

The Hebrew University of Jerusalem

Syllabus

MICRO-ELECTRONICS DEVICES LAB - 83412

Last update 17-08-2023

HU Credits: 3

<u>Degree/Cycle:</u> 1st degree (Bachelor)

Responsible Department: Applied Physics

Academic year: 0

Semester: 1st Semester

<u>Teaching Languages:</u> Hebrew

Campus: E. Safra

Course/Module Coordinator: Dr Gilad Marcus

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

Coordinator Office Hours: Coordinate in advance

Teaching Staff:

Dr. Liron Stern

Course/Module description:

Characterization of the basic components of microelectronics: Diodes, Transistors CMOS, bipolar transistor, SCR. The experiments include performance measurements devices and their dependence on the details of the structure of the devices and their operation conditions.

Course/Module aims:

Basic knowledge of electronic measurements and measurements Components

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

Characterize basic components like diodes and CMOS transistors

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Preliminary report Conducting experiments and writing the final report

Course/Module Content:

See course aims

Required Reading:

according to recommendation of the lab instructors

<u>Additional Reading Material:</u>

NA

<u>Grading Scheme:</u>

Active Participation / Team Assignment 40 %

Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 50 %

Personal Guide / Tutor / Team Evaluation 10 %

Additional information:
Grade composition:
10% preliminary report
40% experiment
50% final report