Fourth Homework Assignment for Math 448

Due: Friday, March 26th.

All section references are to the text.

Problems to hand in for Math 448 and 748:

Chapter 7, exercise 7.16.
Chapter 8, exercises 8.2, 8.8.
Chapter 9, exercises 9.6, 9.16, 9.18, 9.20.

Additional problems to hand in for Math 748:

Chapter 7, exercise 7.22.
Chapter 9, exercises 9.4 and 9.36.

Math 448 students are also welcome to try these problems.

Reading for this week and next:

If you haven't already, please read Sections 8.1 and 9.1 through 9.4.
For Friday, March 19th, Sections 9.5–9.6.
For Wednesday, March 24th, Sections 10.1–10.3.
For Friday, March 26th, Sections 10.4 and 10.5.

Graduate Student Presentations:

Here is the preliminary schedule of student presentations, along with the papers they will be presenting. Please check that this information is correct. Note that presentations should be accompanied by a set of computer overheads, which will be submitted to the instructor as part of the grading process.

Arezou Zaresani, [Old01], Friday, April 9th, 11:30 a.m. in SC 14-400.

Timothy Yusun, [Jai01], Wednesday, April 14th, 11:30 a.m.

Alex Goussiatiner, [BDK93], Thursday, April 15th, 3:30 p.m. in SC 14-400 (O.R. Seminar).

Zhila Pirmoradi, [GJ99], Friday, April 16th, 11:30 a.m. in SC 14-400.

Incidentally, it is still possible to move one of these presentation to the seminar slot on April 8th, if anyone is interested.

References

[BDK93] Rainer E. Burkard, Karin Dlaska, and Bettina Klinz, *The quickest flow problem*, Z. Oper. Res. **37** (1993), no. 1, 31–58.

[GJ99] Donald Goldfarb and Zhiying Jin, *A new scaling algorithm for the minimum cost network flow problem*, Oper. Res. Lett. **25** (1999), no. 5, 205–211.

[Jai01] Kamal Jain, *A factor 2 approximation algorithm for the generalized Steiner network problem*, Combinatorica **21** (2001), no. 1, 39–60.

[Old01] Jeffrey D. Oldham, *Combinatorial approximation algorithms for generalized flow problems*, J. Algorithms **38** (2001), no. 1, 135–169, Tenth Annual ACM-SIAM Symposium on Discrete Algorithms (Baltimore, MD, 1999).