האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM



The Hebrew University of Jerusalem

Syllabus

Molecular Genetics of Bacteria: A Practical Course -94679

Last update 11-04-2024

HU Credits: 5

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Bio-Medical Sciences

Academic year: 0

Semester:

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Shoshy Altuvia

Coordinator Email: shoshy@cc.huji.ac.il

Coordinator Office Hours: Every day upon coordination via mail

<u>Teaching Staff:</u> Dr. Sahar Melamed, Mr. Lior Aroeti, Ms. Sivan Alkalay

Course/Module description:

The course is based on lectures and practical and independent lab work of the students. The student learn advance methodologies in prokaryotic genetic engineering.

Course/Module aims:

The course aims at providing the students with critical thinking, experimental design capabilities, data analysis and practical experience.

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

The students should be able to design and execute complex experiments. Analyze the results and build a model.

<u>Attendance requirements(%):</u> 100

Teaching arrangement and method of instruction: Lectures, discussions, and practical supervised lab work.

<u>Course/Module Content:</u> Gene cloning Generation and isolation of mutants Genetic and biochemical analysis Genomic manipulations

Required Reading:

Pre-lab reading material, lab course manual that will be provided to the students and a list of research papers that will be updated on an annual basis.

Additional Reading Material:

<u>Grading Scheme:</u> Essay / Project / Final Assignment / Home Exam / Referat 60 % Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 20 % Personal Guide / Tutor / Team Evaluation 20 %

Additional information: