

The Hebrew University of Jerusalem

Syllabus

introduction to biology - 72148

Last update 14-01-2014

<u>HU Credits:</u> 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Life Sciences (Biology)

<u>Academic year:</u> 1

<u>Semester:</u> 1st Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> Mt. Scopus

<u>Course/Module Coordinator:</u> Michael Brandeis

Coordinator Email: michael.brandeis1@mail.huji.ac.il

<u>Coordinator Office Hours:</u> By prior appointment

Teaching Staff:

Prof Michael Brandeis

<u>Course/Module description:</u> Introduction molecular genetics

<u>Course/Module aims:</u> Teach the students to comprehend the basics of modern biology

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

define basic concepts in biology; 2. Identify major molecules in biology; 3. describe their roles; 4. Analyze and present main genetics principles

<u>Attendance requirements(%):</u> None

Teaching arrangement and method of instruction: Lecture

Course/Module Content:

1. What is life.

- 2. Mendelian genetics
- 3. DNA
- 4. RNA
- 5. Protein synthesis and decay
- 6. The Genome project
- 7. Epigenetics
- 8. Genetically modified crops
- 9. Cancer
- 10. Sex

<u>Required Reading:</u> None

<u>Additional Reading Material:</u> Biology By Campbell and Reece <u>Course/Module evaluation:</u> End of year written/oral examination 100 % Presentation 0 % Participation in Tutorials 0 % Project work 0 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

<u>Additional information:</u> None