

Schedule

A week-by-week breakdown of the material.

Week 1 (01/05-01/09)

Day 1 Introduction

Day 2 Graphs, Euler Circuits, Valence¹

Day 3 Hamiltonian Circuits, Complete Graphs²

Day 4 Traveling Salesman Problem³
Minimum Cost Spanning Trees⁴

Day 5 Directed Graphs, Critical Paths⁵

Week 2 (01/12-01/16)

Day 1 Priority Lists, Scheduling, Independent Tasks⁶

Day 2 Bin-packing, Vertex-Coloring⁷

Day 3 MIDTERM 1

Day 4 Linear Programming, Mixture Problems⁸
Corner Point Principle⁹

Day 5 Transportation Problems, Tableaux¹⁰

Week 3 (01/19-01/23)

Day 1 Voting Systems, Majority Rules¹¹

¹[notes/graphs_euler.html](#)

²[notes/graphs_hamiltonian.html](#)

³[notes/graphs_tsp.html](#)

⁴[notes/graphs_mst.html](#)

⁵[notes/graphs_directed.html](#)

⁶[notes/scheduling.html](#)

⁷[notes/bin_packing.html](#)

⁸[notes/linear.html](#)

⁹[notes/corner_point.html](#)

¹⁰[notes/tableaux.html](#)

¹¹[notes/voting_majority.html](#)

Day 2 Voting with more than 3 candidates¹²

Arrow's theorem¹³

Day 3 Manipulability¹⁴

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

¹²[notes/voting_more_candidates.html](#)

¹³[notes/voting_arrow.html](#)

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](#)