

Department of Plant Protection College of Agricultural Engineering Sciences Salahaddin University Subject: Phytobacteriology Course Book – (Year 4) Lecturer's name: Nask Sherzad Salh Academic Year: 2023/2024

Course Book

Ministry of Higher Education and Scientific research

1. Course name	Phytobacteriology
2. Lecturer in charge	Nask Sherzad Salh
3. Department/ College	Plant protection department/ Agricultural Engineering Sciences
4. Contact	e-mail: <u>nask.salh@su.edu.krd</u> . Tel: 009647507176155
5. Time (in hours) per wee	k 3
6. Office hours	(8:30-11:30) (11:30-2:30)
7. Course code	
8. Teacher's academic	Born on:30 June 1986 Baghdad/ Iraq
profile	*B.Sc. Agriculture Plant Protection, University of
	Salahaddin-Erbil, 2008-2009)
	*M.Sc. Plant Pathology/Plant Protection, University of
	Salahaddin-Erbil, 2015
	Work History:
	In plant protection.3rd of the 10th BSc degree, started
	working as an academic staff (teaching assistant), getting
	MSc. Degree In plant pathology in 2015 and working as an
	assistant lecture in department until now.
	As an Assistant Lecturer, I was teaching:
	1. Principles of plant pathology for 1st stage students. 2016-
	2017
	2. Postharvest Diseases for 3 rd stage students. 2016-2017
	3. Microbiology for 2 nd stage students. 2019-2020
	4. Field crop diseases for 4 th stage 2019-2020
	Field crop dis. For 4 th stage 2021-2022(field crop Dept.)
	5. Phytobacteriology for 4 th stage 2021-2022
	6. Bacterial Plant diseases stage 4 2021-2022 (2022-2023)
	. 7. Phytobacteriology for 4th stage 2023-2024
	All in plant protection department

9. Keywords Phytobacteriology, Phytobacteria, diagnoses of bacteria
10. Course overview: Students will learn about molecular mechanisms required for bacterial symbiosis with plants, including pathogenic and symbiosis mechanisms. This course builds upon basic concepts learned in an introductory plant pathology and microbiology courses. Students must have a basic understanding of bacterial and bacterial genetics

11. Course objective: To become familiar with techniques for manipulating bacteria such as isolation, identification and inoculation of pathogens.

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12. Student's obligation

Should be prepared for quizzes in the begging of each lab. for the previous lab's content. Collect diseased plants samples and identify in the lab.

Write a report about a plant disease.

13. Forms of teaching

The lecturer will use data show by preparing PowerPoint presentations in which outlines of each lecture will be shown however the details of the lecture will be narrated by the lecturer herself. In some cases, samples will be shown to students to have a close and real idea on laboratory.

14. Assessment scheme

. The practical part is given 35 marks in total.

15. Student learning outcome:

As a result of this course, the student will learn the importance of History and Economic importance of phytobacteriology. Get knowledge about many worldwide important diseases. Description of the disease, including the causal agent, symptoms, environmental conditions favorable for the disease development and provide a good control working knowledge.

16. Course Reading List and References:

• Key references:

17. The Topics:

- 1. Introductory + Background of phytobacteriology
- 2. Dickeya and Pectobacterium
- 3. Pseudomonas
- 4. Xanthomonas
- 5. Ralstonia
- 1st Exam
- 6. Agrobacterium
- 7. Xylella
- 8. Streptomyces
- 9. Other genus of plant bacteria
- 10. Confirmation of bacterial pathogens in plant samples
- 11. Isolation of bacteria from plant samples
- 12. Medium for isolation of plant pathogenic bacteria
- 2nd Exam

18. Examinations:

- 1. Definitions
- 2. What are the management strategies of plant bacterial diseases?
- 3. What are the differences between:

19. Extra notes:

21. Peer review I approve that the course is comprehensive and cover all the aspects of the course.

Name: Degree: Specialty: Sign: Date:

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