

Course Description Form

1. Course Name:
Principles of Plant Protection
2. Course Code:
APD-1202
3. Semester / Year:
second semester/ 2024-2025
4. Description Preparation Date:
15/1/2025
5. Available Attendance Forms:
Full time (theoretical lecture + practical) weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
125 hours – 5 units
7. Course Administrator's Name (Mention All, If More Than One Name)
Name: Hussein Ali Mutney Email: huseinmutney@uodiyala.edu.iq
8. Course Objectives
<p>The student should get acquainted with the field of distinguishing disease infections from insect infestation :</p> <ul style="list-style-type: none">•Applying for external tests by local/regional/international bodies of insects .• The student should get acquainted the enable one to gain knowledge of the methods used and methods for distinguishing disease and insect infestations
9. Teaching and Learning Strategies

In-person lectures for 15 weeks, including monthly exams and daily exams in each lecture, with reports in the laboratory part.

- Lecture method and use of the board.
- Explanation and clarification.
- Providing the students with basics and additional topics that related to the outcomes of Entomology thinking and analysis.
- Creating discussion groups during lectures to discuss Principles of plant protection topics that require thinking and analysis.
- Asking students a set of thinking questions during lectures, such as what, how, when, and why for specific topics.
- Giving students homework that requires self-explanation in explained ways

10. Course Structure

Theoretical part

Week	Hou rs	Required learning outcomes	Unit or Subject	Learning Method	Evaluation Method
1	2	Introduction to Entomology	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
2	2	Insect feeding methods and factors survive	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	2	Insect reproduction methods	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
4	2	Environmental factors affecting the life activity of insects	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
5	2	First month's examination			
6	2	Methods of insect resistance	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
7	2	Economic Mites and Important Factors in Iraq	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

8	2	External anatomy of agricultural mites, important factors of agricultural mites	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
9	2	The nature of life and damage of non-insect pests, rodents and birds, and methods of controlling them	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
10	2	Economic importance of plant diseases. Definitions of plant disease terms	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
11	2	Second month examination			
12	2	Parasitic plant pathogens (biological)	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
13	2	Non-parasitic plant pathogens (abiotic)	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
14	2	Methods of spread of parasitic plant diseases	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
15	2	Basic methods of controlling plant diseases in this science	Principles of Plant Protection	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
Practical part					
Week	Hours	Required learning outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	3	Taxonomic of insects	Principles of	Observation	Daily, monthly

			Plant Protection	Dialogue & discussion	and final exams and daily reports
2	3	General characteristics of the arthropod phylum	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
3	3	Classes of the phylum Arthropoda	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
4	3	Insect body structure / head accessories / mouth types / antenna types	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
5	3	First month's examination			
6	3	Thorax attachments / types of legs / types of wings / abdominal attachments	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
7	3	Metamorphosis	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
8	3	Classification of insects and characteristics of insect orders	Principles of Plant Protection	Computer 1	Observation Dialogue & discussion
9	3	Pathology of plant	Principles of Plant Protection	Dialogue & discussion	and final exams and daily reports
10	3	Wheat and barley insects + corn + cotton	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
11	3	Palm/fruit insects and cucurbits	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
12	3	Second month examination			
13	3	Identify the most important symptoms and signs of plant pathogens	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
14	3	symptoms of field crop diseases and methods of controlling them	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports

15	3	symptoms of horticultural crop diseases and methods of controlling	Principles of Plant Protection	Observation Dialogue & discussion	Daily, monthly and final exams and daily reports
11. Course Evaluation					
Examination Monthly & daily exams with discussion questions inside the lecture . The degree of participation in the questions related to the subject.					
12. Learning and Teaching Sources					
Required Textbooks (Curricular Books, If Any)			Al-Azzawi, A. F., Ibrahim Q. Q., and Al-Jubouri.H. S. 1990. Economic Insects, Ministry of Higher Education and Scientific Research, Dar Al-Kutub Printing Foundation, Baghdad Uni. Qaddo, I. Q. and Hussein A. A.. 2015. General Entomology. Republic of Iraq - Ministry of Higher Education and Scientific Research.		
Main References (Sources)			The foundations of the level and topography - Riyadh Saleh Al-Khafaf / 2000		
Recommended Books and References (Scientific Journals, Reports...)			Iraqi academic journal		
Electronic References, Websites					