56:171 Operations Research
Fall 2002
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Questions regarding grading of a homework assignment or quiz should be directed to the appropriate TA.  
Students with questions, complaints, &/or suggestions are encouraged to contact the instructor or TA via e-mail when possible.
Topics include

- Linear programming models
- Simplex & revised simplex algorithms
- Duality & sensitivity analysis in LP
- Transportation & assignment problems
- Project scheduling
- Decision trees
- Integer programming models
- Stochastic processes: Markov chains & birth/death processes
- Queueing models
- Dynamic programming: deterministic & stochastic
Textbook:


A very complete coverage of linear and integer programming, network models, dynamic programming, etc., in addition to applied stochastic processes. Includes student editions of several software packages: LINDO and LINGO, CPLEX, MPL, MS Project, & various Excel add-ins.

See [http://www.mhhe.com/hillier](http://www.mhhe.com/hillier). (Will be available at IMU Bookstore. Earlier editions, if you have one, are also acceptable.)
Reserve books in Engineering Library:


(This book had been used in this course during the previous ten years.)

Resources on the WWW will be also used.
There is a course website at

http://asrl.ecn.uiowa.edu/dbbrick/or_index.html

from which you may download

- course syllabus
- current semester homework assignments & solutions
- past semester homework assignments & solutions
- sample quizzes & examinations, with solutions
- lecture notes (in form of pdf files, 1, 4, or 8 screens/page)
- some software (written in APL by the instructor) for Markov chain analysis, dynamic programming, transportation problem, & assignment problem
Homework:

- due Friday by 1:30pm, unless specified otherwise.
- Students will form teams to collaborate on HW, handing in one set of solutions per team.

Quizzes:

- Generally, a short (10-minute) multiple-choice quiz will be given the day that each HW is due.
- This quiz is intended to cover the same material as the HW for that day.
- Needless to say, collaboration is not allowed on the quizzes!

In the case of both homework and quizzes, each student’s three lowest scores will be discarded when computing the course grade. This, of course, means that you are allowed to "skip" three homeworks and three quizzes.
Grading Scheme:

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<tbody>
<tr>
<td>Midterm Examination</td>
<td>20%</td>
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<tr>
<td>Final Examination</td>
<td>20%</td>
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<tr>
<td>Quizzes (best 10 of 13)</td>
<td>30%</td>
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<tr>
<td>Homework (best 10 of 13)</td>
<td>20%</td>
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<tr>
<td>Lab/discussion exercises</td>
<td>10%</td>
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