

Due: Wednesday, April 11th (in class)

Reading

For Wednesday, March 21st, Section 10.3.

For Monday, March 26th, Section 10.5.

For Wednesday, March 28th, Chapter 14.

For Monday, April 2nd, Sections 11.1–11.2.

For Wednesday, April 11th, Sections 15.1–15.2.

Assignment exercises to hand in for Math 448 and 748

Chapter 9, exercises 9.28, 9.30 and 9.53.

Run the first two phases of:

I. the capacity-scaling algorithm, and

II. the cost-scaling algorithm

on the network shown in Figure 9.21 (a) on page 348.

Chapter 14, exercise 14.2 and 14.4.

Additional problems to hand in for Math 748

Chapter 10, exercise 10.8.

Chapter 14, exercises 14.10 and 14.18.

Math 448 students are also welcome to try these problems.

Reminder

The final exam is on Wednesday, April 18th, from noon to 3 p.m. in SUR 3310.

Presentations

Here is the schedule of graduate student presentations, along with the papers they will be presenting. 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. Presentations will last approximately 20 minutes each, with questions following the presentation.

Dawei Deng, [GJ99], Monday, April 2nd, 3:30 p.m.

Xiaorui Li, [Tar85], Monday, April 2nd, 4:00 p.m.

Krishna Teja Malladi, [LS08], Wednesday, April 4th, 2:30 p.m.

Xueying Shen, [RW09], Wednesday, April 4th, 3:00 p.m.

References

- [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.
- [LS08] Lu-Wen Liao and Gwo-Ji Sheen, *Parallel machine scheduling with machine availability and eligibility constraints*, European J. Oper. Res. **184** (2008), no. 2, 458–467.
- [RW09] Mateo Restrepo and David P. Williamson, *A simple GAP-canceling algorithm for the generalized maximum flow problem*, Math. Program. **118** (2009), no. 1, Ser. A, 47–74.
- [Tar85] Éva Tardos, *A strongly polynomial minimum cost circulation algorithm*, Combinatorica **5** (1985), no. 3, 247–255.