Introduction to Operations Research
Economics 172B
Spring 2007
(as of April 10)

Calendar:

Lectures: Monday, Wednesday, Friday: 1:00 - 1:50 PM, Center Hall 212.

Exception: No class on April 20. Instead, I will hold a non-required question and answer session during exam week.

More Calendar:

Midterm Examination: Wednesday, April 25, 2007, 1:00 - 1:50 PM, Center Hall 212

Midterm Examination: Wednesday, May 23, 2007, 1:00 - 1:50 PM, Center Hall 212

Final Examination: Friday, June 15, 11:30 - 2:30, probably in the same room.

Office hours:

Marshall, Economics 109, office hours Monday-Wednesday 11:00 - 12:00. Thursday 1:00 - 2:00, or by appointment (email me or call 858 534 8904 (no voice mail)), or drop in. E-mail: marshall@econ.ucsb.edu (Note the E-mail is ucsB, not ucsD).

Teaching assistants:

Adam Sanjurjo: Economics 118, Tuesday, 12:00 - 1:30.

Sarada: Economics 118, Monday 4:00 - 5:00.

Problem sets: due at the start of class on Wednesdays.

Grading: Midterms, each 15%, Homework 20%, Cumulative Final 50%.

Text: Mainly Hillier and Lieberman, *Introduction to Operations Research*, McGraw-Hill, New York, recent editions. Chapter citations are to the eighth edition, which is the latest available to me.

Objectives: Taking Hillier and Lieberman as a guide to the course, I intend to cover chapter 11, Integer programming and chapter 12, nonlinear programming. I expect also to touch on chapter 9, network analysis, and I will occasionally revisit game theory, chapter 14, which was Chapter 11 in earlier editions.

As in 172A, your main goal is to formulate problems successfully, but now the palette is expanded to include integer programs, nonlinear programs, and a few special problems. Shadow prices are still an issue, although the dual programs of linear programming theory are not always available. In order to become comfortable with these types of problems, you will solve some programs by hand and some by use of solver in excel (or similar). Linear programming will be reviewed more or less continuously throughout the course.