



Syllabus

Biology of Embryonic Development - 72340

Last update 12-05-2024

HU Credits: 2

Responsible Department: Life Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Prof. Nissim Ben-Arie

Coordinator Email: nissim.ben-arie@mail.huji.ac.il

Coordinator Office Hours: email to arrange

Teaching Staff:
Prof Nissim Ben-Arie

Course/Module description:

An introduction to developmental biology, emphasizing the development of a

human embryo

Course/Module aims:

To provide students with no scientific background knowledge and tools to understand processes and mechanisms acting during the development of a cell to an organism

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

To define Basic terms and concepts in developmental biology. To identify stages in embryogenesis. To describe basic scientific knowledge in the field and the "real life" and medicine.

Attendance requirements(%):

75

Teaching arrangement and method of instruction: Zoom Lectures and Moodle quizzes

Course/Module Content:

1. Generation of the sex cells
2. Fertilization
3. Early embryonic development
4. Embryology and Genetics of twins
5. Regulation of gene expression
6. Fate determination
7. Development of the nervous system
8. Development of the cortex (date of birth)
9. Development of the spinal cord (place of birth)
10. Regenerative medicine: stem cells and Parkinson's disease

Required Reading:

Sections from papers and textbooks will be provided via Moodle.

Additional Reading Material:

Grading Scheme:

Written / Oral / Practical Exam 100 %

Additional information:

To keep continuous learning, a short and simple Moodle quiz will take place before every class. Passing the quiz bonus to the final grade!

Passing all an extra bonus!