



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *DATABASES - 67506*

*Last update 04-08-2019*

*HU Credits: 5*

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

*Responsible Department: Computer Sciences*

*Academic year: 0*

*Semester: 1st Semester*

*Teaching Languages: Hebrew*

*Campus: E. Safra*

*Course/Module Coordinator: Sara Cohen*

*Coordinator Email: [db@cs.huji.ac.il](mailto:db@cs.huji.ac.il)*

*Coordinator Office Hours: Coordinate in advance*

*Teaching Staff:*

---

Prof Sara Cohen  
Ms. Rachel Behar

Course/Module description:

*Fundamentals of Database Management Systems.*

Course/Module aims:

*See learning outcomes*

Learning outcomes - On successful completion of this module, students should be 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*

Attendance requirements(%):  
0

*Teaching arrangement and method of instruction: Lecture and exercise*

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 75 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 25 %

Reports 0 %

Research project 0 %

Quizzes 0 %

Other 0 %

Additional information:

NA