

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
DEPARTMENT OF MATHEMATICS

COURSE DESCRIPTION - FALL 2012

MATH 584 CONJUGATE DUALITY AND OPTIMIZATION (unofficial title: NONLINEAR PROGRAMMING)

Sections G1: 3:00-3:50 MWF, 345 Altgeld Hall

Instructor: B. Lidický, 222 Illini Hall, 244-5468, lidicky@illinois.edu

Web page: <http://www.math.uiuc.edu/~lidicky/589/>

Office hours: tentatively 11:00 - 11:50 PM MW

Final Exam: no final exam

This course has some intersection with the undergraduate course Math 484 on nonlinear programming. But the material in this course is of a higher level: more proofs and methods.

PREREQUISITES: Course of linear algebra and real analysis.

TEXT (suggested): Nonlinear Optimization by A. Ruszczyński, Princeton Univ. Press, 2006.
Convex Optimization by S. Boyd and L. Vandenberghe, Cambridge Univ. Press, 2004.

REQUIREMENTS: There will be roughly 6 homework assignments and no exams. Grades thresholds are 80% for A, 70% for B, 60% for C and 50% for D. Below 50% is F.

RESOURCES: Electronic mail is a medium for announcements and questions. Do not hesitate to contact the instructor by email.