

MATH 467: Theory and Computational Methods for Optimization (Spring 2024)

Lecture: (39679) MWF 1PM, KAP-113, Dr N Haydn

Prerequisite: MATH 226 or MATH 227 or MATH 229 and MATH 225 or MATH 245

Textbook: E. K.P. Chong and S.H. Zak *An Introduction to Optimization*, 4th Ed., Wiley Inter-Science, 2013

Office hour: M: 3–5PM, W: 3–4PM, or by appointment (ext. 4293), KAP-444D

Course Outline

Unconstrained optimization and quasi-Newton method (ch. 6–11)

Least square problems (ch. 12)

Simplex method (ch. 15–18)

Constrained optimization and convex optimization (ch. 20–23)

Assignments, Quizzes, Quarter-terms, Exam

- (i) Assignment will be collected (usually the following week) and some of it graded (30% of final grad).
- (ii) There probably will be a mid-term (30% of final grad).
- (iv) There is a final exam which will take place on Wednesday 1 May 2–4pm (40% of final grad).