Advanced Macroeconomics

Winter term 2015/ 16

Syllabus

Lecturer: Marten Hillebrand

Teaching assistant: Jean Roch Donsimoni

October 27, 2015

Organization

- Course website: `http://www.macro.economics.uni-mainz.de/1181.php`

- Tutorials:

  - Thursdays from 12:15-13:45 in RW 2 starting **November 12**
  - Jean Roch Donsimoni will be the TA

- Problem sets:

  - to be prepared at home
  - discussion in the tutorial

- Final module exam:

  - takes place on February 16, 2016 from 16:00 - 18:00
  - also covering 'Principles of Public Economics'

- Questions:

  - concerning lecture: `mhillebr@uni-mainz.de`
  - concerning problem sets: `jdonsimo@uni-mainz.de`

Course Overview

Part I: Economic Growth

1. Facts about economic growth

2. The Solow growth model

3. The OLG growth model

4. The neoclassical growth model

Part II: Business Cycles

1. Facts about business cycles

2. A stochastic Solow model

3. Real business cycle models

4. Monetary business cycle models

Part III: Selected Topics (incomplete)

1. Growth models with climate change

2. Search & matching models of the labor market

Objectives

- General objectives:

  - provide an overview of *modern macroeconomics* together with...

  - *mathematical tools and methods* required to...

  - understand the relevant *literature*

- *Quantitative style*, focus on selected models representative for entire field

- *Problem sets* to illustrate and amplify results presented in class

- Whet your appetite for further *specialization* (on a particular topic)

Textbooks

- On economic growth:

  - Acemoglu (2009): *Introduction to Modern Economic Growth*
  - de la Croix & Michel (1998): *A Theory of Economic Growth*

- On business cycles:

  - McCandless (2008): *The ABCs of RBCs*
  - Gali (2008): *Monetary Policy, Inflation, and the Business Cycle*

- On mathematical methods:

  - Galor (2007): *Discrete Dynamical Systems*
  - Stachurski (2009): *Economic Dynamics*
  - Waelde (2012): *Applied Intertemporal Optimization*

- Additional references will be announced as we progress!