
Oversigt nr. 1

For the PhD course in

Problems of Advanced Optimisation

given on September 25, 27 and 29, 2006, the following set of lecture notes will be used:

An introduction to mathematical optimal control theory (version 0.1)
by Lawrence C. Evans, University of California, Berkeley.

The notes are available from the internet at

<http://www.math.berkeley.edu/evans/control.course.pdf>

The participants are kindly asked to make their own print-out of this material before the course begins !

Evans' lecture notes give a good presentation of the type of problems the course will deal with. It is the purpose of the course to give the participants a good understanding of the many different types of problems, as well as to present the Pontryagin maximum principle to find their solutions.

For a more complete overview of the many types of problems one can treat, it is recommended to consult

Optimal control theory with economic applications by A. Seierstad
and K. Sydsæter, North-Holland 1987.

Additional references can be found from the internet, e.g.

Dynamic programming and optimal control, vol. I+II by D. P. Bertsekas, Athena Scientific

For the lecture rooms and tentative schedules, please see the next page.

Sincerely
Jon Johnsen

Oversight nr. 2

1st time, Monday 25 September 2006. We meet in room E3-209.

The intension is to follow this programme:

- **9.15-11.00:** Lectures giving a brief introduction to the course and a review of techniques from calculus of variations. (Notes will be handed out.)
- **11.00-12.30:** Exercises in calculus of variations.
- **12.30-13.00:** Lunch.
- **13.00-14.45:** Lectures on Optimal control theory, based on Evans' lecture notes.
- **14.45-16.15:** Exercises.

2nd time, Wednesday 27 September 2006. We meet in E3-209 from 9.15 to 16.15.

3rd time, Friday 29 September 2006. Here the room is G5-109, from 9.15 to 15.15.

Sincerely
Jon Johnsen