



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Physics for medical students - 96103*

*Last update 13-11-2024*

*HU Credits:* 2

*Degree/Cycle:* 1st degree (Bachelor)

*Responsible Department:* Medicine

*Academic year:* 0

*Semester:* 1st Semester

*Teaching Languages:* Hebrew

*Campus:* Ein Karem E. Safra

*Course/Module Coordinator:* Danny Ben-Zvi

*Coordinator Email:* [danny.ben-zvi@mail.huji.ac.il](mailto:danny.ben-zvi@mail.huji.ac.il)

*Coordinator Office Hours:*

*Teaching Staff:*

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Dr. Moshe Roseman,  
Prof. Dan Ben Zvi

Course/Module description:

*In this course, we will introduce and clarify basic concepts in physics that are required for physiology and medical studies.*

Course/Module aims:

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

*The students will understand how conservation laws are relevant to biomedicine.*

*The students will understand how electrostatics and simple electrical circuits are relevant for cell biology.*

*The students will understand the standard units.*

Attendance requirements(%):

*Teaching arrangement and method of instruction:*

Course/Module Content:

*conservation laws*

*electrostatics*

*simple electrical circuits*

*how electrostatics and electrical circuits relate to cell biology*

*physical units*

Required Reading:

*none*

Additional Reading Material:

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Grading Scheme:

*Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 100 %*

Additional information: