Course Description Form

1. Course Name:

Horticultural plant insects

2. Course Code:

HOIN426

3. Semester / Year:

4.th

4. Description Preparation Date:

quarterly 1/2/2024

5. Available Attendance Forms:

Blended education

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

75 hours / 3.5 units

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

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8. Course Objectives

Theoretical:

Asking students deductive questions.

2-Developing training programs.

- 3- Finding solutions to the problems and obstacles that students encounter in the practical part.
- 4- Enabling students to find solutions and applications for crisis situations.

Practical:

- The course aims to prepare graduates in plant protection sciences who are familiar with the basic principles of entomology, in terms of their harm to the agricultural environment and their benefits on the other hand, as well as their forms and how to distinguish them from other organisms close to them. The course also aims to become familiar with the structures of these external living organisms and know their internal bodily systems. in detail.

9. Teaching and Learning Strategies

Theoretical:

- Interactive lecture
- Brainstorming
- Assignment of tasks and report
- Providing students with the basics and additional topics related to insect classification

Practical:

- Commissioning teamwork to uncover leadership skills
- Assignment of tasks and report for each experience

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- Asking students to ask a set of thinking questions during the lecture
- Giving students homework that requires self-explanation in causal ways.

1	0	Course Structure
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Ne ek	Hours	Required Learning Outcomes	Unit or subject name	method	Evaluation method
1	2Theoretical	The state of the s	Theoretical: Entomology introduction, factors that help spread insects, pests, their types and harms, benefits and harms of insects.	Audio Methods Writing Style On the board direct dialogue style	Short Tests Duty Assignmen Discussions
	3 Practical	Practical a1: Remembers the characteristics of insects class, the divisions of the insect's body, the head, and its	Practical: Characteristics of insect class, insect body divisions, head and appendages	Practical: Assignment and reporting	
2	2Theoretical	appendages. Theoretical a2:	Theoretical:		Short Test
		The student reviews the life characteristics of insects, mating in insects and their methods of reproduction, and types of hibernation in insects.	Life characteristics of insects, egg stage, nymph stage and larval stage, pupal stage, adult stage, mating in insects, methods of reproduction, types of hibernation in insects.	Writing Style	Duty Assignmen Discussion
3		Practical a2: The student reviews the life characteristics of insects, mating in insects and their methods of reproduction, and	Practical: Thorax and its appendages		
1 53	t	types of hibernation in insects.	7 · .		
3 2	Theoretical 7	Theoretical a3: The student discusses the basics of pest control.	Theoretical: Basics of pest control, pest control methods.	Theoretical: Audio Methods Writing Style On the board director	Short Tes Duty Assignme Discussio

insects and apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical b2: Assess apple insects, observing the infestation, damage, and describing the insect. Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting Appearance of infestation, damage and description of the insect (apple insect).	Short Tests, Duty Assignment, Discussions
discusses the abdominal area and its appendages and the types of transformation or changes in living organisms. 4 2Theoretical Theoretical b1: Discovers fruit tree insects and apple tree insects. Theoretical: Fruit tree insects, apple tree insects. Theoretical: Fruit tree insects, apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Assignment and reporting Theoretical: Fruit tree insects, apple tree insects Practical: Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting Assignment and reporting	Duty Assignment, Discussions
abdominal area and its appendages and the types of transformation or changes in living organisms. 4 2Theoretical Theoretical b1: Discovers fruit tree insects and apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Appearance in insects, development in insects and their types. Theoretical: Fruit tree insects, apple tree insects Practical: Appearance of infestation, damage and description of the insect (apple insect). Theoretical: Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting	Duty Assignment, Discussions
its appendages and the types of transformation or changes in living organisms. Theoretical b1: Discovers fruit tree insects and apple tree insects. Theoretical: Fruit tree insects, apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects Practical: Practical: Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting Appearance of infestation, damage and description of the insect (apple insect).	Duty Assignment, Discussions
the types of transformation or changes in living organisms. 4 2Theoretical Theoretical b1: Discovers fruit tree insects and apple tree insects and apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical b2: Assession damage and describing the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects, apple tree insects Practical: Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting	Duty Assignment, Discussions
transformation or changes in living organisms. Theoretical b1: Discovers fruit tree insects and apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects. Practical: Appearance of infestation, damage and description of the insect (apple insect). Theoretical: Fruit tree insects, apple tree insects dialogue style Practical: Assignme and reporting Appearance of infestation, damage and description of the insect (apple insect).	Duty Assignment, Discussions
4 2Theoretical Theoretical b1: Discovers fruit tree insects and apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects Practical: Appearance of infestation, damage and description of the insect (apple insect). Theoretical: Fruit tree insects, apple tree insects Order insects Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting	Duty Assignment, Discussions
4 2Theoretical Theoretical b1: Discovers fruit tree insects, apple tree insects. Practical Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects Fruit tree insects, apple tree insects Practical: Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and reporting Appearance of infestation, damage and description of the insect (apple insect).	Duty Assignment, Discussions
Theoretical b1: Discovers fruit tree insects and apple tree insects. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects, apple tree insects Practical: Audio Methods Writing Style On the board direct dialogue style Practical: Appearance of infestation, damage and description of the insect (apple insect).	Duty Assignment, Discussions
3 Practical Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Fruit tree insects, apple tree insects Practical: Audio Methods Writing Style On the board direct dialogue style Practical: Appearance of infestation, damage and description of the insect (apple insect).	Duty Assignment, Discussions
3 Practical Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Theoretical: Audio Methods Writing Style On the board direct dialogue style Practical: Assignme and description of the insect (apple insect).	Duty Assignment, Discussions
3 Practical Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect.	Assignment, Discussions
Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical: Appearance of the insect (apple insect). Practical: Appearance of infestation, damage and description of the insect (apple insect).	Discussions
Practical b2: Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical: Appearance of infestation, damage and describing the insect. Appearance of infestation, damage and describing the insect. Appearance of infestation, damage and describing the insect.	
Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Practical: Appearance of infestation, damage and description of the insect (apple insect). Practical: Appearance of infestation, damage and description of the insect (apple insect).	Short Tests
Assess apple insects, observing the appearance of the infestation, damage, and describing the insect. Appearance of infestation, damage and description of the insect (apple insect).	Short Tests
insects, observing the appearance of the infestation, damage and description of the insect (apple insect). damage, and describing the insect.	Short Tests
the appearance of the infestation, damage, and describing the insect. [Apple insect]. (apple insect).	Short Tests
the infestation, damage, and describing the insect.	Short Tests
damage, and describing the insect.	Short Tests
describing the insect.	Short Tests
insect.	Short Tests
5 2Theoretical m	Short Tests
Theoretical Theoretical b2: Theoretical: Theoretical c	Short Tests
Assess olive tree Olive and pistochio trees Audio Mail	1
insects and insects Weight Co. 1	Duty
nistachia traa	Assignment,
insects dialogue style	Discussions
3 Practical Practical d1. Practical: Practical:	
Appearance of infestation, Assignment and	
damage, and description of reporting	
and moset (onto and	
the appearance of the appearance of	
infestation, damage,	
and description of	<u> </u>
the insects.	
6 2Theoretical Theoretical of	
Incorculat.	Short Tests,
Shows grape grape insects. Audio Methods Write	Duty
	Assignment,
Appearance of infestation, dialogue style	Discussions
damage and description of Prostical	
the insect (grape Assignment and	
divided Grapevine insects) reporting	
insects on the	· ·
appearance of the	
infestation, damage,	
and description of	
the insect.	
	Short Tests.
Ct	Assignment,
insects. On the board direct	Discussions
dialogue style	פווטונפטוטווא
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	3 Practical		Practical: Appearance of infestation, damage, and description of the insect (stone fruit trees insects).	Practical: Assignment and reporting	
8	2Theoretical	Theoretical c4:	Theoretical:	Theoretical:	Short Tests,
O	3 Practical	The student compares pomegranate and fig insects. Practical c3: The student divides pomegranate and fig insects based on the appearance of	pomegranate and fig insects. Practical: Appearance of infestation, damage, and description of the insect (pomegranate and fig	Audio Methods Writ Style On the board direct dialogue style. Practical: Assignment and reporting.	Duty Assignment, Discussions
0	OThe evention	the infestation, damage, and description of the insect.	insects).	Thomasical	Chart Tark
9	2Theoretical	Theoretical b3: Differentiates between citrus and palm insects.	Theoretical: citrus and palm insects.	Style.	Short Tests, Duty Assignment, Discussions
	3 Practical	Practical b4: Demonstrates the student's skills in distinguishing between the appearance of infestation, damage, and insect description of citrus and palm insects.		Practical: Assignment and reporting	
10	2Theoretical	Theoretical b5:	Theoretical:	Theoretical: Audio Methods Writi	Short Tests,
	3 Practical	Identifies vegetable insects, insects of the leguminous	vegetable insects, insects of the leguminous family.	Style On the board direct dialogue style	Assignment, Discussions
		family. Practical b3: Distinguishes between insects of the leguminous	Appearance of infestation, damage, and description of the insect (vegetable	Practical: Assignment and reporting	
	erfor		ع النسان ال	وقاي	

1		family			
		family in terms of appearance,	insects, insects of the		
		damage, and	leguminous family).		
		description of the			
11	2Thomas i	I Incact		,	
1 1	2 i neoretical	Theoretical c3:	Theoretical:	Theoretical:	
		Divides insects of	Cucurbitaceae family	Audio Methods Writi	Short Tests, Duty
		the Cucurbitaceae	insects and insects of	Style On the board	Assignment,
		family and insects	the Cruciferous family.	direct dialogue style	Discussions
		of the Cruciferous family.			
	3 Practical	Practical b3:	Described	Practical:	
		distinguish between	Practical:	Assignment and	
		Cucurbitaceae family	Appearance of infestation, damage, and description of	reporting	
		insects and insects of	the insect (Cucurbitaceae		
		the Cruciferous family.	family insects and insects o		
12	2Theoretical	Theoretical d3:	the Cruciferous family).		
	or cercur	Classification of	Theoretical:	Theoretical: Audio Methods	Short Tests,
		Solanaceae family	Solanaceae family insects.	Writing Style On the	Duty
		insects.	msects.	board direct dialogue	Assignment, Discussions
				style.	Discussions
	3 Practical	Practical d2:	Practical:	Practical:	
		Collect of	Appearance of infestation,	Assignment and	
		Solanaceae family	damage, and description of	reporting	
		insects on	the insect (Solanaceae family insects).		
	,	appearance of the infestation, damage,	laminy misects).		
		and description of			
		the insect.			
13	2Theoretical		Theoretical:	Theoretical:	Short Tests,
		Student moderates	insects of the Aceaceae,		Duty
		discussion panels	the Lilyaceae, and the	Writing Style	Assignment,
		on the insects of the	Maraceae.	On the board direct dialogue style.	Discussions
		Aceaceae, the		dialogue style.	
		Lilyaceae, and the			
	0 D 1	Maraceae.	Duantinal	Practical:	
	3 Practical	Practical d1:	Practical: Appearance of infestation,	Assignment and	
		Insects are classified into the	damage, and description of	reporting.	
		marshmallow	the insect (insects of the		
	14	family, the	Aceaceae, the	- I	, 1,1 -2
		saprophytic family,	Lilyaceae, and the		
	I	and the lily family,	Maraceae).		
		depending on the	•		
-	1	appearance of the			
	1	infestation, damage,		9	. ~
	l l	and description of	, * F	* -	
		the insect.			
14 2	Theoretical	Theoretical b5:	Theoretical:	Theoretical:	Short Tests,
14 2				Theoretical:	Short

	3 Practical	The student identifies ornamental pla insects and horticultural plainsects. Practical e1: Gives a clear description of ornamental and horticultural plainsects through appearance of infestation, dam and insect	ant I ant the	ornamental pinsects and horticultural insects. Practical: Appearance of idamage, and desof the insect (ornamental pinsects and horticultural pinsects).	plant infestation, scription plant	Practical:	Style pard direct style.	Duty Assignment Discussions	
15	2Theoretical	description.							
13	3 Practical	Theoretical: Field visit Practical: Field visit	I	Theoretical: Field visit Practical: Field visit		Theoretica a reporting Practical: a reporting		Short Tests, Duty Assignment, Discussions	
11.	. Course Eva	a William A to Committee of the Committe					A Transfer on the	Discussions	
	Calendar Me	thods	1	ndar Date	Grade	The state of the s	Relativ	e Weight%	
1	Practical Experience Reports		1	oretical week ractical week	7 Theor	7 Theoretical + 6 Practical		13%	
2	Short Test (1) Quiz			k (2-5)	1	4Theoretical + 2 Practical		6%	
3	Midterm Exam half-test (theoretical and practical)		Weel	k (8,14)	10 Theoretical + 5 Practical		15%		
4	Short Test (2)		Weel	k(9-12) 4Theoretic		cal + 2	2 6%		
5	Final Practica	l Test	20	Practical 20			20%		
6	Final theoretic	cal test	40		40		40%		
10		l Tanakina Dan			100				
de interior		Teaching Resource		- General e Tawfiq	entomolo	ogy / Muh	ıammad	Fouad	
Main re	Main references (sources)			- Modern research in the field of insects					
	N				- Books on the principles of entomology				
	Recommended books and references				- Rev. APPli. Entomol. - J. Economic Entomology				
•	scientific journals, reports…)			- Google research gate.					
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