Vegetables and protected agriculture description course Pathology

.1 : Course Name
Vegetable diseases and protected agriculture
.2 : Course Code
VEPA420
.3 Annual : Year / Semester
2024–First semester/fourth stage/2023
.4 Date this description was prepared
2024/2/1
.5 : Available forms of attendance
In Class
.6 :(Number of study hours (total)/number of units (total
unit 3.5 /hours75
.7 (Name of the course administrator (if more than one name is mentioned
Dr.Raghad Naif Mheedi .M,M. Rayan Salem Mahmoud.
.8 Course objectives
• The learner should be able to define the concept of disease and the information that must be available to know the medical history • Choosing the appropriateness of the factors affecting the disease and determining its ability to spread • Differentiate between types of pathogens and know all their classifications • Understanding the basics of modern planning to develop a program that explains the forms and patterns of plant diseases • class ng to the type of eachDistinguishing between classes and sections of fungi accordi • Identify plant diseases, symptoms and signs, and what must be taken into account when distinguishing between them • A comprehensive study of the various types of control, how to diagnose each disease, and determine the controls .nd conditions that must be observed when carrying out all instructions to carry out the control in the proper mannera
.9 Teaching and learning strategies
- Interactive lecture - Brainstorming - and discussion Dialogue - Field Training - Practical exercises - project Field - education -Self

Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Semester exam 1, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	An overview of the plant concept of disease and its history	Identify diseases that spread in agricultural fields :a1	1 theoretical	1
Short practical test1	Interactive lecture, brainstorming, dialogue and discussion, field learning -training, self		Learn about the installation of a greenhouse and ,a1 the mechanism of cultivation inside it	3 practical	
Semester exam 1, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	The importance of crops and their relationship to plant diseases	Recognizes the economic importance of field crops and their relationship to diseases :a2	1 theoretical	2
discussion	,Interactive lecture brainstorming, dialogue and discussion, field training, practical -exercises, and self learning		Field trips to find out the factors that help spread a2 diseases inside greenhouses	3 practical	
Semester exam 1, final exam	lecture, Interactive brainstorming, dialogue -and discussion, self learning	Medical history for each disease	Get to know a brief history of each disease spreading in agricultural fields :a3	1 theoretical	3
Laboratory evaluation	Interactive lecture, brainstorming, dialogue and discussion, field learning -training, self		Explains the most common pathogens that lead a3 to economic losses	3 practical	
Semester test 1, final , test report	Interactive lecture, brainstorming, dialogue -self ,and discussion learning	The importance of organisms causing plant diseases	Identify the organisms that cause plant diseases a4: and understand the meaning of pathogenicity	1 theoretical	4
Practical short test 2 direct , drawing	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning		He is familiar with the most important agricultural a4 methods used inside greenhouses to prevent disease infections	3 practical	
Semester test 1, final , test report	Interactive lecture, dialogue ,brainstorming -and discussion, self learning	Disease symptoms and signs	Explains the difference between pathological a5: symptoms and pathological signs	1 theoretical	5
Field evaluation	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning		The most common symptoms on plants grown in b1 greenhouses are described	3 practical	
Short test,	Interactive lecture,	The relationship of	Explains the concept of plant pathology and its :b1	1	6

final test	brainstorming, dialogue -discussion, self and learning	diseases to environmental health	relationship to environmental health	theore tical	
discussion and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning		Explaining the most important means that help b2 spread diseases that affect plants in greenhouses	3 practic al	
Semester exam 2, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	The spread of diseases in greenhouses	Familiarize yourself with the most important :b2 factors affecting the epidemiology of diseases and their relationship to the spread of diseases in .greenhouses	1 theore tical	7
Field project	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, field project, learning-self		Proficient in the process of taking samples from b3 plant parts to the laboratory	3 practic al	
Semester exam 2, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	Types of pathogens relationship and their to plant health	Master the importance of pathogens and their :b3 relationship to plant health and environmental health	1 theore tical	8
Direct drawing and homework	Interactive lecture, dialogue ,brainstorming and discussion, field training, practical -exercises, and self learning		Proficient in the process of taking soil samples for b4 the laboratory	3 practic al	
Semester exam 2, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	The spread of diseases in greenhouses	Understand the importance of the spread of :b4 pathogens in agricultural fields and greenhouses	1 theore tical	9
Direct drawing and homework	Interactive lecture, brainstorming, dialogue discussion, field and training, practical -exercises, and self learning		Familiar with the process of isolating pathogens in a1 the laboratory	3 practic al	
Semester test2	Interactive lecture, brainstorming, dialogue -and discussion, self learning	The latest technologies in diagnosing diseases and pathogens	Masters the importance of diagnosing plant :b5 diseases by all modern means	1 theore tical	10
Direct drawing and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Practical steps	Learn about the mechanism of laboratory b2 diagnosis of pathogens	3 practic al	
Final test	Interactive lecture, brainstorming, dialogue -and discussion, self	The importance of insect vectors in greenhouses	Explains the great importance of studying insect :c1 vectors of pathogens and their relationship to .greenhouses	1 theore tical	11

	learning				
Direct drawing and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning		Learn about the mechanism of laboratory c1 diagnosis of pathogens	3 practical	
Final test	,Interactive lecture brainstorming, dialogue -and discussion, self learning	Control the carrier and how to transport and infect	Suggests an appropriate method to control the :c2 vector of diseases and how to transmit and infect them	1 theoretical	
Direct drawing and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Practical steps for	Purifying pathogens and preparing laboratory b4 slides for examination	3 practical	12
Final test	Interactive lecture, dialogue ,brainstorming -and discussion, self learning	Ideal control in disease management	Explains an ideal control program and suggests :c3 an optimal method for disease management and control	1 theoretical	
discussion and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -self exercises, and learning	Practical steps	Laboratory evaluation of the effectiveness of c3 some pesticides	3 practical	13
,Short test final test	,Interactive lecture brainstorming, dialogue -and discussion, self learning	The importance of the spread of pathogens in greenhouses	Leads discussion panels on the critical :d1 importance of the spread of plant diseases and how to control them	1 theoretical	
Short practical test3	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	.	Spraying chemical pesticides is applied in practice c2 inside chemical houses	3 practical	14
,Short test final test	Interactive lecture, dialogue ,brainstorming -and discussion, self learning	Identifying health risks and their impact on human health	impact on Identifying health risks and their :e1 human health Negligence in public health	1 theoretical	
Field project	Interactive lecture, brainstorming, dialogue and discussion, field training, practical field project, ,exercises learning-self		Learn about the most important biological control b4 agents, their abundance and use	3 practical	15

Course evaluation .1

Relative weight %	Class	(Calendar date (week	Calendar methods	
2.5	2.5	fourth week	Report 1	

Report 2		The fifth week	2.5	2.5
Quiz (Short test (1		sixth week	2	2
Quiz (Short test (2	4	The fourteenth week	2	2
Quiz (Short test (3	5	The fifteenth week	1	1
(Semester test (1	6	the sixth week	7.5	7.5
(Semester test (2	7	The eleventh week is difficult	7.5	7.5
Final theoretical test	8	Final semester exams	40	40
Practical field project	9	The fifteenth week	5	5
Field evaluation	10	The third and fifth week	2	2
Quiz (Short practical test (1	11	The first week	1	1
Quiz (Short practical test (2	12	fourth week	0.5	0.5
Quiz (Short practical test (3	13	The fourteenth week	1	1
and homework Live drawings	14	Weeks 6, 8, 9, 10, 11, 12 and 13	5.5	5.5
Final practical test	15	Final semester exams	20	20
the total		100	%100	%100

12. Learning and teaching resources

(Required textbooks (methodology, if any	**nid-Dr. Samir Mikhail and Daabd Al Diseases of orchards and vegetables, written by Zarri-Jawad Al-Tarabiya Dr. Abdel**
(Main references (sources	Diseases of orchards and vegetables/University of Aleppo Dr. Muhammad Amer Fayyad And thank you Mohamed - Plant diseases Albasrah university - Hamza Written by George Agrios and translated by Dr. - diseases Plant Mahmoud Musa Abu Arqoub
Recommended supporting books and references (scientific journals, ...reports)	Google research
Electronic references, Internet sites	Google scholar Google chrome Google research Researchgate Journal of plant pathology

Practical subject teacher
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Dr.Firas Kadhim

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