

The Hebrew University of Jerusalem

Syllabus

Biogeochemical cycles and carbon sequestration - 89703

Last update 10-09-2023

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Environmental Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Alon Angert

Coordinator Email: angert@gmail.com

Coordinator Office Hours: after class

Teaching Staff:

Prof Alon Angert

Course/Module description:

The students will learn the main biogeochemical cycles related to climate

Course/Module aims:

The students will learn the main biogeochemical cycles related to climate

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

By the end of the course, The students will know the main biogeochemical cycles related to climate

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Class and homework

Course/Module Content:

Box models
Global carbon cycle
Terrestrial carbon cycle
P, N,S cycles
Sinks
approaches and methods
long-term changes in the carbon cycle

Required Reading:

Earth System Science: From Biogeochemical Cycles to Global Changes
Michael C. Jacobson

Additional Reading Material:

Biogeochemistry an analysis of global change

Schlesinger, William H ; Bernhardt, Emily S.

Phosphorus in Action

EK Bunemann, A Oberson, E Frossard

Grading Scheme:

Written / Oral / Practical Exam 85 %

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

Additional information:

75% of the home assignments must be submitted