## **Course Description Form**

1. Course Name:				
Entomological principles				
2. Course Code:				
PREN128				
3. Semester / Year:				
1 <sup>st</sup>				
4. Description Preparation Date:				
quarterly 1/2/2024				
5. Available Attendance Forms:				
Groups				
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)			
Name:dr. renna reiadh faleh				
Email: <u>renna.reyadh@uomosu</u>	l.edu.iq			
8. Course Objectives				
Theoretical:	Practical:			
- Enabling the student to understand	- Enabling the student to become familiar			
and comprehend what is related to	with the most important laboratory			
insects and their relationship with	methods for identifying and			
humans and their domestic animals.	distinguishing between insect body			
- Enable the student to distinguish	parts through various practical			
between the harms and benefits of	experiments			
insects to humans.				
-Enabling the student to know the				
areas of the insect's body.				
- Enabling the student to beco				
familiar with the various insect be	5			
appendages and the usefulness of th				
appendages for distinguishing betw	een			
different types of insects.				
9. Teaching and Learning Strategie	2S			
Theoretical:				
- Interactive lecture	Practical:			
- Brainstorming	- Commissioning teamwork to uncover			
- Assignment of tasks and report	leadership skills			
- Presentations of models of insects	- Assignment of tasks and report for each			
found in the environment	experience			
- Displaying models of mutations of				
insect body parts and distinguishing				
between mutations of different body	1			

2Distinguishes in elationship of insects to humans, and the taxonomic position of insects, in addition to the characteristics of the arthropod phylum, in addition to the characteristics of the insect class.their relationship to humans, the taxonomic position of insects in the arthropod phylum, and the characteristics of the insect class.Writing Style On the board of insects.22TheoreticalDractical b1: collects insects from the fieldPractical: Collect insects.Practical: Assignment ar reporting22TheoreticalTheoretical b2: explains the factors that helped insects to spread, the most important classes of the insect class.The insect class.Practical: Audio Method Writing Style on the board of insects. the factors that helped insects to spread, the most important classes of the insect class.Practical: Collect insects. the distribution and spread of insects. the factors that helped insects important classes of the insect class.Practical: Audio Method Writing Style on the board of insects. the factors that helped insects important classes of the insect class.Practical: Collect insects. the distribution and spread of insects. the factors that helped of insects. The importance of insects. The insect set class important classes of the insect class.Practical: Kill insects.Practical: Audio Method of insects. the factors that helped insects' insects.3PracticalPractical b3: Judges insects' external appearance, body wall, structure and function.Practical: Audio Method syle on the board of insects (insect hardening)Practical: Audio Method syle on the board of insects (insect hardening)3PracticalPractical a3: Learn about methods of jurget insects (insect hardening)Practical: Audio Method syle on the board of insects (insect hardening) </th <th></th> <th></th> <th></th> <th></th> <th>220</th> <th>rogi</th>					220	rogi		
10.         Course Structure           We ek         Hours         Required Learning Outcomes         Unit or subject name (her subject name)         Learning method           1         2Theoretical         Theoretical a1: Distinguishes the relationship of insects to humans and the taxonomic position of insects, in addition to the characteristics of the arthropod phylum, and the characteristics of the insect class.         Theoretical: Introduction to insects and their relationship to minual world, features of an earthropod phylum, features of the class of insects.         Practical: Assignment ar reporting           2         Practical         Practical: Collect insects from the field         Practical: Collects insects from the field         Practical: Audio Method Witing Style           3         Practical         Practical b1: collects insects from the field         Theoretical: The importance of insects, that helped insects to spread, the most important classes of the arthropod phylum, and the characteristics of the insect class         Theoretical: Audio Method Witing Style           3         Practical         Practical b3: [Judges insects'         Theoretical: Kill insects.         Practical: Assignment ar reporting           3         Practical         Practical a3: [Judges insects'         Practical: Audio Method Style           3         Practical a3: [Learn about methods of preserving insects (insect hardening)         Practical: Assignment ar reporting           3         Practical a3: [Learn about methods of preserving insects (inse				iccussion		-		
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cuticle appendages, insect colors and	Discussions							
their functions								

	3 Practical	Practical b4:	Practical:	Practical: Assignme	
		Distinguishes the external	External appearance of insects, plates and bod	and reporting	
		appearance of	wall.		
		insects, body plates and walls			
5	2Theoretical		Theoretical:	Theoretical:	Short Tests
5		suggested to identify moulting in insects and cuticle formation	Moulting in insects and cuticle formation	Audio Methods Writi Style On the board direct dialogue style	
	3 Practical	<b>Practical</b> c1: Recognizes the insect body parts and the insect head	<b>Practical:</b> Insect body parts, insect head.	<b>Practical:</b> Assignment and reporting	
6	2Theoretical	Theoretical c1:	Theoretical:	Theoretical:	Short Tests
		Recognizes the bodys area, the head and its appendages, the antennae, function and their various modifications, and the eyes	Regions of the body in insects, the head and its appendages, antennae, function and their various mutations.	Audio Methods Writi Style On the board direct dialogue style	Duty Assignment Discussions
	3 Practical	<b>Practical</b> b6: It detects the insect's head and its location on the body, head appendages, and types of antennae	<b>Practical:</b> Insect head, its location on the body, head appendages, types of antennae.	<b>Practical:</b> Assignment and reporting	
7	2Theoretical		Theoretical: Mutations of mouthparts in insects	Theoretical: Audio Methods Writh Style On the board direct dialogue style	Short Tests Duty Assignment Discussions
	3 Practical	<b>Practical</b> b7: Examines the parts of the mouth and its	<b>Practical:</b> Mouth parts and their modifications	<b>Practical:</b> Assignment and reporting	
8	0.001	appendages Theoretical a3:	Theoretical:	Theoretical:	Short Tests

		thorax, chest appendages, legs,	legs, function and their modifications	Style On the board direct dialogue style	Assignment Discussions
	3 Practical	function and their modifications <b>Practical</b> b8: Writes a report on the chest area and its appendages, legs	<b>Practical:</b> Thorax and its appendages, the legs and their types	Practical: Assignment and reporting	
0	2Theoretical	and their types	Theoretical:	Theoretical:	Chart Taata
9	2Theoretical	Theoretical a3: Learn about wings, their structure and modifications, wing veining, wing attachment devices, and flight mechanics.	Wings, wing structure, wing veins, wing modifications, wing clamping devices, flight mechanics	Audio Methods Writi Style On the board direct dialogue style	Short Tests Duty Assignment Discussions
				Practical:	
	3 Practical	<b>Practical</b> b9: Draws wings and their types, and uses a wing- flapping machine	<b>Practical:</b> The thorax and its appendages, the wings and their types, the machine for clasping the wings	Assignment and reporting	
10	2Theoretical		Theoretical:	Theoretical:	Short Tests
10	3 Practical	Field visit <b>Practical</b> : Field visit	Field visit <b>Practical:</b> Field visit	a reporting <b>Practical:</b> a reporting	Duty Assignment Discussions
11	2Theoretical	Theoretical a3:	Theoretical:	Theoretical:	Short Tests
	3 Practical	Identify the abdomen and its appendages <b>Practical</b> c10: Participates in examining the abdominal area	Abdomen, abdominal appendages, asexual and sexual appendages. <b>Practical:</b> Abdomen	Assignment and reporting	Assignment Discussions
12	2Theoretical	Theoretical b11:	Theoretical:	Theoretical:	Short Tests
	3 Practical	Proficient in identifying the life history of insects and the stages of insect development <b>Practical</b> b12: links reproduction	Life history of insects, insect stages, insect eggs, larvae and their types <b>Practical:</b> Baproduction and	Audio Methods Writing Style On the board direct dialogue style. Practical: Assignment and	Duty Assignment Discussions
		links reproduction	Reproduction and	reporting	
13	2Theoretical	and growth <b>Theoretical</b> d1: Discussions will be held on the nymphal and pre- pupal stages, types of pupae, and the	growth in insects <b>Theoretical:</b> Nymphal stages, pre- pupal stages, pupal types (cocoon), full stage.	<b>Theoretical:</b> Audio Methods Writing Style On the board direct dialogue style	Short Tests Duty Assignment Discussions

		pupal stage							
	3 Practical	<b>Practical</b> b10: Participates in a panel discussion about transformation ar its types	M ty	r <b>actical:</b> etamorphosis pes	and its	<b>Practical:</b> Assignment a reporting	and		
14	2Theoretical	Theoretical b13	: Tł	neoretical:		Theoretical:		Short Tests	
		Shows the types of morphology or transformation in insects, and the orders of insects		volution in ins pes of evolutions sects, orders of sects	on in	Audio Methods Writing Style On the board direct dialogue style		Duty Assignment Discussions	
	3 Practical	<b>Practical</b> c2: Ability to distinguish betwe incomplete stages	en s	r <b>actical:</b> nperfect stage	S	<b>Practical:</b> Assignment reporting			
15	2Theoretical	Theoretical:		neoretical:		Theoretical:		Short Tests	
	3 Practical	Field visit <b>Practical</b> : Field visit	Pr	eld visit <b>actical:</b> eld visit		a reporting <b>Practical:</b> a reporting		Duty Assignment Discussions	
11.	Course Evalu	iation							
	Calendar Me			Calendar Date Grade Week)		Relat		ve Weight%	
1		Final Report + Theoretic		retical week actical week		7 Theoretical + 6 13% Practical			
2	Short Test (	1) Quiz		x (2-5)		4Theoretical + 2 Practical		6%	
3	Midterm Exa (theoretical			: (8,14)	10 The	10 Theoretical + 5 Practical		15%	
4	Short Test (2		Week	:( 9-12)		4Theoretical + 2		6%	
5	Final Practic	cal Test	20		20		20%		
6	Final theore	tical test	40		40		40%		
10	<b>T</b> •				100				
		l Teaching Resou (curricular books, if		Cananal	t		la a	ad Faund	
Kequ	neu textbooks	(cumcular books, ii	any)	- General Tawfiq	entomo	ology / Mu	namm	au Fouau	
Main references (sources)			<ul> <li>Modern research in the field of insects</li> <li>Books on the principles of entomology</li> </ul>						
	mmended b ntific journals, 1		erences	- Rev. APF	Pli. Ento	omol.			
Electronic References, Websites			<ul><li>- J. Economic Entomology</li><li>- Google research gate.</li></ul>						
					- Google scoler.				

Dr. Renna Riadh Faleh

Ekhlas Zyaid Mohamed