**Title:** Master Program: Mathematics for Economists

**Lecturer:** Prof. Dr. Jürgen Eichberger

**Tutors:** Nathalie Jorzik, Jan Schmitz

**Teaching Method:** Lecture and Tutorial (L/T)

**Lecture/Tutorial Hours per Week:** 3L / 2T

**Day/Time/Room:**
- L: Thu 10:00-13:00, NUni HS 09
- T1: Mon 14:00-16:00, AWI 00.010
- T2: Tue 14:00-16:00, AWI 00.010
- T3: Wed 14:00-16:00, AWI 01.030

**Start:** Thursday, 15 October 2009

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**General Course Information:**

**Objectives:** The lecture plus the associated tutorials will provide students with the mathematical concepts necessary for dealing with optimisation problems, equation systems, and simple dynamic problems. After completing this course successfully, students will have the necessary prerequisites for reading economic journal articles of moderate mathematical content.

**Assessment:** 2-hours examination

**Course Outline:**

1. Introduction: Optimisation for Functions of One Variable
2. Sets and Functions
3. Functions of Several Variables
4. Multivariable Constrained Optimisation: Kuhn-Tucker Theorem
5. Solutions of Equation Systems
6. Dynamic Analysis
7. Intertemporal Optimisation

**Literature:**
