

## *The Hebrew University of Jerusalem*

### *Syllabus*

## **INTRODUCTION TO PLANT PATHOLOGY - 71502**

*Last update 22-02-2014*

*HU Credits:* 4

*Degree/Cycle:* 1st degree (Bachelor)

*Responsible Department:* Agroecology and Plant Health

*Academic year:* 2

*Semester:* 2nd Semester

*Teaching Languages:* Hebrew

*Campus:* Rehovot

*Course/Module Coordinator:* Prof. Oded Yarden

*Coordinator Email:* [oded.yarden@mail.huji.ac.il](mailto:oded.yarden@mail.huji.ac.il)

*Coordinator Office Hours:* by appointment

*Teaching Staff:*

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Dr. Maggie Levy  
Prof Saul Burdman  
Prof Oded Yarden  
Hila Shomin  
Reut Shavit  
Omer Barda  
Tally Rosenberg  
Raviv Harris

Course/Module description:

*Course subjects: Phytopathology- historical overview and general concepts. Plant diseases caused by bacteria. Plant diseases caused by viruses. Plant disease caused by fungi and oomycetes. Plant diseases caused by nematodes. Molecular approaches for the investigation of plant diseases. Spread and survival of plant pathogens. Management of foliar and root plant diseases. Plant response and resistance to plant pathogens.*

Course/Module aims:

*Knowledge of the principles of Phytopathology, with emphasis on the learning of basic and applied aspects of plant pathogens' biology, plant-pathogen interactions, and management of plant diseases.*

Learning outcomes - On successful completion of this module, students should be able to:

- \* Identify common plant pathogens in agriculture,*
- \* Get to know the ways to address phytopathologies-work methods and treatments*
- \* Get to know the ways of dealing with plant diseases*
- \* Use molecular tools for the study of plants and plant diseases*
- \* Work in Research Laboratory for phytopathology*

Attendance requirements(%):

*100% laboratory only*

*Teaching arrangement and method of instruction: Lectures and laboratories*

Course/Module Content:

*Phytopathology: historical overview and general concepts. Plant diseases caused by bacteria. Plant diseases caused by viruses. Plant disease caused by fungi and oomycetes. Plant diseases caused by nematodes. Molecular approaches for the investigation of plant diseases. Spread and survival of plant pathogens.*

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*Management of plant diseases: general concepts. Resistance of plants to pathogens. Foliar diseases and their management. Soil borne diseases and their management. Plant responses to pathogens.*

*Required Reading:*

*Laboratory handbook*

*Additional Reading Material:*

*Agrios, G.N. 1997. Plant Pathology, 4th Ed., Academic Press, San Diego.*

*Agrios, G.N. 2005. Plant Pathology, 5th Ed., Academic Press, San Diego*

*Course/Module evaluation:*

*End of year written/oral examination 0 %*

*Presentation 0 %*

*Participation in Tutorials 10 %*

*Project work 0 %*

*Assignments 0 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 90 %*

*Other 0 %*

*Additional information:*