

The Hebrew University of Jerusalem

Syllabus

Databases - 67506

Last update 10-11-2021

HU Credits: 5

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

Responsible Department: Computer Sciences

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: E. Safra

Course/Module Coordinator: Sara Cohen

Coordinator Email: db@cs.huji.ac.il

Coordinator Office Hours: Coordinate in advance

Teaching Staff:

Prof Sara Cohen, Mr. David Moshe, Ms. Rachel Behar

Course/Module description:

Fundamentals of Database Management Systems.

Course/Module aims:

See learning outcomes

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

Understand database fundamentals
Design a database schema
Theoretically analyze the quality of a database schema
Formulate queries in both a formal and practical query language
Analyze query plans
Determine the safety of parallel transactions

<u>Attendance requirements(%):</u>

0

Teaching arrangement and method of instruction: * Lecture: asynchronous * Tirgul: synchronous (if possible, there will be tirgul class on campus)

Course/Module Content:

Schema design
Data models
Query languages
Design theory
Query optimization Transaction management
Recovery
NoSQL

Required Reading:

None

Additional Reading Material:

NA

Course/Module evaluation:
End of year written/oral examination 65 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 25 %
Reports 0 %
Research project 0 %
Quizzes 10 %
Other 0 %

Additional information:

NA