Course: Microbial Ecology (221.4302)

Instructor: Dr. Shira Sabrani
Email: savrani@univ.haifa.ac.il

Time: Monday, 12:00-14:00

Attendance: 80% (absence due to illness or other reasons exceeding 80% will not allow passing the course).

Pre-requisites: Microbiology.

Course content:
The course will deal with various aspects of microbial ecology. Topics to be studied include:
- Interactions between microorganisms and different environments,
- Interactions between microorganisms and pathogens and plants,
- Role of microorganisms in the environment,
- Epidemiological view of diseases, microorganisms and environmental obstacles,
- Different types of microorganisms in the environment, communication, molecular methods.

Final grade calculation:
- Seminar presentation (45%)
- Exam (45%)
- Participation and performance of tasks (10%)

The course is intended for advanced students and third-year Bachelor students who wish to continue to the Master's degree.

Registration for Bachelor students in the course depends on a short conversation with the instructor. Please contact me if you are interested in the course.
**Course title:** Microbial Ecology (01×221.4302) 2020-2021

**Name of the lecturer:** Dr. Sarit Avrani
savrani@univ.haifa.ac.il
Office hours: By appointment.

**Course credit:** 2 hours/week

**Lectures date and time:** Thursday, 12:00-14:00.

**Requirements:** Participation in lectures, submitting short assignments, seminar presentation, exam. Prerequisite course: Microbiology.

**Attendance:** 80% (students who attend less than 80% of the lectures will not get any grade). The course will be given via Zoom. Students are required to open their camera throughout the lesson. If the lecture is recorded, the images in the gallery will not be recorded. **Closed camera equals absence.**

**Course program:** In this course, we will discuss various mechanisms and processes that are related to the interactions of microorganisms with the environment. Including: interaction with different environments, interaction with higher organisms, roles of microorganisms in the biosphere, epidemiology in ecological perspective, microorganisms and current environmental problems, environmental microbial diversity, molecular methods in environmental microbiology, quorum sensing.

**Basis of final grades:** Seminar presentation (45%), exam (45%), participation and short assignments (10%).

*** This course is for graduate students and undergraduate students who plan to continue and study towards an MSc degree. Undergrad students must have a short conversation with the lecturer in order to register (apply via the e-mail address above).