



SUJ-01-05-01A	رقم النموذج	نموذج مخطط مادة دراسية/ انجليزي Course Syllabus
	تاريخ الإصدار	
	رقم وتاريخ المراجعة أو التعديل	
	رقم قرار اعتماد مجلس العمداء	
	تاريخ قرار اعتماد مجلس العمداء	
9	عدد الصفحات	

1.	Course title	Principles of Plant Protection
2.	Course number	(0606101)
3.	Credit hours	3
	Contact hours (theory, practical)	3: 18:30-19:30 (S, T, T)
4.	Prerequisites/corequisites	Biology (304101)
5.	Program title	<input checked="" type="checkbox"/> BSc <input type="checkbox"/> MSc <input type="checkbox"/> PhD in Plant Protection
6.	Program code	
7.	Awarding institution	The University of Jordan
8.	School	School of Agriculture
9.	Department	Plant Protection
10.	Course level	First year
11.	Year of study and semester (s)	First semester, 2024-2025
12.	Other department (s) involved in teaching the course	-
13.	Main teaching language	English
14.	Delivery method	<input type="checkbox"/> Face to face learning <input type="checkbox"/> Blended <input checked="" type="checkbox"/> Fully online
15.	Online platforms(s)	<input type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....
16.	Issuing/Revision Date	06.10.2025

**17. Course Coordinator:**

Name: **Dr. Nehaya Al-Karablieh**
Office number: 184 first floor
Phone number: 22343
Email: n.alkarablieh@ju.edu.jo
Contact hours: Sunday: 11:30-12:30, Tuesday 12:30-14:30.

18. Other instructors:

Name: **Dr. Wisam Obeidat**
Office number: 126 first floor
Phone number:
Email: wi.obeidat@ju.edu.jo
Contact hours: Tuesday and Thursday 10-11 a.m.

19. Course Description:

The course is designed to familiarize students with the principles of plant protection including **two parts: Entomology and Plant Pathology**. It will focus on the basic aspects of entomology and plant pathology.

20. Course aims and outcomes:**A- Aims:**

1. Awareness of students with plant protection in agriculture and institutions dealing with this field.
2. Develop a knowledge and understanding of identification the insects of different orders and especially orders of importance to agriculture
3. Sensitize students to the importance of appropriate control measures for managing insect pests in crops.
4. Understand the principles of plant protection
5. Understand the infectious and environmental plant diseases
6. Understand the different methods of disease control
7. Understand the different factors disease spread, favorable environmental conditions and control of plant diseases.

**B- Students Learning Outcomes (SLOs):****Program Students Learning outcome (PLO)**

1. Demonstrate a depth in understanding of the fundamental knowledge and skills required in the field of Plant Protection sciences, which include weeds, insects, mites, fungi, bacteria, viruses and nematodes.
2. Identify and distinguish harmful and beneficial weeds, insects, mites, fungi, bacteria, and nematodes.
3. Predict the outbreaks of pests and determine the level of infection based on skills gained in the field of Plant Protection Sciences.
4. Recognize different techniques (biological, chemical, cultural, and physical) in pest control.
5. Design and develop appropriate management strategies for pests in an environmentally friendly manner.
6. Participate efficiently in agricultural projects in the field of pest management in various public and private sectors in Jordan and worldwide.
7. Communicate effectively in written, oral, and graphical forms.
8. Employ the gained skills in communication and serving different communities.
9. Commit to ethics and compliance responsibilities for being an agricultural engineer, especially with regard to the agricultural sector, environment, and society.

Course Students Learning outcome (CLO)

Upon successful completion of this course, students will be able to:

A. Knowledge and Understanding

- A1. Gain student information for sources related to plant protection.
- A2. Demonstrate basic knowledge on biology, physiology of insects.
- A3. Understand external and internal features of arthropods and insects, which are influencing their success.
- A4. Reflect about the relevance of modern integrated pest management
- A5. Apply and analyze methods of pest management technology.
- A6. Explain the underlying physiological and entomological aspects which can lead to crop loss.



A7. Differentiate between fungal, bacterial, viral, nematodes diseases.

A8. Realize the different components of disease development.

B. Intellectual Analytical and Cognitive Skills

B1. Practical strategy how to cease down the pest problems and how to maintain good crop quality.

B2. Know about the damage that occur to the crop and humans by arthropods and insects.

B3. Know the different factors regarding the disease epidemiology.

B4. Know how to control plant diseases safely.

C. Subject- Specific Skills

C1. Apply the most environmentally save pest control.

C2. Explain the underlying physical and chemical aspects which can affect pesticides.

C3. Understanding the factors that can be managed to optimize pests control.

C4. Applicable for solving problems associated with public health and horticultural crops pests.

C5. Know the proper use of pesticides.

C6. Know how to avoid pollution.

D. Transferable Key Skills

D1. Gain basic plant protection technologies to maintain the quality of fresh fruits, vegetables and ornamental plants.

D2. Reduce crop losses by incorporating ecologically save pest management technologies.

D3. Know the right time to apply the pesticides and the importance of environmental conditions that affect the high-quality product.

D4. Know some vegetable diseases.

D5. Know some fruit tree and ornamental diseases.

Program SLOs SLOs of the course	SLO (A)	SLO (B)	SLO (C)	SLO (D)
1	A1, A2, A3, A7, A8			D1
2				D4, D5
3	A6	B3		
4	A5	B2	C2, C3	D2
5	A4	B1	C1, C4, C5, C6	D3
6		B4		
7				
8				
9	All	All	All	All



21. Topic Outline and Schedule:

Week	Lecture	Topic	Intended Learning Outcome	Learning Methods Face to Face (FF) Blended (B) Fully Online (FO)	Platform MS teams (MS) Moodle (M))	Lecturing Synchronous (S) Asynchronous (AS)	Evaluation Methods Assignment (A) Exam (E) Presentation (P) Quiz (Q) Report (R)	Resources
1	1	Introduction	B7, A8	FO	MS	S	E, Q	2
1	2	Cont.	B7, A8	FO	MS	S	E, Q	2
1	3	Cont.	B7, A8	FO	MS	S	E, Q	2
2	1	Disease triangle	B7, A8	FO	MS	S	E, Q	2
2	2	Cont.	B7, A8	FO	MS	S	E, Q	2
2	3	Cont.	B7, A8	FO	MS	S	E, Q	2
3	1	Disease cycle	B7, A8	FO	MS	S	E, Q	2
3	2	Cont.	B7, A8	FO	MS	S	E, Q	2
3	3	Cont.	B7, A8	FO	MS	S	E, Q	2
4	1	Disease symptoms and signs	B7, A8	FO	MS	S	E, Q	2
4	2	Fungal diseases	B7, A8	FO	MS	S	E, Q	2
4	3	Cont.	B7, A8	FO	MS	S	E, Q	2
5	1	Cont.	B7, A8	FO	MS	S	E, Q	2
5	2	Bacterial diseases	A7, D7, D8	FO	MS	S	E, Q	2



5	3	Plant Pathology-Midterm exam (07.11.2024)						
6	1	Cont.	A7, D7, D8	FO	MS	S	E, Q	2
6	2	Viral diseases	A7, D7, D8	FO	MS	S	E, Q	2
6	3	Diseases caused by Nematodes	A7, D7, D8	FO	MS	S	E, Q	2
7	1	Diseases caused by parasitic plants	A7, D7, D8	FO	MS	S	E, Q	2
7	2	Diseases caused by abiotic factors	A7, D7, D8	FO	MS	S	E, Q	2
7	3	Cont.	A7, D7, D8	FO	MS	S	E, Q	2
8	1	Introduction		FO	MS	S	E, Q	1
8	2	Cont.		FO	MS	S	E, Q	1
8	3	Cont.		FO	MS	S	E, Q	1
9	1	Insects and their ways		FO	MS	S	E, Q	1
9	2	Cont.		FO	MS	S	E, Q	1
9	3	Cont.		FO	MS	S	E, Q	1
10	1	Relationship or effect of insects on humans		FO	MS	S	E, Q	1
10	2	Cont.		FO	MS	S	E, Q	1
10	3	Insect orders		FO	MS	S	E, Q	1



11	1	Principles and methods of insect pest control		FO	MS	S	E, Q	1
11	2	Cont.		FO	MS	S	E, Q	1
11	3	Entomology-Midterm exam (19.12.2024)						
12	1	Control with chemical pesticides		FO	MS	S	E, Q	1
12	2	Cont.		FO	MS	S	E, Q	1
13	1	Medical and household insects		FO	MS	S	E, Q	1
13	2	Insect pests of stored materials		FO	MS	S	E, Q	1
13	3	Insect pests of fruit trees		FO	MS	S	E, Q	1
14	1	Cont.		FO	MS	S	E, Q	1
14	2	Insect pest of vegetables		FO	MS	S	E, Q	1
14	3	Cont.		FO	MS	S	E, Q	1
Final Exam based on university schedule								



22. Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Midterm Exam-plant pathology	15	Introduction Disease triangle Disease cycle Disease symptoms and signs and Fungal diseases		5 07/11/2024	FF
Quizzes	15			Weekly	MS
Midterm Exam-Entomology	15	Insects and their ways Relationship or effect of insects on humans Insect orders Principles and methods of insect pest control Control with chemical pesticides		11 19/12/2024	FF
Quizzes	15			Weekly	MS
Final exam	40	all	all	University Schedule	FF

23. Course Requirements

(e.g: students should have a computer, internet connection, webcam, account on a specific software/platform...etc):

- Students should have a computer, internet connection, and account on Microsoft teams to have access to course materials and some course activities.

24. Course Policies:

A- Attendance policies:

Students should attend all classes on time.

B- Absences from exams and submitting assignments on time:

Students should not be absent from exams and if they do then a convincing excuse should be provided within 24 h after the exams. Assignments should be submitted on their schedule.

C- Health and safety procedures:

- When in class, students should follow safety measures by wearing masks and keeping at least one meter between each other.



- General Laboratory instructions will be explained and discussed with the students during laboratory work.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

According to university regulations, For more details on University regulations please visit <https://units.ju.edu.jo/ar/LegalAffairs/Regulations.aspx>

E- Grading policy:

As mentioned in section 22, and according to university regulations

F- Available university services that support achievement in the course:

Literature room and Data show, Teaching laboratory, etc.

25. References:

A- Required book(s), assigned reading and audio-visuals:

PC or Laptop or Cell phone connected to Internet. Registration on Microsoft teams

1. Charles A. Triplehorn Norman F. Johnson. 2005. Borror and Delong's. Introduction to the study of Insects. 2005. 7th edition. USA. 866 Pp.
2. Agrios, G. N. 2005. Plant Pathology. 5th edition. University of Florida, Academic Press.

B- Recommended books, materials, and media:

26. Additional information:

Concerns or complaints should be expressed in the first instance to the module lecturer; if no resolution is forthcoming, then the issue should be brought to the attention of the module coordinator (for multiple sections) who will take the concerns to the module representative meeting. Thereafter, problems are dealt with by the Department Chair and if still unresolved the Dean and then ultimately the Vice President. For final complaints, there will be a committee to review the grading the final exam.

Name of Course Coordinator: Dr. Nehaya Al-Karablieh -Signature: -----	Date: -06.10.2025
Head of Curriculum Committee/Department: -----	Signature: -----
Head of Department: -----	Signature: -----
Head of Curriculum Committee/Faculty: -----	Signature: -----
Dean: -----	Signature: -----