

UIC Department of Mechanical and Industrial Engineering
IE 471 - Operations Research I
Fall 2008

Instructor

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Office hours: Monday and Wednesday 1-2pm or by appointment

Meeting times

The class meets for lecture on Mondays, Wednesdays and Fridays at 12-12:50pm in 3290 SEL. Please arrive on time and turn your cell phones off during the lectures.

Fall 2008 Catalog Description

3 OR 4 hours. Introduction to operations research, formulation of linear programming problems, simplex methods, duality theory, sensitivity analysis, network models, and integer linear programming. 3 undergraduate hours. 4 graduate hours. No graduate credit for industrial engineering majors. Prerequisite(s): MATH 210.

Textbook

Hillier and Lieberman, *Introduction to Operations Research*, 8th Edition, Mc Graw Hill, 2005. Topics to be covered: Chapters 1-9.

Web page

Course-related information announcements, and homework assignment and solutions:
<http://www.uic.edu/classes/ie/ie471>

Homework

Homeworks are assigned on the course web page, and are due at the end of the lecture on the due date. A homework turned in by someone else or a late homework will not be accepted. Students with documented medical reasons may be excused. The homework solutions will be posted on the course web page on the due date. Graded homeworks will be returned in class the following week. Collaboration with other students is encouraged. You may discuss with your classmates possible approaches to solving the problems in the homework, but **each student should write her/his solution independently.**

Study habits

In order to get the most out of the course, try to stay ahead. Read the assigned material, and make sure to review your lecture notes. In the exams and the homeworks, **concisely explain your reasoning**. Giving a numerical answer, even correct, does not guarantee full credit if you don't justify it.

Grading

Homeworks, midterm and final exams are graded numerically. The course grade will be determined as follows:

Homework and class participation	10 %
Midterm	30 %
Final Exam	60 %

The homework and class participation grade is evaluated based on class attendance, class participation, and the average of all homework grades.

Tentative course outline

Week 1	Aug. 25 - 29	Introduction - Chapter 3(1)	
Week 2	Sep. 3 - 5	Chapter 3 (2)	
Week 3	Sep. 8 - 12	Chapter 3 (3)	HW 1 assigned on Sep. 8
Week 4	Sep. 15 - 19	Chapter 4 (1)	HW 1 due on Sep. 15
Week 5	Sep. 22 - 26	Chapter 4 (2)	HW 2 assigned on Sep. 22
Week 6	Sep. 29 - Oct. 3	Chapter 4 (3)	HW 2 due on Sep. 29
Week 7	Oct. 6 - 10	Chapter 5	HW 3 assigned on Oct. 10
Week 8	Oct. 13 - 17	Chapter 6 (1)	Midterm on Oct. 13
Week 9	Oct. 20 - 24	Chapter 6 (2)	HW 3 due on Oct. 20
Week 10	Oct. 27 - 31	Chapter 6 (3)	HW 4 assigned on Oct. 27
Week 11	Nov. 3 - 7	Chapter 8 (1)	HW 4 due on Nov. 3
Week 12	Nov. 10 - 14	Chapter 8 (2)	HW 5 assigned on Nov. 10
Week 13	Nov. 17 - 21	Chapter 9 (1)	HW 5 due on Nov. 17
Week 14	Nov. 24 - 26	Chapter 9 (2)	HW 6 assigned on Nov. 24
Week 15	Dec. 1 - 5	Chapter 11 (introduction)	HW 6 due on Dec. 1
Week 16	Dec. 8 - 12		Final exam