The Hebrew University of Jerusalem

Syllabus

FOREST ECOLOGY - 71116

Last update 06-09-2022

HU Credits: 3

Degree/Cycle: 2nd degree (Master)

Responsible Department: Horticulture

Academic year: 0

Semester: 1st Semester

Teaching Languages: English

Campus: Rehovot

Course/Module Coordinator: Prof. Jose Gruenzweig

Coordinator Email: jose.gruenzweig@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Prof Jose Gruenzweig,
Mr. Alon levinzon

Course/Module description:
Main topics of this course include the environmental role of forests, interactions among dominant tree species, understory ecology, tree regeneration, fauna and microflora, climatic effects, succession, disturbance, element cycling, global change and sustainable forest management.

Course/Module aims:

Learning outcomes - On successful completion of this module, students should be able to:
The course attempts to provide a basic understanding of the composition, structure and function of natural and planted forest ecosystems in Israel, the Mediterranean region and around the globe. In addition, the course will provide an overview of how environmental factors and humans affect forests and their components.

Attendance requirements(%):
Field labs are mandatory

Teaching arrangement and method of instruction: Lectures, field labs

Course/Module Content:
Introduction to the forest as ecosystem
Introduction to the forests of the world
Environmental functionality of forests: ecosystem services
Forest composition: canopy composition and interactions among species
Forest composition: understory, biodiversity
Forest structure, succession and growth
Forest dynamics
Light in the forest, gap dynamics
Climate and soils in forests
Forest hydrology
Carbon and nutrient cycles in forests
Stress, mortality and resilience
Natural and anthropogenic disturbance and their impact on forests
Impacts of global change on forests

Required Reading:
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 Additional Reading Material:

 Grading Scheme:

Additional information:
  Recording and revealing the recordings to anyone interested