



# *The Hebrew University of Jerusalem*

## *Syllabus*

### **CONTEMPORARY APPROACHES TO PLANT PHYSIOLOGY - 71963**

*Last update 24-03-2024*

*HU Credits:* 3

*Degree/Cycle:* 2nd degree (Master)

*Responsible Department:* Plantsciences in Agriculture

*Academic year:* 0

*Semester:* 2nd Semester

*Teaching Languages:* English

*Campus:* Rehovot

*Course/Module Coordinator:* Alon Samach

*Coordinator Email:* [alon.samach@mail.huji.ac.il](mailto:alon.samach@mail.huji.ac.il)

*Coordinator Office Hours:* By request

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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:

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(%):

Teaching arrangement and method of instruction: Self learning via recorded lectures and quizzes

Course/Module Content:

Plant Development  
Plant hormones  
Plant-water relations  
Photosynthesis

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Required Reading:

None

Additional Reading Material:

*Taiz and Zeiger Plant Physiology relevant chapters*

Grading Scheme:

*Written / Oral / Practical Exam 85 %*

*Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 15 %*

Additional information: