



TEL AVIV
UNIVERSITY

אוניברסיטת
תל אביב

Full Syllabus



Course Title

Introduction to Distributed Algorithms

Lecturer

Boaz Patt-Shamir

Semester

Spring 2022

Course requirements

Design and Analysis of Algorithms

Final grade components

10% homework, 90% final exam

Course schedule

Class no. / Date	Subject and Requirements (assignments, reading materials, tasks, etc.)
1	Models, Leader Elections
2	Broadcast, Convergecast, Shortest Paths Tree
3	Asynchronous Bellman-Ford, All pairs shortest paths
4	Vertex coloring
5	Matching, MIS
6	MST
7	Communication complexity, lower bounds
8	Sparse covers
9	Routing
10	Packet scheduling and pipelining
11	Congested clique
12	Cloud
13	Recommender systems

Required course reading

Distributed Computing: A Locality-Sensitive Approach, D. Peleg. SIAM, 2000.

Optional course reading

See moodle site.

Comments

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