Course Description Form

1. Course Name:
AGRICULTURAL MITES
2. Course Code:
AGM4700
3. Semester / Year:
Spring/ 4th
4. Description Preparation Date: quarterly
1/2/2025
5. Available Attendance Forms:
In-person + Online
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.Reena Riadh Falih Email: renna.reyadh@uomosul.edu.iq Asst. Lect. Hamad Mohammed Hamad
8. Course Objectives
• Description of mites from a morphological and anatomical point of view. • Identifying families that cause harm to humans, plants, and animals. • Know the damage caused by these organisms and distinguish them from other damage caused by different organisms or sources that may cause this damage. • Gaining knowledge about the use of beneficial species in pest control or other fields. • Learn how to collect these organisms from sources of infection. • Enabling students to learn about the most important laboratory methods for detecting these organisms and scientific experiments to diagnose the symptoms of infection with these organisms. • Knowledge of the methods and techniques used in control programs.
9. Teaching and Learning Strategies

Strategy	1. Use the lecture method to deliver information. 2. Students' participation in obtaining information by asking them to submit scientific reports. 3. Training students on the logical discussion method to reach results. 4. Learning through applied field practices.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 Theoretical 3 Practical	Theoretical: a1: The student identifies an introduction to Acarology. What are the reasons that made mites a major pest? Practical: a1: The student identifies the factors leading to the successful spread of agricultural mites.	Theoretical: Acarology... its definition... its development in the world and the Arab world, the most famous workers in this field globally and in the Arab world... definition of agricultural mites... what is the difference between mites and insects? What are the reasons that made mites a major pest? Practical: Brief introduction to agricultural mites and the factors leading to their success.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
2	2 Theoretical 3 Practical	Theoretical: a2: The student reviews the factors leading to the success of agricultural mites. Practical: a2: The student reviews the damage of agricultural mites to plants.	Theoretical: Brief introduction to agricultural mites and the factors leading to their success. Practical: General damage of mites to plants.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
3	2 Theoretical 3 Practical	Theoretical: a3: The student discusses the habits of agricultural mites and their habitats. Practical: a3: The student discusses the factors affecting the activity of agricultural mites.	Theoretical: Habits and habitats of agricultural mites. Practical: The effect of some factors affecting the activity of plant mites.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.

4	2 Theoretical 3 Practical	Theoretical: b1: The student discovers the economic importance of agricultural mites. Practical: b2: The student evaluates methods of surveying and counting agricultural mites.	Theoretical: Economic importance of agricultural mites (on plants, on humans, on animals, on stored materials), information on dust mites on palm trees. Hair-wristed mites and scabies mites (life cycle, control, and treatment). Practical: Methods used in surveying and counting Acari.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
5	2 Theoretical 3 Practical	Theoretical: b2: The student evaluates families of mites of economic importance. Practical: d1: The student classifies the method of taking field samples of mites.	Theoretical: Study of some families of economic damage: family (common red mite, false red mite). Practical: Methods of taking field samples.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
6	2 Theoretical 3 Practical	Theoretical: Field visit to infested fields and nurseries. Practical: Field visit to infested fields and nurseries.	Theoretical: Field visit. Practical: Field visit.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
7	2 Theoretical 3 Practical	Theoretical: c3: The student interacts with families of agricultural mites of economic damage. Practical: d2: The student collects	Theoretical: Study of some families of economic damage: family (eriophyid mites, hair-wristed mites). Practical: Methods of collecting and	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.

		samples of agricultural mites.	isolating soil-dwelling mites.		
8	2 Theoretical 3 Practical	Theoretical: c4: The student compares families of agricultural mites beneficial in agriculture. Practical: c3: The student classifies types of agricultural mites based on the environment.	Theoretical: Study of the most important families beneficial in agriculture: Laelapidae, Phytoseiidae. Practical: Methods of collecting and isolating mites from fresh and salt water.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
9	2 Theoretical 3 Practical	Theoretical: b3: The student distinguishes between economically important families of mites. Practical: b4: The student demonstrates skills in distinguishing between types of mites parasitic on animals.	Theoretical: Methods of spreading economically important families of mites. Practical: Methods of collecting mites parasitic on animals.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
10	2 Theoretical 3 Practical	Theoretical: b5: The student identifies the external morphology of mites. Practical: b3: The student distinguishes between types of mites.	Theoretical: External morphology of mites. Practical: Laboratory breeding of agricultural mites.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
11	2 Theoretical 3 Practical	Theoretical: Field visit to infested fields and nurseries. Practical: Field visit to infested fields and nurseries.	Theoretical: Field visit. Practical: Field visit.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.

12	2 Theoretical 3 Practical	Theoretical: d3: The student classifies agricultural mites based on the method of reproduction. Practical: d2: The student collects the materials needed to make mite environments.	Theoretical: Reproduction in mites. Practical: Materials used in making loading environments and their specifications.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
13	2 Theoretical 3 Practical	Theoretical: d4: The student leads discussion groups on types of grain mites and stored food materials. Practical: d1: The student classifies the agricultural mites under study.	Theoretical: Grain mites and stored food materials. Practical: Preparing mites for study.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
14	2 Theoretical 3 Practical	Theoretical: b5: The student identifies chemical pesticides in the control of agricultural mites. Practical: e1: The student provides steps for preparing and making microscopic slides of Acari.	Theoretical: Pest resistance to chemical pesticides (definitions used in the field of resistance). Practical: Steps for making microscopic slides of Acari.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.
15	2 Theoretical 3 Practical	Theoretical: c1: The student explains the integrated management of agricultural mites. Practical: Field visit to infested fields and nurseries.	Theoretical: Integrated management of mites. Practical: Field observations.	Theoretical: Auditory methods, whiteboard writing, direct dialogue. Practical: Assignment of tasks and reports.	(Short quizzes, first and final midterms), homework assignments, discussions.

11. Course evaluation	
11. Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, monthly, written exams, reports, etc.	
12. Learning and teaching resources	
Required Texts	1. Abu AL-Habb,Jali Karim. 1986. Translation of the book The Harmful Dream for Economic Plants, Part Two: The Quadrupedal Dream (Ariophyte). Written by Gibson, Kiefer, and Baker, Ministry of Higher Education and Scientific Research - University of Baghdad - College of Agriculture. 675 pages. 2. Al-Mallah, Nizar Mustafa 2009 Basic Mites, Economics and Control University of Mosul, Ministry of Higher Education, Scientific research, Iraq 780 pages.
Recommended Texts	Scientific journals, books, and research on the agricultural Mites.
Websites	All agricultural magazines and magazines related to Mites and ticks.