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Mathematics for Economic and Statistical Analysis
Autumn 2017

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Mathematics for Economic and Statistical Analysis, 7.5 hp

Text

Essential Mathematics for Economic Analysis; Sydsæter & Hammond, 4th ed., Pearson, 2012
NB. This book can be accessed online from your university library account here.

Content outline

The course treats elementary functions, derivatives, maximum and minimum problrems, Taylors formula and Taylor series, integrals, functions of several variables, optimization problems with and without constraints, matrices, and determinants. The contents of the course may be used for modelling in a number of fields, for example economy and statistics.

Learning outcomes

It is expected that the student after taking the course will be able to:

- use basic methods in analysis in one or several variables to solve mathematical and applied problems in e.g geometry and economics
- solve elementary problems on matrices, vectors and determinants.

Teaching

Teaching consists of Lectures (15 sessions) and Tutorials (15 sessions). The lectures will mainly deal with the basic theory, while the Tutorials are entirely devoted to practical problem solving. The course will be taught in English.

Examination

The course ends on Friday 22 Sept 2017, with a written exam on Wed 27 Sept 2017. The final exam consists of seven problems, with a maximum score of 70 points. At least 35 points are necessary for the grade E, 42 for D, 49 for C, 56 for B and 63 for A. Exam answers may be submitted in either English or Swedish.

Office hours

At convenience by appointment.

Course webpage

http://kurser.math.su.se/course/view.php?id=595

Stockholm, August 2017

Peter LeFanu Lumsdaine

Preliminary lecture/tutorial plan

(Try to prepare suggested problems before each tutorial session)

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