

# Graph Drawing

## Organisational matters

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Fall semester 2020

# Organisational

## Lectures

- Friday 3-5pm, webex

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## Evaluation

- written exam: 60%
- Programming assignments: 30%
- Written assignments: 10%

## Notes

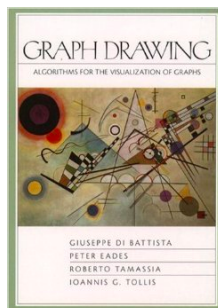
1. Submission of programming assignment is required in order to participate in final exam.
2. Submit homework through “mycourses”

# Organisational

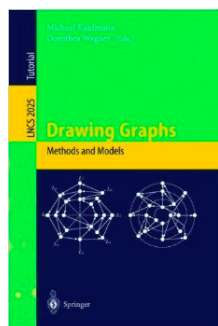
## Lecture material – Slides

- Material produced by researcher at:
  - Karlsruhe Institute of Technology (KIT)
  - TU Wien
  - U Wuerzburg
  - U Konstanz
- On-going community effort
- Hosted at U Wuerzburg

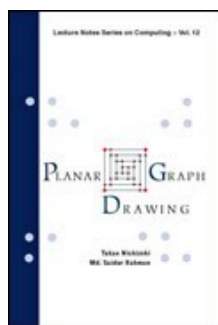
# Books



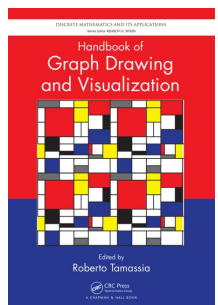
G. Di Battista, P. Eades, R. Tamassia, I. Tollis:  
Graph Drawing: Algorithms for the Visualization of Graphs  
Prentice Hall, 1998



M. Kaufmann, D. Wagner:  
Drawing Graphs: Methods and Models  
Springer, 2001



T. Nishizeki, Md. S. Rahman:  
Planar Graph Drawing  
World Scientific, 2004



R. Tamassia:  
Handbook of Graph Drawing and Visualization  
CRC Press, 2013

<http://cs.brown.edu/people/rtamassi/gdhandbook/>

# What is this course about?

## Learning objectives

- Overview of graph visualisation.
- Improved knowledge of modeling and solving problems via graph algorithms.

## Visualisation problem:

- Given a graph  $G$ , visualise it with a drawing  $\Gamma$ .

## Topics

- Drawing trees and series-parallel graphs
- Straight-line drawings of planar graphs
- Orthogonal grid drawings
- Hierarchical layouts of directed graphs
- Force-based algorithm
- yFiles
- ...