

Course evaluation: 2D1266 Mathematical Models, Analysis and Simulation, part I, 2004/05

Course data • 2D1266 Mathematical Models, Analysis and Simulation, part I, 5 credits

- P1, P2 2004/05
- Personal: Michael Hanke, Claes Trygger, Erik von Schwerin, Mohammad Motamed
- Teaching sessions
 - Lectures: 48 timmar
 - Laborations: 12 timmar
- Students: 58 (including 12 PhD students)
- Credits: Laboration 2.5, written examination 2.5.
- Prestationsgrad: 70% (per 2005-03-22)
- Examinationsgrad: 57% (per 2005-03-22)

Aims The goals of the course are to expose the students to and give them experience of important parts of applied and numerical mathematics, give the students experience of numerical experiments using MATLAB so that they will be able to analyze equilibrium models and dynamical systems with a finite number of degrees of freedom both theoretically and computationally.

Changes compared to the last year The course material as well as the slides (especially in the second part) were updated.

Conclusions In the beginning, the course was considered easy. The second part was really hard. While the assignments were rather complete in the beginning, later parts made more difficulties. Nevertheless, the course was considered to be interesting and meaningful.

Teaching In a usual fashion using lectures and lab work. Assignments: One assignment each week, from paper and pencil work to parameter studies of dynamical models in ecology and mechanics. Even partial differential equations were solved using Femlab.

Examination Written examination and computer labs

Kurslitteratur • G. Strang: Applied mathematics, Wellesley-Cambridge, 1986
• Lecture notes, copies of OH-slides

Prerequisites No problem.

Planned changes None.