

principles of plant protection Description of the course on

: Course Name .1					
Principles of plant protection					
: Course Code .2					
PRPP117					
Annual : Year / Semester .3					
stage is the Department of Agricultural Economics and the second is the Department of Soil and Water The second semester/the 2024-2023/ Resources					
Date this description was prepared .4					
2024/2/1					
: Available forms of attendance .5					
My presence					
:(total)/number of units (total) Number of study hours .6					
theoretical hours / 3 practical hours / 3.5 units 2					
(Name of the course administrator (if more than one name is mentioned) .7					
Dr. Raghad Nayef Mahidi Dr,Khaled Amiri Muhammad . Ammar manaf Salah Ahmad					
Course objectives .8					
<ul style="list-style-type: none"> <li>• be able to define the concept of disease and the information that must be available to know the medical history <b>should</b></li> <li>• Choosing the appropriateness of the factors affecting the disease and determining its ability to spread</li> <li>• pathogens and know all their classifications Differentiate between types of</li> <li>• Understanding the basics of modern planning to develop a program that explains the forms and patterns of plant diseases</li> <li>• Distinguish between the ranks and sections of fungi according to the type of each</li> <li>• ut entomology and the factors that helped insects survive and spread Learn abo</li> <li>• distinguishing between them when Identify plant diseases, symptoms and signs, and what must be taken into account</li> <li>• each disease, and determine the controls and conditions A comprehensive study of the various types of control, how to diagnose</li> <li>• .that must be observed when carrying out all instructions to carry out the control in the proper manner</li> </ul>					
Teaching and learning strategies .9					
<ul style="list-style-type: none"> <li>- Interactive lecture</li> <li>- Brainstorming</li> <li>- and discussion Dialogue</li> <li>- Field Training</li> <li>- Practical exercises</li> <li>- Field project</li> <li>- education -Self</li> </ul>					
Course structure .10					
Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Semester	Interactive lecture,	An overview of the	Concept of plant disease :A1	1	1

exam 1 final exam	brainstorming, dialogue and discussion, self learning	plant concept of disease, its definition knowledge of and , the disease and the plant host	Plant disease pathogen The -1 The breadwinner -2 Environmental factors -3	theoretical	
Short practical test1	Interactive lecture, brainstorming, dialogue and discussion, field learning -training, self	Plant pathology laboratory	Identify laboratory equipment :C6 The student learned how to use a microscope, :A41 how to examine pathogens, and prepare slides	3 practical	
Semester exam 1, final exam	Interactive lecture, brainstorming, dialogue and discussion, self learning	Factors of the pathological triangle	Recognizes the disease pyramid, the disease A2 triangle, and the factors affecting it and medical history	1 theoretical	2
Live discussion	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Conducting the sterilization process inside the laboratory sterilization -	The student learns about sterilization methods :C6 and how to eliminate pathogens inside the laboratory	3 practical	
Semester exam 1, final exam	Interactive lecture, brainstorming, dialogue -discussion, self and learning	Development and detection of plant disease	Learn a brief overview of the disease history of :A3 and the each disease spreading in agricultural fields stages of development and detection of the plant .disease	1 theoretical	3
Laboratory evaluation	Interactive lecture, brainstorming, dialogue and discussion, field learning -training, self	Food environments	Identifying food media and how to prepare :A6 them	3 practical	
Semester test 1, final , test report	Interactive lecture, brainstorming, dialogue and discussion, self learning	Pathogens of plant hosts	diseases Identify the organisms that cause plant :A4 and understand the meaning of pathogenicity	1 theoretical	4
Practical short test 2 direct , drawing	Interactive lecture, dialogue ,brainstorming and discussion, field training, practical -exercises, and self learning	Identify several symptoms of pathogenic causes, diagnose them within the disease, and differentlate between pathogenic causes	The student learns about different plant :A10 diseases and how to diagnose them	3 practical	
Semester test 1, final , test report	Interactive lecture, brainstorming, dialogue and discussion, self learning	Disease symptoms and signs	It explains the difference between pathological :A1 and studies the symptoms and pathological signs anatomical symptoms and apparent and pathological signs	1 theoretical	5
Laboratory evaluation	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Isolation of causing organisms plant diseases	Laboratory isolation of pathogens from :A10 plant parts different	3 practical	

Short test, final test	Interactive lecture, brainstorming, dialogue -and discussion, self learning	Basics of integrated management	attack plants Shows how pathogens :B1 mechanically and chemically and discusses the .concept of the basics of integrated management	1 theoretical	6
Field assessment and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -self exercises, and learning	Scientific visit	scientific visit to the fields Conduct a :D9 Horticulture stations, identifying the most important plant diseases and diagnosing them in the field	3 practical	
Semester exam 2, final exam	Interactive lecture, dialogue ,brainstorming -and discussion, self learning	Synthetic and chemical defences	the importance and how plants Understands :B2 defend themselves through synthetic defenses and biological chemical defenses	1 theoretical	7
writing a report	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, field project, learning-self	A scientific visit to the plastic one of houses	and inside Conduct a scientific visit to the fields :D9 and identify the most important the greenhouses plant diseases and diagnose them in the field	3 practical	
Semester exam 2, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	world of insects	factors that Learn about insect science and the :A3 helped insects survive and spread	1 theoretical	8
Discussion and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Insect body wall	Learn the basics about insects and their body -A1 walls	3 practical	
Semester exam 2, final exam	Interactive lecture, brainstorming, dialogue -and discussion, self learning	harms of Benefits and insects	the harms and benefits of insects Learn about :A4 and their economic importance	1 theoretical	9
Discussion and homework	Interactive lecture, brainstorming, dialogue field ,and discussion training, practical -exercises, and self learning	Identify the insect's body	recognizes insect body regionsA2	3 practical	
Semester test2	Interactive lecture, brainstorming, dialogue -and discussion, self learning	Learn about modern methods of resistance	Master the methods of pest controlB1:	1 theoretical	10
Discussion and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Study concepts	is familiar with the concept of evolution and B1 impossibility	3 practical	
Final test	Interactive lecture, brainstorming, dialogue	Learn about modern methods of	He is proficient in pest control Proficient :B2 methods	1 theoretical	11

	-and discussion, self learning	resistance		tical	
Discussion and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Identify insects	Identifies some insectsB2	3 practical	
Final test	Interactive lecture, brainstorming, dialogue -and discussion, self learning	Learn about modern methods of resistance	the methods of pest control Master :B3	1 theoretical	
And my homework	,Interactive lecture brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Examines the mouth parts of the insect	Examines the types of mouthparts of important insects and the appendages of the head region B3	3 practical	12
Final test	Interactive lecture, brainstorming, dialogue -and discussion, self learning	Insects that infect crops	Identify crop insects :B4	1 theoretical	
Discussion and homework	Interactive lecture, brainstorming, dialogue and discussion, field training, practical -exercises, and self learning	Examines the insect's body parts	examines the chest and its appendagesB4	3 practical	13
,Short test final test	Interactive lecture, brainstorming, dialogue -and discussion, self learning	Orchard insects	garden insects Identify :B5	1 theoretical	
Short practical test3	Interactive lecture, brainstorming , dialogue and discussion, field training, practical -exercises, and self learning	Examines the insect's body parts	Examines the abdomen and its appendages C1	3 practical	14
,Short test final test	Interactive lecture, brainstorming, dialogue -discussion, self and learning	General insects	Identify general insects :B6	1 theoretical	
Field project	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, field project, learning-self	General insects	discusses general insectsB5	3 practical	15
<b>evaluation Course .11</b>					
Relative % weight	Class	(Calendar date (week	Calendar methods	T	

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

### Learning and teaching resources .12

Introduction to plant pathology insects Orchard General insects	( Required textbooks (methodology, if any
Hamid Tarabiyah -Dasmir Mikhail Daabd al -Diseases of orchards and vegetables University of Al Mosul - Zarari-Jawad al-Dr. Abd al University - Dr. Muhammad Amer Fayyad and Muhammad Hamza - Plant diseases of Basra and translated by Damahmoud Musa written by George Akrios - Plant Diseases Abba Arqoub University of -written by Abdulaziz Majeed Nakhilan - Practical plant diseases Basra	( Main references (sources
Journal of plant pathology	Recommended supporting books and (....references (scientific journals, reports
Google scholar Google chrome Google research Researchgate Journal of plant pathology	references, Internet sites Electronic

Practical subject teacher  
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AMMAR MANAF

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