האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

SELECETED TOPOCS IN PHYTOPATOLOGY - 71514

Last update 26-07-2016

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: agroecology & plant health

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Rehovot

Course/Module Coordinator: Prof Oded Yarden

Coordinator Email: yarden@mail.huji.ac.il

Coordinator Office Hours: by appointment

Teaching Staff:

Prof Saul Burdman
Prof Oded Yarden

Course/Module description:

Dynamics, epidemiology and physiology of plant diseases in the field, in the greenhouse and in the orchard. Introduction to selected diseases and their causal agents, with emphasis on diseases caused by plant pathogenic fungi and bacteria. Study of phytopathological research and diagnostic methods.

Course/Module aims:

Expanding knowledge of the dynamics, epidemiology and physiology of plant diseases in greenhouses, open field and plantation.
Understanding Diseases and their Causes with emphasis on fungal and bacterial diseases of plants. Learning Research Methods and Diagnosis phytopathology.

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

Knowledge of dynamics, epidemiology and physiology of plant diseases in greenhouses, open field and plantation.
Familiarity with selected diseases and their Causes with an emphasis on fungal and bacterial diseases of plants.
Experience in research methods and diagnostic phytopathology.

Attendance requirements(%):

100

Teaching arrangement and method of instruction: lectures, labs and tours

Course/Module Content:

1. Introduction - plant diseases and their impact on agricultural production.
2. Pea diseases.
3. Diseases of spices.
4. Wheat diseases.
5. Implications of graft on plant diseases.
6. Molecular basis of the interaction plant - pathogen.
7. Plant diseases caused by bacterial Xanthomonas
8. Tomato bacterial ulcer disease (Clavibacter).
9. Great stain bacterial diseases of vegetables.
10. Social implications of plant diseases.
11. Laboratory diagnosis of plant pathogens on the basis of DNA.

12. Tour diseases grains and / or vegetables.
13. Presentation and discussion of students' work (file operation).

Required Reading:
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Additional Reading Material:
The course will be divided into reference material and articles.

Course/Module evaluation:
End of year written/oral examination 60 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 15 %
Assignments 0 %
Reports 25 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: