

Discrete Optimization, Utrecht 2012

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<http://wwwhome.math.utwente.nl/kernw/>

- ▶ **discrete** (*lat.* “discernere” \approx to distinguish)
- ▶ course based on **script** by Guido Schaefer
 1. Preliminaries (reviewing some prerequisites)
 2. Min spanning trees
 3. Matroids and the greedy algorithm
 4. Shortest paths in graphs
 5. Max flow
 6. Min cost flow
 7. Matching
 8. Integrality of polyhedra
 9. Complexity (classify problems as “easy” or “hard”)
 10. Approximation algorithms (for certain problems)
- ▶ **course dates**: sept 17/24, oct 8/22, nov 19.
- ▶ **discussion meeting**: dec 3 (questions, suggestions, ...)

- ▶ **exam:** jan 21 (2013), 13.30 in “Educatorium” (UU).

Because we did not use sheets, I propose the following

compromise: Each student may bring up to five (DIN A4) handwritten pages with notes/excerpts from the manuscript for use (and for feeling better/safer) during the exam.

- ▶ **Homework (in english!)** to be handed in one week after each lecture.

Please work in groups of 2 or 3!

- ▶ electronic versions \rightsquigarrow x.qiu@utwente.nl,
(**nicely!**) handwritten \rightsquigarrow Georg Still (Continuous Opt)
... or scan.
- ▶ homework is **mandatory!**
(score 5.5 requested for passing the course)
No homework credits! (final mark determined by exam)