipment, tools, conditions that must be observed, and laboratory safety in the plant pathology laboratory	Plant pathology and laboratory safety laboratory	Assigning tasks and reporting	Short testQuiz
2	2 theoretical	b2:The student explains the importance of plant diseases	The importance of plant diseases	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	b3:The student applies the sterilization process in the laboratory	Sterilization	Assigning tasks and reporting	Short testQuiz
3	2 theoretical	-a3:Gives examples of losses and damage caused by plant diseases	Losses and damage caused by plant diseases	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	b4:The student experiences the nutritional environment that is most important for the development of pathogens	Food media for the development of pathogens كلية الزراعة والغابات	Assigning tasks and reporting	Short testQuiz



4	2 theoretical	<b>b3:</b> The student explains the concept of disease in plants	The concept of disease in plants	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	<b>b4:</b> The student distinguishes pathogenic causes through the laboratory diagnostic process	DiagnosisDiseases Vegetarianism	Assigning tasks and reporting	Short testQuiz
5	2 theoretical	<b>a4:</b> The student leads discussion panels on the development of plant disease and the relationship of the parasite to the host	The development of plant disease and the relationship of the parasite to the host	Auditory methods. Method of writing on the blackboard	Report and discuss
	3 practical	<b>b4:</b> The student examines pathogens by isolating them from plant parts	Isolation of pathogens from plant parts	Assigning tasks and reporting	writing a report
6	2 theoretical	<b>a4:</b> The student discusses the stages of disease development	Stages of plant disease development	For audio methods. Writing style on	Semester test1+a lecture
	3 practical	<b>b4:</b> The student examines pathogens by isolating them from seeds	Isolation of pathogens from seeds	Assigning tasks and reporting	Semester test1+ practical application
7	2 theoretical	<b>b2:</b> The student explainsHow to attack the pathogens of the diseaseaAsk the vegetarian	How to attack pathogensaLaoaAsk the vegetarian	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	<b>b4:</b> The student examines pathogens by isolating them from soil	Isolation of pathogens from soil	Assigning tasks and reporting	Short testQuiz
8	2 theoretical	<b>a4:</b> The student discusses how to enzymatically analyze	Enzymatic hydrolysis of plant cell contents	Auditory methods. Method of writing on the blackboard	Short

قسم وقاية النباتات  
جامعة القاهرة  
مصر

		plant cell contents			testQuiz
	3 practical	<b>b3:</b> The student applies the process of how to purify pathogens from plants, seeds, and soil	Purification of pathogens from plants, seeds and soil	Assigning tasks and reporting	Short testQuiz+ Homework
9	2 theoretical	<b>a2:</b> The student learns about plant defenses against pathogen attacks	How plants defend themselves against pathogen attacks	<b>a</b> For audio methods, writing style on the blackboard	Short testQuiz+ Homework
	3 practical	<b>a4:</b> The student differentiates between symptoms and signs of illness	Disease symptoms and signs+Scientific visit	Assigning tasks and reporting	Short testQuiz+ Homework
10	2 theoretical	<b>a2:</b> Describes the studentThe effect of pathogens on physiological processes in plants	The effect of pathogens on physiological processes in plants	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	<b>b3:</b> The student applies pathogenicity measurement	Measuring pathogenicity	Assigning tasks and reporting	Short testQuiz
11	2 theoretical	<b>a2:</b> The student gets to know onfactors Environmentalthat effect onDevelopment of plant diseases	The effect of environmental factors on the development of diseases the plant	Methods Audio. Style of writing on the blackboard	Short testQuiz
	3 practical	<b>b4:</b> The student distinguishesPhenotypic and morphological characteristics of pathogens	Phenotypic and morphological characteristics of pathogens	Assigning tasks and reporting	Short testQuiz
12	2 theoretical	<b>b3:</b> The student writes a report on the epidemiology of plant diseases	Epidemiology of plant diseases قسم وقاية النباتات البحر الأحمر	Auditory methods. Method of writing on the blackboard	Short testQuiz

قسم وقاية النباتات  
البحر الأحمر

	3 practical	<b>b3:</b> The student applies how to prepare glass slides to diagnose pathogens	Preparing glass slides to diagnose the pathogen	Assigning tasks and reporting	Short testQuiz+ Homework
13	2 theoretical	<b>a4:</b> The student discusses MethodsControl of plant diseases	Control of plant diseases	Auditory methods. Method of writing on the blackboard	Short testQuiz
	3 practical	<b>b4:</b> The student experiments with how to use a microscope to diagnose the causes of plant diseases	Optical microscope	Assigning tasks and reporting	Short testQuiz+ Homework
14	2 theoretical	<b>a4:</b> The student discusses MethodsControl of plant diseases	Control of plant diseases	Auditory methods. Method of writing on the blackboard	Semester test2+a lecture
	3 practical	<b>b3:</b> applicationLaboratory evaluation of fungicides	Laboratory evaluation of fungicides	Assigning tasks and reporting	Semester test2+ practical application
15	2 theoretical	<b>a4:</b> The student discusses MethodsControl of plant diseases	Control of plant diseases	Auditory methods. Method of writing on the blackboard	Report and discuss
	3 practical	<b>b3:</b> applicationEvaluation of fungicidesFieldly	Evaluation of fungicides in the field	Assigning tasks and reporting	Report and discuss



## 11. Course Evaluation

Relative weight %	Class	Calendar date (week)	Calendar methods	T
2	2	the sixth week	Short test(1)Quiz	1
2	2	The fourteenth week	Short test(2)Quiz	2
10	10	The seventh week	Semester test (1)	3
10	10	The eleventh week	Semester test (2)	4
40	40	Final semester exams	Final theoretical test	5
5	5	The fifteenth week	Report and discuss	6
5	5	The third and fifth week	Report and discuss	7
2	2	The first week	Short practical test (1)Quiz	8
2	2	fourth week	Short practical test (2)Quiz	9
2	2	The fourteenth week	Short practical test (3)Quiz	10
20	20	Final semester exams	Final practical test	11
100%	100%	100	the total	

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Book (General Plant Diseases - Abdul Hamid Khaled Khudair)
Main references (sources)	The book (Plant Diseases - Facilitator Majeed Jarhis, Raqeeb Akef Al-Ani, and Iyad Abdel-Wahed Al-Hiti) Book (Plant Diseases - Jihad Muhammad Al-Habaa and Mahmoud Shaker Mustafa - Arab Republic of Egypt)
Recommended books and references (scientific journals, reports...)	Plant Diseases Book (written by Dr. George Agrios, University of Massachusetts, Boston United States of America - Translated by Dr. Mahmoud Musa Abu Arqoub)
Electronic References, Websites	<a href="#">Home Feed</a>   <a href="#">ResearchGate</a>

Theoretical teacher. Dr. Alaa Hamed Muhammad



Practical teacher: M.M. Ahmed Younis Khalil

Chairman Scientific Committee: Prof. Dr. Juhayna Idris Muhammad



Head of the Department: Dr. Firas Kadhim Al-Jubouri


