

# DM839 Pensum

June 11, 2014

- Mitzenmacher and Upfal, Probability and Computing, Cambridge University Press 2012:
  - Chapters 1-3
  - Sections 4.1-4.3, 4.5.1
  - Chapter 5, except the proof of Theorem 5.13
  - Sections 6.1-6.8
  - Sections 7.1-7.4
  - Chapter 10 and 12
  - Sections 11.1-11.2 and 13.1-13.3
- Kleinberg and Tardós, Algorithm Design, Sections 13.10-13.11. This was handed out during the course. It is also available from the course page (bottom).
- The notes by Ronitt Rubinfeld on the algorithmic version of Lovász Local Lemma. You can find these at the link [http://people.csail.mit.edu/ronitt/COURSE/S14/Handouts/lec2\\_scribe\\_final.pdf](http://people.csail.mit.edu/ronitt/COURSE/S14/Handouts/lec2_scribe_final.pdf)
- Bang-Jensen and Gutin, Digraphs, Springer verlag 2000, Section 10.2. You can access the pdf of the book from the course page (bottom).
- Alon, Yuster and Zwick, Color-coding: a new method for finding simple paths, cycles and other small subgraphs within large graphs, STOC94. If you do not have the paper, you can find it via Google and download it when you are at SDU.