

Introduction to MATLAB for Economics

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Aim of the course:

The aim of the course is to provide students with a general overview of MATLAB and how it can be used to solve problems in economics. Specifically we are going to see applications in optimization and simulating model dynamics.

Schedule:

- Session 1: Friday October 24th, 2014. From 12am to 2pm.
- Session 2: Friday October 31th, 2014. From 12am to 2pm.

Session 1: Introduction to MATLAB (2h)

This session will cover the basis of MATLAB and its language.

- Introduction.
- Basic operations in MATLAB.
- Arrays and Matrices.
- Relational and Logical Operators.
- Control Flow.
- Generating random numbers.
- Data analysis.
- Plotting.

Session 2: Advanced Topics

Introduction to Optimization in MATLAB (1h)

- Optimization principles.
- Finding zero of a function.
- Minimizing a function.

Application: The Solow Model in MATLAB (1h)

- Computing the steady state.
- Simulating model dynamics.
- Plotting the model.

Course Material:

Course material will be available at the following website in the teaching section corresponding to this course:

<http://www.javierbarbero.net>