



## *Syllabus*

# *Biology of Embryonic Development - 72340*

*Last update 27-01-2022*

*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](mailto: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*

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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:

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*Course/Module evaluation:*

*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 %*

*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!*