# Preliminary Lecture Plan MOD510

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MOD 510 will be lectured as a mix between physical and virtual 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.

## 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 |
|---|---|---|
| 35 | Introduction to the course, installing software | |
| 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 | 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 | 31. August | 13. September 23:59 | No |
| II | 25. September | 11. October 23:59 | Yes |
| III | 23. October | 8. November 23:59 | Yes |
| IV | 21. November | 6. December 23:59 | Yes |