

Marcin Bielecki, email: mbielecki@wne.uw.edu.pl

Office hours: Wednesdays 4.45–6.15 PM, please send an e-mail if you plan to come

Advanced Macroeconomics: Growth and Business Cycles Course Syllabus Spring 2019

1. Description:

This is a 60-hour graduate course in advanced macroeconomics that focuses on dynamic general equilibrium macroeconomics. The topics will cover microeconomic foundations of macroeconomics, growth theories and selected business cycles and labor market issues. This is an obligatory course for MA Programs in International Economics. The course is offered only in the spring semester. The class meets twice a week on Mondays and Wednesdays for two lecture hours (3–4.30 PM) in room A203. The class is accompanied by tutorial classes that meet on Wednesdays (4.45–6.15 PM) in room A203 every two weeks.

2. Objectives:

The main objective of this course is to familiarize students with key analytical models in modern macroeconomic literature. The course consists of three parts. The first part is devoted to microfoundations of macroeconomic models such as consumption, investment and the government sector. The second part focuses on exogenous and endogenous growth theories and covers neoclassical models as well as new growth theory. The third part concentrates on business cycles and covers real business cycle and new Keynesian theories, as well as various labor market issues.

3. Readings:

There is no single textbook for this course, although Romer's *Advanced Macroeconomics* covers the majority of the topics of the course. Materials for this course come from various textbooks and articles. Most often references will be made to the selected chapters from the following books:

Acemoglu D. (2009) *Introduction to Modern Economic Growth*, Princeton University Press, Princeton.

[AH] Aghion P., Howitt P.W. (2009) *The Economics of Growth*, The MIT Press, Cambridge, M.A.

[BB] Bagliano F.C., Bertola G. (2004) *Models for Dynamic Macroeconomics*, Oxford University Press, Oxford.

Barro, R.J. (1997) *Macroeconomics*, Fifth Edition, The MIT Press, Cambridge, M.A.

[BS] Barro R.J., Sala-i-Martin X. (2004) *Economic Growth*, Second Edition, The MIT Press, Cambridge, M.A.

Romer D. (2012) *Advanced Macroeconomics*, Fourth Edition, McGraw-Hill, New York.

4. Prerequisites:

The main prerequisite for this course is knowledge of both macro and microeconomics at the undergraduate level and mathematical methods in economics at the graduate level.

5. Grading:

The grading will be based on two closed-book written exams that shall take place in April (midterm) and during the Spring examination session (final). Each exam is worth 50 points. Additional 15 points can be earned by completing homework assignments, verified during tutorials. The total score will correspond to the final grade as indicated below:

Points	[0, 50)	[50, 60)	[60, 70)	[70, 80)	[80, 90)	[90, 100)	[100, 115]
Grade	2	3	3.5	4	4.5	5	5.5

Detailed course program and readings

Part I: Microeconomic Foundations

1. Consumption [BB (2004): 1, Romer (2012): 8]
2. Government sector [Romer (2012): 12]
3. Neoclassical labor markets [Barro (1997): 2]
4. Investment [BB (2004): 2, Romer (2012): 9]

Part II: Economic Growth

Neoclassical Growth Theory

1. Solow-Swan model [Acemoglu (2009): 2, AH (2009): 1.2, BS (2004): 1, Romer (2012): 1]
2. Growth empirics [Acemoglu (2009): 3, BS (2004): 11, 12, Romer (2012): 4]
3. Overlapping generations (OLG) model [Acemoglu (2009): 9, Romer (2012): 2B]
4. Ramsey-Cass-Koopmans (RCK) model [Acemoglu (2009): 8, AH (2009): 1.3, BS (2004): 2, Romer (2012): 2A]

New Growth Theory

1. AK models and externalities [Acemoglu (2009): 11, AH (2009): 2, BS (2004): 1.3, 4, 5, Romer (2012): 3]
2. Expanding product variety models [Acemoglu (2009): 13, AH (2009): 3, BS (2004): 6]
3. Improving product quality models [Acemoglu (2009): 14, AH (2009): 4, 5, BS (2004): 7]
4. Diffusion of technology [Acemoglu (2009): 18, AH (2009): 7, BS (2004): 8]

Part III: Business Cycles and Labor Markets

1. Real Business Cycles (RBC) model [Romer (2012): 5]
2. Models of unemployment [BB (2004): 5.3, 5.4, Romer (2012): 10]
3. Models of inequality [**Jones (2014)** and **De Nardi (2015)**]
4. New Keynesian model and monetary policy [Romer (2012): 7, 11]
5. Coordination failures and financial frictions [BB (2004): 5, Romer (2012): 6]