

Schedule

A week-by-week breakdown of the material.

Week 1 (01/05-01/09)

Day 1 Graphs, Euler Circuits, Valence¹

Day 2 Hamiltonian Circuits, Complete Graphs²

Day 3 Traveling Salesman Problem³
Minimum Cost Spanning Trees⁴

Day 4 Directed Graphs, Critical Paths⁵

Day 5 Priority Lists, Scheduling, Independent Tasks⁶

Week 2 (01/12-01/16)

Day 1 Bin-packing, Vertex-Coloring⁷

Day 2 MIDTERM 1

Day 3 Linear Programming, Mixture Problems⁸
Corner Point Principle⁹

Day 4 Transportation Problems, Tableaux¹⁰

Day 5 Voting Systems, Majority Rules¹¹

Week 3 (01/19-01/23)

Day 1 Voting with more than 3 candidates¹²
Arrow's theorem¹³

¹notes/graphs_euler.html

²notes/graphs_hamiltonian.html

³notes/graphs_tsp.html

⁴notes/graphs_mst.html

⁵notes/graphs_directed.html

⁶<notes/scheduling.html>

⁷notes/bin_packing.html

⁸<notes/linear.html>

⁹notes/corner_point.html

¹⁰<notes/tableaux.html>

¹¹notes/voting_majority.html

¹²notes/voting_more_candidates.html

¹³notes/voting_arrow.html

Day 2 Manipulability¹⁴

Day 3 Impossibility, Chair's Paradox¹⁵

Day 4 MIDTERM 2

Day 5 Error-Correcting, Identification Numbers¹⁶

Week 4 (01/26-01/30)

Day 1 Binary Codes, Parity Check¹⁷

Day 2 Data Compression¹⁸

Day 3 Cryptography¹⁹

Day 4 Wrap-up

Day 5 MIDTERM 3

¹⁴[notes/voting_manipulability.html](#)

¹⁵[notes/voting_chairs.html](#)

¹⁶[notes/codes_ecc.html](#)

¹⁷[notes/codes_binary.html](#)

¹⁸[notes/codes_compression.html](#)

¹⁹[notes/crypto.html](#)