Institut for Matematik & Datalogi — March 21, 2003
Syddansk Universitet — JBJ

DM69 — Weekly note 7

Exam date

The oral exam date is now fixed to be June 11, 2003.

Handed out material Friday March 21, 2003

Bang-Jensen, Gutin and Yeo: When the greedy algorithm fails, preprint no 4 2003 IMADA

Material covered in the lecture on March 21

Matroid intersection 13.5 in Korte and Vygen.

Exercises March 27, 2003

- Read section 16.5 in Cormen and be prepared to present the material.
- 16.1-2, 16.1-3 and 16.1-4 in Cormen.
- Read page 382-383 in Cormen and be prepared to present the material.
- Exercise 16.2-1 in Cormen,
- Read the proof of Theorem 13.12 and be prepared to present it.
- Read the proof of Theorem 13.19 and 13.20 and be prepared to present them.
- Exercise 1 page 305 in Korte and Vygen

Lecture on March 28, 2003

Scheduling algorithms, material will be available in the "hyttefad" monday March 24.

Exam questions

We will start compiling a list of possible exam questions. For the stuff we have covered until now, the following are the possible questions (main questions).

1. Shortest paths in digraphs.
2. The maximum (s,t)-flow problem and the minimum (s,t)-flow problem.
3. Polynomial algorithms for maximum flows.
4. Minimum cost flows.
5. The assignment problem and the transportation problem.
6. Matchings: characterizations and algorithms.
7. Matroids and the greedy algorithm.
8. Matroid intersection: algorithm and applications