



Syllabus

Data structures and algorithms - 52411

Last update 17-08-2021

HU Credits: 5

Responsible Department: Statistics

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Gal Elidan

Coordinator Email: galel@huji.ac.il

Coordinator Office Hours: Monday at noon, by appointment

Teaching Staff:

Prof Gal Elidan,
Ms. Anael Cain,
Ms. Maya Glassman

Course/Module description:

The course will covers basic data structures and algorithms that are used to solving real problems ranging from sorting and search to transportation planning.

Course/Module aims:

- *Understanding of basic data structures*
- *Understanding of core algorithmic approach*
- *Develop ability for run-time analysis*
- *Develop ability for proving correctness*
- *Develop capability for development of algorithms for problem solving*

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

- *Pick the right data structure / algorithm for a range of real problems*
- *Propose a new/adapted efficient algorithm for a problem*
- *Analyze the run-time of the proposed algorithm*
- *Prove correctness of the proposed algorithm*

Attendance requirements(%):

0

Teaching arrangement and method of instruction: Recorded lecture, reverse class, TA class

Course/Module Content:

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Required Reading:

None

Additional Reading Material:

Introduction to Algorithms is a book by Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest, and Clifford Stein

Grading Scheme:

Additional information: