

COSC 480 - OR Topic List and Schedule

Alan C. Jamieson

Fall 2012

1. What is Operations Research?
2. Basics of Linear Programming (Ch. 1 & 2)
3. Simplex Method (Ch. 3)
4. Duality (Ch. 4)
5. Sensitivity Analysis (Ch. 4)
6. Integer Programming (Ch. 6)
7. Branch and Bound, Branch and Cut (Ch. 6)
8. Transportation and Scheduling (Ch. 5 & 6)
9. Network Analysis (Ch. 13)
10. Inventory Theory (Ch. 15)
11. Decision Analysis (Ch. 18)
12. Queuing Theory (Ch. 22)
13. * Markov Chains & Markov Decision Processes (Ch. 20, 21, 23)
14. * Game Theory (Ch. 17)

* we may or may not get to these topics

Important Dates:

Project 1 - 9/19
Project 2 - 10/12
Midterm exam - 10/22
Half-term Project due - 12/3
Final Presentations - 12/3, 12/5
Final Period - Saturday, December 8