The Hebrew University of Jerusalem

Syllabus

CONTEMPORARY APPROACHES TO PLANT PHYSIOLOGY - 71963

Last update 07-10-2024

HU Credits: 3

Degree/Cycle: 2nd degree (Master)

Responsible Department: Plantsciences in Agriculture

Academic year: 0

Semester: 1st Semester

Teaching Languages: English

Campus: Rehovot

Course/Module Coordinator: Alon Samach

Coordinator Email: alon.samach@mail.huji.ac.il

Coordinator Office Hours: By request

Teaching Staff:
Prof. Alon Samach,
Dr. Shilo Rosenwaser,
Dr. Yotam Zait

Course/Module description:
This course is an introduction to the physiological processes that govern plant development and growth and plant responses to the environment. The course is designed for students who have not taken course 71015 (Plant Physiology). The course is offered online with videos and quizzes, allowing students to progress at their own pace.

Course/Module aims:
1). A deep understanding of physiological processes in plants.
2). Knowledge of contemporary approaches used in the study of Plant Physiology.

Learning outcomes - On successful completion of this module, students should be able to:
Recognizing the molecular mechanisms by which plant hormones act to regulate plant growth and development
Understanding photosynthesis, the process by which plants convert light energy into chemical energy. Acknowledging the main molecular components involved in photosynthesis.
Understanding Plant–water relations, why plants need water and what they do to remain hydrated, how water is transported within the plant and evaporates from the leaves

Attendance requirements(%):
0

Teaching arrangement and method of instruction: Self learning via recorded lectures and quizzes. A single meeting with each lecturer for answering questions

Course/Module Content:
Plant Development
Plant hormones
Photomorphogenesis
Plant–water relations

Photosynthesis

Required Reading:
None

Additional Reading Material:
Taiz and Zeiger Plant Physiology relevant chapters

Grading Scheme:
Written Exam % 85
Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 15 %

Additional information: