

OPTIMIZATION - 104193

SYLLABUS

The lecturer: Dr. Alexander Zaslavski
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Lectures: Monday 14:30 - 17:30, Ulman 604
Office hours: by appointment via e-mail

The teaching assistant: Dr. Vadim Derkach
Email: vadder@technion.ac.il
Exercises: Sunday 15:30-16:30, Ulman 604
Office hours: Sunday 16:30-17:30, Amado 614 (2/06, 9/06), Ulman 604 (from 16/06). Please inform the TA in advance about arriving at the reception hour.

TOPICS

1. Unconstrained Optimization.
2. Convex sets and convex functions.
3. Iterative methods for unconstrained optimization.
4. Convex programming and the Karush-Kuhn-Tucker conditions.
5. Penalty methods.
6. Optimization with equality constraints.
7. Subgradients of convex functions.

LITERATURE

A.L. Peressini, F.E. Sullivan, J.J. Uhl, Jr. The Mathematics of Nonlinear Programming, Springer, 1988.

TESTS AND GRADES

Homework exercises (10) and a final exam (90 points).
The final exams: 05-09-2024; 01-10-2024;