האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM



## The Hebrew University of Jerusalem

Syllabus

## MOLECULAR GENETICS OF EUKARYOTES - 72683

Last update 02-09-2018

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

**Responsible Department:** Life Sciences

Academic year: 0

Semester: 1st Semester

<u>Teaching Languages:</u> Hebrew

Campus: E. Safra

<u>Course/Module Coordinator:</u> Michael Brandeis and Michal Goldberg

<u>Coordinator Email: goldbergm@mail.huji.ac.il</u>

Coordinator Office Hours: Upon request

Teaching Staff:

#### Prof Michael Brandeis Prof Michal Goldberg

#### Course/Module description:

Study of diverse topics in molecular genetics, Methods in molecular genetics, regulation of signal transduction by post-translational regulation,Connect to your polyploid cells, Sex, what is it good for? From genetics to epigenetics, Introns - how come we know so little about so much of the genome? The brave new world of RNA.

<u>Course/Module aims:</u> Understanding advance molecular genetics subjects.

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

1. Analyze and evaluate different experiments in molecular genetics, 2. Critically analyze and evaluate scientific papers.

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

*Teaching arrangement and method of instruction: Starting with lectures by the teachers of the course. Then, the students present a seminar summarizing a paper in the field.* 

### Course/Module Content:

Methods in molecular genetics, regulation of signal transduction by posttranslational regulation, Senescence and aging. DNA replication + DNA translesion synthesis, Connect to your polyploid cells, Sex, what is it good for? From genetics to epigenetics, Introns - how come we know so little about so much of the genome? The brave new world of RNA.

#### Required Reading:

Will be provided at the beginning of the year, since these topics are constantly studied, and we wish to present the most updated papers.

<u>Additional Reading Material:</u> None

<u>Course/Module evaluation:</u> End of year written/oral examination 0 % Presentation 50 % Participation in Tutorials 0 % Project work 50 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

Additional information:

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