

Convex Optimization II: Course Information

Professor Stephen Boyd, Stanford University, Spring Quarter 2007–08

Lectures & section

Lectures: Tuesdays and Thursdays, 9:30–10:45 am, **Gates B03**.

Problem session: Wednesday 3:15–4:05 pm, **Gates B03**.

Course requirements and grading

Requirements:

- Attendance.
- Some homework assignments, assigned asynchronously, as we create new exercises. Homework is due by 5 pm in the inbox outside Denise's office, Packard 267.
- A project.

Grading: Homework 30%, project 70%.

Prerequisites

Convex Optimization I

Catalog description

3 units.

Continuation of 364a. Subgradient, cutting-plane, and ellipsoid methods. Decentralized convex optimization via primal and dual decomposition. Alternating projections. Exploiting problem structure in implementation. Convex relaxations of hard problems, and global optimization via branch & bound. Robust optimization. Selected applications in areas such as control, circuit design, signal processing, and communications. Course requirements include a substantial project.