## **Course Description Form Plant diseases**

1. Course Name:

Plant diseases

2. CourseCode:

PLDI319

3. Semester /Year:

First semester/third stage, plant protection/2024-2025

4. DescriptionPreparation Date:

1/2/2025

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 Saleh Hhmed Eesa

## 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 illnessesthe 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

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We ek	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluatio n method
	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	Shori testQuiz
1	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	Shor testQui:
	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
2	3 practical	b3:The student applies the sterilization process in the laboratory	Sterilization	Assigning tasks and reporting	Short testQuiz
	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	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	Assigning tasks and reporting	Short testQuiz

			The state of the same	Auditory methods.	Short
	2 theoretical	b3:The student explains the concept of disease in plants	The concept of disease in plants	Method of writing on the blackboard	testQuiz
4	3 practical	b4:The student distinguishes pathogenic causes through the laboratory diagnostic process	DiagnosisDiseases Vegetarianism	Assigning tasks and reporting	Short testQuiz
, 5	2 theoretical	a4: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	b4:The student examines pathogens by isolating them from plant parts	Isolation of pathogens from plant parts	Assigning tasks and reporting	writing a report
	2 theoretical	a4:The student discusses the stages of disease development	Stages of plant disease development	For audio methods. Writing style on	Semester test1+a lecture
6	3 practical	b4: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	Method of writing on	Chan
	3 practical	<b>b4:</b> The student examines pathogens by isolating them from soil	Isolation of pathogens from soil		
8	2 theoretical	a4:The student discusses how to enzymatically analyze	Enzymatic hydrolysis o plant cell contents	i Method of Writing of	Shor

		plant cell contents			testQuiz
	3 practical	b3: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
	2 theoretical	a2:The student learns about plant defenses against pathogen attacks	How plants defend themselves against pathogen attacks	aFor audio methods, writing style on the blackboard	Short testQuiz+ Homework
9	3 practical	a4: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	a2: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	a2: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	Shor testQui
	3 practical	b4:The student distinguishesPhenoty pic and morphological characteristics of pathogens	Phenotypic and morphological characteristics of pathogens	Assigning tasks and reporting	Shoi testQui
12	2 theoretical	<b>b3:</b> The student writes a report on the epidemiology of plant diseases	Epidemiology of plant diseases	Auditory methods. Method of writing on the blackboard	Sho testQu

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	3 practical	b3:The student applies how to prepare glass slides to diagnose pathogens	Preparing glass slides to diagnose the pathogen	Assigning tasks and reporting	Sho testQui Homewo
*	2 theoretical	a4:The student discusses MethodsControl of plant diseases	Control of plant diseases	Auditory methods. Method of writing on the blackboard	Sho testQu
13	3 practical	b4:The student experiments with how to use a microscope to diagnose the causes of plant diseases	Optical microscope	Assigning tasks and reporting	Sho testQui Homewo
14	2 theoretical	a4:The student discusses MethodsControl of plant diseases	Control of plant diseases	Auditory methods.  Method of writing on the blackboard	Semesto test2+ lectur
	3 practical	<b>b3:</b> applicationLabora tory evaluation of fungicides	Laboratory evaluation of fungicides	Assigning tasks and reporting	Semeste test2 practica applicatio
15	2 theoretical	a4:The student discusses MethodsControl of plant diseases	Control of plant diseases	Auditory methods. Method of writing on the blackboard	Report an
	3 practical	b3:applicationEvaluat ion of fungicidesFieldly	Evaluation of fungicides in the field	Assigning tasks and reporting	Report and discus

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	Course	CVal	uation

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

## 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	Home Feed   ResearchGate

Theoretical teacher. Dr. Alaa Hamed Muhammad

Practical teacher. Saleh Ahmed Eesa

Chairman Scientific Committee: Prof.Dr. Ahmed AWad

Head of the Department: Dr. Tala Saeed Hamid Wy