

The Hebrew University of Jerusalem

Syllabus

INSECT PATHOLOGY - 71127

Last update 31-07-2018

<u>HU Credits:</u> 2

Degree/Cycle: 2nd degree (Master)

<u>Responsible Department:</u> Agroecology & Plant Health

<u>Academic year:</u> 0

Semester: 2nd Semester

Teaching Languages: English

<u>Campus:</u> Rehovot

Course/Module Coordinator: Itamar Glazer

Coordinator Email: glazerit@volcani.agri.gov.il

Coordinator Office Hours: By Appointment

Teaching Staff:

Prof Itamar Glazer Dr. Dana Ment

Course/Module description:

The course will focus on the biology of major insect pathogens including bacteria, fungi nematodes and viruses as well as on the workouts of the insect immune system. Also, it will deal with the utilization of some of these pathogens for control of insect pests.

Course/Module aims:

To provide:1- knowledge on research areas about major insect pathogens, and the insect immune system and 2- tools for its implementation in their approach to insects and for insect-pest control.

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

Understand the life cycle of the above insect pathogens as well as their use in pest control

<u>Attendance requirements(%):</u> 100

Teaching arrangement and method of instruction: Frontal lectures and visit to the relevant labs at the Volcani Center. Short presentation of a seminar based on a paper about a subject learned throughout the course.

<u>Course/Module Content:</u> Viruses, Fungi,, Bacteria, Nematodes, The insect immune system

<u>Required Reading:</u> None

<u>Additional Reading Material:</u> Insect Pathology. Fernando E. Vega, Harry K. Kaya Academic Press 2nd Edition, 2012 -Baculovirus Molecular biology G.F Rohrmann 2011 (internet edition.) -The Insect Viruses. Miller K. L. and Ball L. A. (1998). Springer - Antimicrobial defense in Drosophila: the story so far. Naitza, S. and Ligoxygakis, P. (2004). Molecular Immunology. 40:887-896.

<u>Course/Module evaluation:</u> End of year written/oral examination 80 % Presentation 20 % Participation in Tutorials 0 % Project work 0 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

<u>Additional information:</u> None