

Syllabus for MA416G/CS416G
Principles of Operations Research I
Spring 2001

Course: MA416G/CS416G, MWF 1:00–1:50, CB 345

Instructor: Carl Lee

Office: 967 Patterson Office Tower

Phone: 257-1405 (or 257-3336 to leave a message)

Email: lee@ms.uky.edu

Web Page: <http://www.ms.uky.edu/~lee>

Office Hours: MWF 11:00–11:50, and by appointment.

Prerequisites: MA 213 or equivalent. It would, however, be *extremely* helpful to have had MA322, since we will make use of matrix notation and concepts related to solutions of systems of equations.

Text: Hillier and Lieberman, *Introduction to Operations Research*, including software on CD.

Homework: There will be frequent homework assignments, usually assigned weekly.

Exams: At this point I am planning to have two or three exams during the semester.

Final Exam: Thursday, May 3, 1:00 pm, in our regular room.

Grading:

Homework	50.0%
Exams	37.5%
Final	12.5%

Working Together: It is ok to work together on homework. However, when it comes time for you to write up the solutions, I expect you to do this on your own, and it would be best for your own understanding if you put aside your notes from the discussions with your classmates and wrote up the solutions entirely from scratch. Working together on exams, of course, is expressly forbidden.

Absences: A University excuse from a scheduled class activity such as an exam must be presented in writing no later than two weeks prior to the date of the absence. An absence due to illness or family emergency may be excused, provided that you can supply acceptable written evidence if required, and that you notify me *as soon as possible*. Notification is almost always possible immediately upon occurrence of an emergency. If you're too sick to telephone, you can get a friend to do it. Failure to make such timely notification may result in denial of your request. For an explanation of valid excused absences, refer to U.K.'s *Student Rights and Responsibilities*.

Cheating: The University's *minimum penalty* for cheating or plagiarism is *a failure in the course*. Cheating or plagiarism can lead to expulsion from the university. See *Student Rights and Responsibilities* for information on cheating, plagiarism, and penalties. It's not worth it, so don't do it.

Expectations: I expect that everyone will maintain a classroom conducive to learning. I like an informal atmosphere, but it must be orderly. Thus, everyone is expected to behave with basic politeness, civility, and respect for others. In particular, talking in class is ok if it's part of a class discussion or directed to me. Private communications are not, especially during quizzes and tests. Neither are reading extraneous materials, using electronic equipment, or sleeping.

Suggestions: Suggestions for improvement are welcome at any time. Any concern about the course should be brought first to my attention. Further recourse is available through the offices of the Department Ombud and the Department Chair, both accessible from the Main Office in 715 Patterson Office Tower.

Course Content: We will cover a substantial portion of the material in the first nine chapters of the text. We will focus primarily on ways to solve problems that can be cast as minimizing or maximizing a linear function in several variables subject to linear constraints. Algorithms to accomplish this will be presented and analyzed. We will practice taking "real-life" problems, developing mathematical formulations of these problems, solving the problems using appropriate algorithms, and writing up the solutions in a form understandable to typical "clients."