

The Hebrew University of Jerusalem

Syllabus

EXPERIMENTAL DESIGN FOR PLANT SCIENCE IN AGRICULTURE - 71332

Last update 27-08-2024

HU Credits: 4

<u>Degree/Cycle:</u> 1st degree (Bachelor)

Responsible Department: Plant Science in Agriculture

Academic year: 0

Semester: 1st Semester

<u>Teaching Languages:</u> Hebrew

Campus: Rehovot

Course/Module Coordinator: Prof Zvi Peleg

Coordinator Email: zvi.peleg@mail.huji.ac.il

Coordinator Office Hours: by appointment

Teaching Staff:

Prof. Zvi Peleg, Ms. Michal mannes

Course/Module description:

Experimental design, hypothesis and research objectives, strategies for experimental design, simulations, interactions and source of variance.

Course/Module aims:

Develop hypothesis and research objectives Experimental design for plant sciences Strategies for experimental design and analysis

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

Design experiments to answer the research objectives and hypothesis

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

100

Teaching arrangement and method of instruction: Lectures, lab

Course/Module Content:

- 1. generate hypothesis
- 2. define the factors
- 3. experimental design
- 4. experimental unit
- 5. adding more factors
- 6. split plot design
- 7. correlations between traits
- 8. natural experiments
- 9. data analysis
- 10. visualization of results

Required Reading:

No

Additional Reading Material:

Grading Scheme:

Written / Oral / Practical Exam 70 % Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 30 %

Additional information: