Institut for Matematik & Datalogi
Syddansk Universitet

February 11, 2003
JBJ

DM69 — Weekly note 2

Change of schedule

We decided to move the monday time slot to thursday 10-12 in U49A (just opposite of the seminarroom). We will generally use the thursday hours for exercises.

Extra lectures in this week

Note that in order to get a good start we will have lectures both thursday and friday (to compensate for the late start of the course).

Handed out material

Chapter 3 from the book "Digraphs: Theory, Algorithms and Applications, Bang-Jensen and Gutin, Springer Verlag London 2001.

Material covered in the lecture on February 13, 2003

I will gave a brief overview of the course and then covered sections 24.1-24.2, 25.2. You should read Sections 24.5 and 25.1 yourself and make sure you understand the arguments.

Lecture on February 13, 2003

Flows in Networks Section 3.1-3.5 in Bang-Jensen and Gutin, Digraphs.

Lecture on February 14, 2003

Flows in Networks Section 3.6-3.9 in Bang-Jensen and Gutin, Digraphs.

Exercises on February 20, 2003

- Read Section 25.3 in Cormen and be prepared to explain how Johnson's algorithm works and why it works!
- Read the subsection on computing the transitive closure of a digraph on pages 633-634 and be prepared to explain how to use the Floyd-Warshall algorithm for this problem.
- Problem 25.1 page 641 in Cormen.
- 24.2-4 page 595 in Cormen.
- Exercises 3.8, 3.14, 3.15 and 3.16 in Bang-Jensen and Gutin, Digraphs.