

1. **Name of Course:** [Macroeconomic Theory II](#)
2. **Lecturer:** [Alessia Campolmi and Katrin Rabitsch](#)
3. **No. of Credits (no. of ECTS credits):** **5 CEU credits** (10 ECTS)
4. **Semester or Time Period of the course:** Winter 2008
5. **Pre-requisites:** None
6. **Course Level:** First year MA compulsory course
7. **Course Outline:** The course is aimed at providing a basic background in the field of graduate macroeconomics. The focus will be on real and monetary models of the business cycle.
8. **The goals of the course:** The main aim of this course is to acquaint students with the modern macro theory at a graduate level and to give them the tools necessary to be able to take more advanced, topic-specific, macro courses.
9. **The learning outcomes of the course:** i) understanding of the general framework used to study macro issues in modern macro ii) development of technical skills that enable students to critically evaluate core papers in the field, iii) development of skills that enable students to apply what they have learned to everyday macro issue they can find in economic newspapers.
10. **Assessment:** Grading will be based on a final examination (85%) and on bi-weekly homeworks (15%).
11. **Contact information:** Office hours after lectures or by appointment: campolmia@ceu.hu (Campolmi), rabitschk@ceu.hu (Rabitsch).

12. More detailed display of contents:

This course is designed for first year master students and, therefore, it is aimed at providing a basic background in the field of graduate macroeconomics. During *Macroeconomics I* students familiarized with the basic models for economic growth, consumption and investment theory and labour markets. In *Macroeconomics II* we build up on the technical skills acquired during the first course and study more in details the modern theory of business cycle. In particular, the course will be divided into two parts. The first part (weeks 1-6, Katrin Rabitsch) will focus on the *Real Business Cycle* while the second part (weeks 7-12, Alessia Campolmi) will concentrate on the relation between real and nominal variables presenting basic models used in *Monetary Economics*.

The main textbooks for the first part of the course are:

Cooley, Thomas F. and Edward C. Prescott (1995): *Frontiers of Business Cycle Research*, Princeton University Press.

McCandless, George (2008): *The ABCs of RBCs*, Harvard University Press.

The textbooks for the second part of the course are:

Galí, Jordi (2008). *Monetary Policy, Inflation and the Business Cycle*. Princeton University Press.

Walsh, Carl E. (2003). *Monetary Theory and Policy*. Second Edition, MIT Press

Preliminary Weekly Breakdown

Part I: Real Business Cycles (RBC)

Week 1 (2 lectures)

A first Introduction to Business Cycles: Trends versus Cycles, Filtering Data, Stylized Facts

Cooley T. F. and E.C. Prescott, Chapter 1

Stock, James, and Mark W. Watson (1999): "Business Cycle Fluctuations in U.S. Macroeconomic Time Series", in J.B. Taylor and M. Woodford, eds., *Handbook of Macroeconomics*, volume 1A, 3-64 (also NBER WP 6528).

Stock, James and Mark W. Watson (2000): "Has the Business Cycle Changed and Why?" NBER WP 9127

Week 2 (2 lectures)

The Basic Real Business Cycle Model

Cooley T. F. and E.C. Prescott, Chapter 1 and Chapter 2

McCandless, G., Chapter 5

Blanchard, Olivier and Charles Kahn (1980): "The Solution of Linear Difference Models under Rational Expectations", *Econometrica*, 48, 1305-1311.

King, Robert G., and Sergio T. Rebelo (1999): "Resuscitating Real Business Cycles" ", in J.B. Taylor and M. Woodford, eds., *Handbook of Macroeconomics*, volume 1B, 928-1002

King, Robert G., Charles I. Plosser and Sergio T. Rebelo (1988): "Production, Growth, and Business Cycles. I. The Basic Neoclassical Model", *Journal of Monetary Economics* 21, 195-232.

Klein, Paul (2000): "Using the Generalized Schur Form to Solve a Multivariate Linear Rational Expectations Model", *Journal of Economic Dynamics and Control*, Elsevier, vol. 24(10), pages 1405-1423.

Prescott, Edward C. "Theory Ahead of Business Cycle Measurement", F.R.B. of Minneapolis, *Quarterly Review* 10, 9-22.

Kydland, Finn E. and Edward C. Prescott (1991): "Time to Build and Aggregate Fluctuations", *Econometrica* 59, 1345-1370

Weeks 3 (2 lectures)

Real Business Cycle Theory, Extensions: Indivisible Labor, Multisector Models

McCandless, G., Chapter 6

Hansen, Gary D. (1985): "Indivisible Labor and the Business Cycle", *Journal of Monetary Economics* 16, 309-327

Rogerson, Richard (1988): "Indivisible Labor, Lotteries and the Business Cycle", *Journal of Monetary Economics* 21, 3-16.

Long, John B., and Charles I. Plosser (1983): "Real Business Cycles", *Journal of Political Economy* 91, no.1, 39-69

Weeks 4 (2 lectures)

Real Business Cycle Theory, Extensions: Factor Hoarding, Fiscal Policy

Burnside, Craig, Martin Eichenbaum, and Sergio Rebelo (1993): "Labor Hoarding and the Business Cycle", *Journal of Political Economy* 101, no.2, 245-273.

Burnside, Craig, and Martin Eichenbaum (1996): "Factor Hoarding and Propagation of Business Cycle Shocks", *American Economic Review* 86, 1154-1174.

Christiano, Lawrence J., and Martin Eichenbaum (1992): "Current Real Business Cycle Theories and Aggregate Labor Market Fluctuations", *American Economic Review* 82, 430-450.

Chari, V.V., Lawrence J Christiano, and Patrick J. Kehoe (1993): "Optimal Fiscal Policy in a Business Cycle Model", *Journal of Political Economy* 102, no.4, 617-652.

Weeks 5 and 6 (4 lectures)

International Aspects of Business Cycles: The Small Open Economy Model, Two-Country IRBC Models

McCandless, G., Chapter 13

Cooley T. F. and E.C. Prescott, 11: International Business Cycles: Theory and Evidence

Backus, David K., Patrick J. Kehoe, and Finn E. Kydland (1993): "International Real Business Cycles: Theory vs. Evidence", *Quarterly Review*, Fall issue, Federal Reserve Bank of Minneapolis.

Backus, David K., Patrick J. Kehoe, and Finn E. Kydland (1993): "International Real Business Cycles", *Journal of Political Economy* 100, no.4, 745-775.

Backus, David K., Patrick J. Kehoe, and Finn E. Kydland (1993): "Dynamics of the Trade Balance and the Terms of Trade: the J-Curve", *American Economic Review* 84, no. 1, 168-185.

Baxter, Marianne (1995): "International Trade and Business Cycles", *NBER WP 5025*.

Mendoza, Enrique G. (1991): "Real Business Cycles in a Small Open Economy", *American Economic Review* 798, 797-818.

Schmidt-Grohé, Stephanie, and Martin Uribe (2002): "Closing Small Open Economy Models", *NBER WP 9270*.

Part II: Monetary Economics

(*) indicates a compulsory reading.

Week 7 (2 lectures)

1) Motivation: Some Empirical Evidence

- (*) Galí, ch.1
- (*) Prescott E. C. (1986). "Theory Ahead of Business Cycle Measurement", *Quarterly Review Fed of Minneapolis*, vol. 10.
- (*) Galí J. (1999). "Technology, Employment and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?", *American Economic Review*, vol. 89, n.1.
- (*) Christiano L.J., Eichenbaum M. and Evans C.L. (1998). "Monetary policy Shocks: What Have We Learned and to What End?", *Handbook of Macroeconomics*, J.B. Taylor and M. Woodford eds., vol. 1A.

- Bilts M. and P.J. Klenow (2004). “Some Evidence on the Importance of Sticky Prices”, *Journal of Political Economy*, vol. 112, n. 5.
- Nakamura E. and Steinsson J. (2007). “Five Facts About Prices: A Reevaluation of Menu Cost Models”, *Harvard University mimeo*.
- Kydland F. E. and Prescott E. C. (1982). “Time to Build and Aggregate Fluctuations”, *Econometrica*, vol. 50, n. 6.
- Bruno M. and Easterly W. (1998). “Inflation Crises and Long Run Growth”, *Journal of Monetary Economics*, vol. 42, n. 1.
- Stock J. and Watson W. (2000). “Business Cycle Fluctuations in U.S. Macroeconomic Time Series”, *Handbook of Macroeconomics*, J.B. Taylor and M. Woodford eds., vol. 1A.
- Cooley T.F. and Hansen G.D. (1995). “Money and the Business Cycle”, *Frontiers of Business Cycle Research*, T. Cooley ed.
- Taylor J. B. (1999). “Staggered price and Wage Settings in Macroeconomics”, *Handbook of Macroeconomics*, J.B. Taylor and M. Woodford eds., chapter 15.
- Romer C. and Romer D. (1989). “Does Monetary Policy Matter? A New test in the Spirit of Friedman and Schwarts”, *NBER Macroeconomics Annual*, vol.4.
- Galí J. (2004). “On the Role of Technology Shcock as a Source of Business Cycles: Some New Evidence”, *Journal of the European Economic Association*, vol. 2, n. 2-3 (papers and proceedings).
- Galí J. and Gertler M. (2007). “Macroeconomic Modelling for Monetary Policy Evaluation”, *Journal of Economic Perspectives*, forthcoming.
- Goodfriend M. and King R.G. (1997). “The new neoclassical Synthesis and the Role of Monetary Policy”, *NBER Macroeconomic Annual*.
- Christiano L.J., Eichenbaum M. and Evans C.L. (2005). “Nominal Rigidities and the Dynamic Effects of a Shock to Monetary Policy”, *Journal of Political Economy*.

Week 8 (2 lectures)

2) A Classical Economy with Money (no price or wage rigidities)

- Cashless Economy
- Money in the Utility Function
- Shopping-Time Models
- Cash in Advance Model
- (*) Galí, ch.2
- (*) Walsh, ch.2 and 3
- Svensson L.E.O. (1985). “Money and Asset Prices in a Cash-in Advance Economy”, *Journal of Political Economy*, vol. 93, n. 5.
- King R.G. and Watson M. (1995). “Money, Prices, Interest Rates, and the Business Cycle”, *Review of Economics and Statistics*, vol. 58, n. 1.
- Correia I. and Teles P. (1999). “The Optimal Inflation Tax”, *Review of Economic Dynamics*, vol. 2, n. 2.

Week 9&10 (4 lectures)

3) The New Keynesian Model (price rigidities)

- (*) Galí, ch.3
- Woodford, ch.3
- Blanchard O.J. and Kiyotaki N. (1987). “Monopolistic Competition and the Effects of Aggregate Demand”, *American Economic Review*, vol.77.
- Calvo G. (1983). “Staggered Prices in a Utility Maximizing Framework”, *Journal of Monetary Economics*, vol. 12.
- Rotemberg J. (1982). “Monopolistic price Adjustment and Aggregate Output”, *Review of Economic Studies*, vol. 49.
- Galí J. (2003). “New Perspectives on Monetary Policy, Inflation, and the Business Cycle”, *Advances in Economic Theory*, M. Dewatripont, L. Hansen and S. Turnovsky eds., vol. 3.
- Galí J. and Gertler M. (1999). “Inflation Dynamics: A Structural Econometric Analysis”, *Journal of Monetary Economics*, vol.44, n.2.
- Galí J., Gertler M. and López-Salido D. (2001). “European Inflation Dynamics”, *European Economic Review*, vol. 45, n. 7.
- Galí J. (1999). “Technology, Employment and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?”, *American Economic Review*, vol. 89, n.1.
- Goodfriend M. and King R.G. (1997). “The new neoclassical Synthesis and the Role of Monetary Policy”, *NBER Macroeconomic Annual*.
- Taylor J. (1980). “Aggregate Dynamics and Staggered Contracts”, *Journal of Political Economy*, vol. 88, n. 1.
- Chari V.V., Kehoe P.J. and McGrattan E.R. (2000). “Sticky Price Models of the Business Cycle: Can the Contract Multiplier Solve the Persistence Problem?”, *Econometrica*, vol.68, n.5.
- Dotsey M., King R.G. and Wolman A.L. (1999). “State Dependent Pricing and the General Equilibrium Dynamic effects of a Shock to Monetary Policy”, *Journal of Political Economy*, vol.113, n.5.
- Mankiw N.G. and Reis R. (2002). "Sticky Information Versus Sticky Prices: A Proposal To Replace The New Keynesian Phillips Curve" *The Quarterly Journal of Economics*, vol. 117, n. 4.

4) Monetary Policy Conduct: Optimal Monetary Policy and Simple Rules

- (*) Galí, ch.4 and 5
- Woodford, ch.4 and 6
- Svensson L.E.O. (1997). “Inflation Forecast Targeting: Implementing and Monitoring Inflation Targets”, *European Economic Review*, vol. 41.
- Taylor J.B. (1993). “Discretion versus Policy Rules in Practice”, *Carnegie-Rochester Series on Public Policy*, vol. 39.
- Taylor J.B. (1999). “An Historical Analysis of Monetary Policy Rules”, *Monetary Policy Rules*, J.B. Taylor ed.
- Rotemberg J. and Woodford M. (1999). “Interest Rate Rules in an Estimated Sticky price Model”, *Monetary policy Rules*, J.B. Taylor ed.
- Judd J.P. and Rudebusch G. (1998). “Taylor’s Rule and the Fed: A tale of Three Chairmen”, *FRBSF Economic Review*, vol. 3.
- Clarida R., Galí J. and Gertler M. (2000). “Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory”, *Quarterly Journal of Economics*, vol. 105, n.1.

- Woodford M. (2001). “The Taylor Rule and Optimal Monetary Policy”, *American Economic Review*, vol. 91, n. 2.

Week 11&12 (4 lectures)

5) Possible Extensions

- Cost-push Shocks
 - Sticky Prices and Wages
 - Open Economy
 - Labour Market Imperfections
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- Clarida R., Galí J. and Gertler M. (1999). “The Science of Monetary policy: A New Keynesian Perspective”, *Journal of Economic Literature*, vol. 37, n. 4.
 - Erceg C.J., Henderson D.W. and Levin A.T. (2000). “Optimal Monetary Policy with Staggered Wage and Price Contracts”, *Journal of Monetary Economics*, vol. 46, n2.
 - Clarida R., Galí J. and Gertler M. (2002). “A Simple framework for International Monetary Policy Analysis”, *Journal of Monetary Economics*, vol. 49.
 - Galí J. and Monacelli T. (2005). “Monetary Policy and Exchange Rate Volatility in a Small Open Economy”, *Review of Economic Studies*, vol.72, n. 3.
 - Corsetti G. and Pesenti P. (2001). “Welfare and Macroeconomic Interdependence”, *Quarterly Journal of Economics*, vol. 116.
 - Corsetti G. and Pesenti P. (2005). “International Dimension of Monetary Policy”, *Journal of Monetary Policy*, vol. 52, n.2.