Course Description Form

1. Course Name:
PESTCIDIES
2. Course Code:
PEST417
3. Semester / Year:
FIRSTsemester/FOURTH stage/2023-2024
4. Description Preparation Date:
1-2-2024
5. Available Attendance Forms:
Classroom
6. Number of Credit Hours (Total) / Number of Units (Total)
2 hours theory / 3 hours practical (5 hours) / 3 units
7. Course administrator's name (mention all, if more than one name)
Name: 1- Dr. SADDAM MOWAFAK HASSAN 2- M.M.HAMED MOHAMED HAMED Email: DR.SADDAM_HASSAN@uomosul.edu.iq
8. Course Objectives
• Introducing students to the common types of pesticides and their effect on crops, and explaining their transmission methods and infection mechanisms. • Provide an understanding of the basic biology and ecology of pesticides, with emphasis on the impact of environmental factors on their spread and development. • Students learned the skills of diagnosing caecilian infections and analyzing the factors affecting them, using laboratory tests and field observation. • Study means and methods of prevention and control of, including the use of pesticides and advanced agricultural techniques such as biological control. • Analyze the economic and environmental impacts of pefticides, and study sustainable and preventive management methods to reduce their impact on crops and environment. • Enhancing students' skills in planning and implementing field experiments and scientific studies to effectively treat and control caecilian infestations. • Encouraging students to research and interact with modern literature and research

in the field of Nematode, and to contribute to developing innovative solutions to m current challenges in this field.

9. Teaching and Learning Strategies

Strategy	
	• Brainstorming • Teamwork • Discussion • Discovery learning • Problem solving or problem-based learning • E-Learning • Practical field training • Think, discuss, share

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
١	2 Theoretical ٢ Practical	Theoretical: a1 knows the concept of pest and pest damage Practical: b1 Enumerate the groups of pesticides and their classifications	Theoretical: Pests, their types and harms Practical: Definition of pesticides, their types and classifications	Interactive lecture, brainstorming, dialogue and discussion, self-learning	semester test 1, final test
				Interactive lecture, brainstorming, dialogue and discussion, field training, self-learning	Short practical test
٢	2 Theoretical 3Practical	heoretical: a2 explains methods of pest control Practical: b2 Writes a report on the types of pesticides	Theoretical: Methods of pest control Practical: Viewing different types of pesticides	interactive lecture, brainstorming, dialogue and discussion, self-learning	semester test 1, final test
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	short practical test
٣	2 Theoretical ٢ Practical	Theoretical a4 is familiar with different pesticides Practical: b4 tests pesticide additives	heoretical: Pesticides Practical: Exploring the importance of additives in pesticide preparation	Interactive lecture, brainstorming, dialogue and discussion, self-learning	semester test 1, final test
				Interactive lecture, brainstorming, dialogue and discussion, field training	self-learning Short practical test
4	1 Theoretical 3Practical	Theoretical: a3 ا understands pesticides	Theoretical: Insecticides Practical: Knowing the	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester test 1, final test, report.

		Practical: b4 tests pesticide additives	importance of additives in pesticide preparation	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	short practical test
5	1 Theoretical 3Practical	Theoretical: a3 understands pesticides Practical: b4 tests for pesticides	Theoretical: Insecticides Practical: Conduct laboratory experiments	, interactive lecture, brainstorming, dialogue and discussion, self-learning	semester test 1, final test, report.
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	Semester test 1, final test, report.
6	1 Theoretical ٢ Practical	Theoretical a3 Understands the chemicals that inhibit insect reproduction Practical: b2 writes a report on some pesticide labels	Theoretical: Chemicals that inhibit insect reproduction Practical: Views different models of these stickers	interactive lecture, brainstorming, dialogue and discussion, self-learning	short test, final test
				interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	short practical test
٧	1 Theoretical 3Practical	Theoretical a3 Understands fungicides and their modes of action Practical: b4 tests some fungicides	Theoretical: Fungicides Practical: Conducting experiments based on these studies	interactive lecture, brainstorming, dialogue and discussion, self-learning	semester test 2, final test
				interactive lecture, brainstorming, dialogue and discussion	semester test 2, final test
8	1 Theoretical 3 Practical	Theoretical: a3 Understands fungicides and their modes of action Practical: b4 tests some fungicides	Theoretical: Fungicides Practical: Conducting experiments based on these studies	interactive lecture, brainstorming, dialogue and discussion	self-learning, semester test 2, final test
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises	self-learning Short practical test
9	1 Theoretical 3 Practical	Theoretical: a3 understands pest resistance Practical: b4 tests some pesticides on a number of collected insects	Theoretical: Pest resistance to pesticide action practical : Collecting insect samples and conducting experiments on them	Interactive lecture, brainstorming, dialogue and discussion, self-learning	semester test 2, final test.
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	short practical test
10	1 Theoretical	Theoretical: a3 understands pest resistance Practical: b4	Theoretical: Pest resistance to pesticide action	interactive lecture, brainstorming, dialogue and discussion, self-learning	quarterly test 2

	3 Practical	tests some pesticides on a number of collected insects	Practical: Collecting insect samples and conducting experiments on them	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	Short practical test
11	1 Theoretical 3 Practical	Theoretical: a3 understands pollution Practical: b1 enumerates the effects and harms of pollution	Theoretical: Pesticides and environmental pollution Practical: Test animals for pesticides and various chemicals	interactive lecture, brainstorming, dialogue and discussion, self-learning	final exam
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning.	
12	1 Theoretical 3 Practical	Theoretical: a3 understands pollution Practical: b1 enumerates the effects and harms of pollution	Theoretical: Pesticides and environmental pollution Highlighting practical: Conducting experiments specific to the topic	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning.	final exam
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	short practical test.
13	1 Theoretical 3 Practical	Theoretical: a3 understands pollution Practical: b1 enumerates the effects and harms of pollution	Theoretical: Pesticides and environmental pollution Practical: Conduct experiments on the topic	Dialogue and discussion, self-learning	Report
				Dialogue and discussion, field training, practical exercises, self-learning	Report
14	1Theoretical 3 Practical	Theoretical: a3 understands pollution Practical: b1 enumerates the effects and harms of pollution	Theoretical: Pesticides and environmental pollution Practical: Practical application of these analyses	Interactive lecture, brainstorming, dialogue and discussion, self-learning	report.
				Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, self-learning	Short practical test 3
15	1 Theoretical 3 Practical	Theoretical: a3 understands pollution Practical: b1 enumerates the effects and harms of pollution	Theoretical: Pesticides and environmental pollution The skeleton and the rest of the themes practical: Practical application of these examples	Brainstorming, dialogue and discussion, self-learning	Report
				Brainstorming, dialogue and discussion, field training, practical exercises	Report
11. Course Evaluation					

buting the score out of 100 according to the tasks assigned to the student such as ly preparation, daily oral, monthly, or written exams, reports .... etc
12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1- Pesticides: Awad Shaaban and 2- Nizar Mustafa Al-Mallah, 1993
Main references (sources)	
Recommended books and references (scientific journals, reports...)	-Theoretical foundations of pesticides, Nizar Mustafa Al-Mallah and Abdul- Razzaq Al-Jubouri 3-The practical foundations of pesticides and their applications, Nizar Mustafa Mallah and Abdul-Razzaq Al-Jubouri
Electronic References, Websites	

The theoretical subject teacher and the practical subject teacher

Dr.SADDAM MOWAFAK HASSAN

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Chairman of the Scientific Committee

Dr. Juhayna Idris Mohamed,

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Dr. Firas Kadhim AlJuboori

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