# Syllabus for GRA 6035 Mathematics

#### **Course Information**

Course code	GRA 6035	
Course title	Mathematic	CS
ECTS credits	6	
Examination	Midterm	20 % (1 hour individual multiple choice)
	Final exam	80 % (3 hours individual written exam)

### Instructor Information

Instructor	Eivind Eriksen
Office	B4-032
Office hours	Wednesday $10.00 - 12.00$
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# Reading

 [ME] Simon, Blume, Mathematics for Economists International Student Edition, ISBN 978-0-393-11752-3
[WB] Eriksen, Digital Workbook for GRA 6035 Mathematics Available for download through It's Learning

# Lecture Notes

Lecture Notes for each lecture will be made available through It's Learning.

# Problems

The Digital Workbook [WB] will contain a set of problems (with solutions) for each lecture. It is part of the course requirements that you work out the problems, and some topics will only be treated in the exercise problems. In fact, the problems are perhaps the most important part of the course. Your final grade will depend mostly on your ability to work out problems. If you do not solve most of the exercise problems, do not expect to be able to solve the problems on the exam.

#### Prerequisites

We require the following to be known when you start GRA 6035 Mathematics:

- $1. \ Elementary \ algebra \ and \ mathematical \ analysis \ taught \ in \ a \ standard \ mathematics \ course \ at \ bachelor/undergraduate \ level$
- 2. Linear algebra at the level of FORK 1003

The most important material from the first part is elementary algebra, derivation and integration, and standard functions such as polynomials, exponential functions and logarithms. It is also useful to be familiar with min/max-problems in one and two variables. To revise the prerequisites, see Simon, Blume [ME] Chapter 1-5 and the lecture notes from FORK 1003. There is a test available that you can use for self-assessment.

After the first common Lecture 1, there will be two parallell lecture series in this course, Lecture Series A and Series B.

- 1. Series A is adapted for those students who need to revise prerequisites
- 2. Series B is adapted for those students who do not need to revise

You are free to follow the lectures you want to. The full curriculum will be covered in both series. All material will be available to all students, and of course the exams are the same for all students.

#### Lectures and Problem Session

The lecture plan is available through It's Learning, and will be updated through the semester. The lecture plan gives an overview of all lectures, problems sessions and exams. It also contains links to lecture notes, the topics of each lectures and the relevant sections in Simon, Blume [ME].

#### Exams

Date	Time	Exam
Oct 11 2013	15 - 16	Midterm Exam
$\mathrm{Dec}\ 13\ 2013$	09 - 12	Final Exam