Johannes-Gutenberg Universität Mainz
Master in International Economics and Public Policy

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:
  - de la Croix & Michel (1998): *A Theory of Economic Growth*

- On business cycles:
  - McCandless (2008): *The ABCs of RBCs*

- 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!