

# TMA4215 NUMERICAL MATHEMATICS

Autumn 2009

## Curriculum

- From Kincaid & Cheney, *Numerical Analysis*, 3th edition.  
  
1.0-1.3 (Overview and background material.)  
3.0-3.2, 3.4  
4.2-4.4, 4.6 to Extrapolation, p. 221.  
5.0-5.1, 5.2 (only Gershgorin and deflation from 5.2).  
6.0-6.1 to The Convergence of Interpolating Polynomials, p. 318.  
6.2 to Hermite-Genocchi Formula, p. 334,  
6.3-6.4 to Tension splines, p. 356.  
7.1-7.2 to Error Analysis, p. 486,  
7.3-7.5.
- The lecture notes.
- Exercises and solution sets 1-8.

There will be no MATLAB on the exam.