**Possible topics covered in the course**

* Linear Programming
  + Simplex algorithm
  + Duality
  + Linear Programming in fixed dimensions, subexponential Simplex variants
* Network Flow
  + MaxFlow/MinCut theorem
  + MinCostFlow
* Approximation Algorithms for NP-hard problems
  + Knapsack, TSP, Set Cover, Hitting Set, ...
  + Primal-Dual algorithms
  + Greedy and Dual-Fitting

There will be a **written exam** at the end of the semester (unless your Prüfungsordnung does not allow that; in that case, there will be an oral exam).