

Preliminary Lecture Plan MOD510 Fall 2021

Aksel Hiorth

Aug 18, 2021

This fall MOD 510 will be lectured mainly as physical interactions. Information will be given at the course homepage in Canvas. The most updated lecture material can be found at [github](#). For each of the chapters a jupyter notebook is available. An html version is also available [here](#).

Lectures are in KE E166, Monday and Thursday from 12:15-14:00. Each Wednesday there are lab hours from 12:15-20:00 in KE-D123

The most up to date course material can be downloaded from [github](#).

1 Preliminary Lecture Plan

Note that the themes below might be subjected to changes, keep up to date with [announcement](#) at the canvas website.

Week	Theme	Chapter
34, 35	Introduction to the course, installing software	
35, 36	Discretization and Finite Difference	1
37	Solving Linear Systems	2
38	Solving Nonlinear Equations	3
39	Numerical Integration	4
40	Richardson Extrapolation	4
41 (11.-15. Oct.)	Autumn break	
42	Solving ODE systems	5
43	Adaptive Methods	5
44	Monte Carlo Integration	6
45	Monte Carlo Importance Sampling	6
46	Monte Carlo Simulated Annealing	6

2 Preliminary Project plan

Note that the dates below might be subjected to changes, keep up to date with [announcement](#) at the canvas website.

Mandatory Project	Hand out	Deadline	Contribute to final grade?
I	30. August	12. September 23:59	No
II	27. September	10. October 23:59	Yes
III	25. October	7. November 23:59	Yes
IV	22. November	5. December 23:59	Yes