



The Hebrew University of Jerusalem

Syllabus

ENVIRONMENTAL MICROBIOLOGY - 71977

Last update 08-03-2022

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Agroecology & Plant Health

Academic year: 0

Semester: 2nd Semester

Teaching Languages: English

Campus: Rehovot

Course/Module Coordinator: Eddie Cytryn

Coordinator Email: eddie@volcani.agri.gov.il

Coordinator Office Hours: by appointment

Teaching Staff:

Dr. Eddie Cytryn

Course/Module description:

Principals of microbial ecology and environmental microbiology

Course/Module aims:

Facilitate holistic understanding of how microbes influence (and are influenced by) the world as we know it

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

Broad understanding of microbial ecology and environmental microbiology principals and basic and molecular methods used to study microbes in the environment

Attendance requirements(%):

80%

Teaching arrangement and method of instruction: Frontal Lectures and Journal Clubs

Course/Module Content:

Understanding basic principles and methodologies used in microbial ecology and environmental microbiology, biogeochemical cycles (C, N, S), plant-microbe interactions, bioremediation, wastewater microbiology, microbes in extreme environments, "the arms race"- synthesis of and resistance to antibiotics

Required Reading:

*Brock Biology of Microorganisms (Textbook)
Scientific papers that will be distributed during the course.*

Additional Reading Material:

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Course/Module evaluation:

*End of year written/oral examination 80 %
Presentation 0 %*

Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 20 %
Journal club

Additional information:

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