MATH 354-04, Spring 2006

Instructor: Richard Lyons, Hill 236, `lyons@math.rutgers.edu`, 445-5090 (or leave message at 445-2390, M-F, between hours of 9–12 or 1–4)

Office Hours: Tuesday 10:00-12:00, or by appointment

Text: Bernard Kolman and Robert E. Beck, *Elementary Linear Programming with Applications*, **Second** Edition, published by Academic Press, 1995. (ISBN 0-12-417910-X)

Supplementary notes on various topics will be posted on the class web site, and some of them will be required reading.

Website: `www.math.rutgers.edu/courses/354/354-s06/lyons`

Do not count on everything's being posted there. You are responsible for coming to class.

Course plan: Extreme points and the simplex method (Chapters 1 and 2), about 4 weeks. Duality, souped-up simplex methods (Chapter 3), about 3 weeks. Integer programming (Chapter 4), about 2 weeks. Transportation problem, assignment problem, maximal flow problem, shortest route problem, about 3 weeks. This leaves two slack periods and two periods for midterms.

Grades: There will be two midterm exams, one around the 6th week and one around the 11th or 12th week. There will be a comprehensive final exam. Occasional quizzes may be given, not necessarily announced in advance. Homework assignments will be collected regularly. The final exam will constitute 44% of your course grade; each midterm, 22%; and the remaining 12% will be a combination of homework, quizzes, and class participation.

A good time to ask questions about homework (or anything else) is at the **beginning of class**. Come prepared with questions, comments, examples and counterexamples!