

# Macroeconomics 5

Module 5, 2019-2020

**Instructor: Konstantin Styrin**

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## Course information

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**Course Website:** [my.nes.ru](http://my.nes.ru)

**Instructor's Office Hours:** by appointment; walk-ins welcome

**Class Time:** TBA

**Room Number:** TBA

**TAs:** TBA

## Course description

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The course provides an introduction into theories of business cycles. Major business cycle regularities observed in the data are our motivation and a starting point. Over the course, we discuss the ability of alternative business cycle models developed in the literature, from Real Business Cycle to New Keynesian, to explain main empirical facts about fluctuations.

## Course requirements, grading, and attendance policies

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The requirements include the midterm exam (40% of final grade), and the final exam (60%). Three of four problem sets will be distributed only for practice purposes without contributing the course grade. At least 70% lecture attendance is mandatory for getting a passing grade.

## Course contents

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### I. Main empirical facts about business fluctuations

- Trend vs. business cycle: How are they separated in practice?
- Cyclical behavior of major economic time series
- Course overview

### II. Real Business Cycle (RBC) theory

- Productivity shocks as a potential driving force of business cycles
- Exactly solvable version of the RBC model
- Solving a log-linearized RBC model in general case; impulse responses
- Empirical fit and limitations of RBC models

### **III. Imperfect information and real effects of money**

- Evidence of non-neutrality of money in the short-run
- Imperfect information about aggregate demand shocks as a potential cause of monetary non-neutrality
- Lucas imperfect information model
- Strategic complementarity and incomplete response to new information
- Empirical fit monetary business-cycle models with imperfect information

### **IV. New Keynesian Economics (NKE)**

- Macro- and microeconomic evidence of the stickiness of goods prices and wages
- Menu cost as a cause of nominal rigidities
- Real rigidities and strategic complementarities
- Time-dependent vs. state-dependent sticky-price models
- New Keynesian Phillips Curve: derivation and empirical fit
- New Keynesian Model: open issues

### **V. Imperfections on goods and factor markets**

- Market imperfections as potential sources of real rigidities
- Search frictions on the labor market and their implications
- Asymmetric information on financial markets and propagation of shocks

### **VI. Financial crisis 2007-2009 and the state of macro**

- How has the recent crisis affected modern macro modeling and thinking?

## **Sample tasks for course evaluation**

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What are the implications of the following models for the effects of monetary policy on output and why? Address both anticipated and unanticipated changes in monetary policy. Be specific in your responses. The allocation of credit will depend on the quality of your discussion.

- i. The RBC model
- ii. The Lucas imperfect information model
- iii. The Fisher model with predetermined prices
- iv. The Taylor model with fixed prices
- v. The Caplin-Spulber Ss model

In what sense do you need both nominal and real rigidities to obtain monetary non-neutrality? What happens if you have one but not the other?

True, false, or uncertain? "One implication of the New Keynesian Phillips Curve is that disinflations are costless, i.e. do not lead to recessions." Explain.

Past exams will be posted on [my.nes.ru](http://my.nes.ru)

## **Course materials**

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### **Required textbooks and materials**

Romer, D., *Advanced Macroeconomics*, McGraw-Hill Irwin, 4th ed., 2012; earlier editions are also acceptable

Blanchard, O.J., and S. Fischer, *Lectures on Macroeconomics*, MIT Press, 1989

### **Additional materials**

Woodford, M., *Interest and Prices: Foundations of a Theory of Monetary Policy*, Princeton University Press, 2003

Stock, J., and M. Watson (1999), "Business Cycle Fluctuations in U.S. Macroeconomic Time Series", Chapter 1, Volume 1A, *Handbook of Macroeconomics*, J. Taylor and M. Woodford eds, North Holland, pp. 3-64

Campbell, J.Y. (1994), "Inspecting the Mechanism: An Analytical Approach to the Stochastic Growth Model," *Journal of Monetary Economics* 33, 463-506

King, R., and S. Rebelo (1999), "Resuscitating Real Business Cycles", Chapter 14, Volume 1B, *Handbook of Macroeconomics*, J. Taylor and M. Woodford eds, North Holland, 927-1007

Rebelo, S. (2005), "Real Business Cycle Models: Past, Present and Future," *Scandinavian Journal of Economics* 107(2), 217-238

Blanchard, O. (1990), "Why Does Money Affect Output? A Survey," in B. Friedman and F. Hahn eds, *Handbook of Monetary Economics*, North Holland, 779-835

Bernanke, B., and M. Gertler (1989), "Agency Costs, Net Worth, and Business Fluctuations," *The American Economic Review* 79(1), pp. 14-31.

Kiyotaki, N., and J. Moore (1997), "Credit Cycles," *The Journal of Political Economy* 105(2), pp. 211-248

Blanchard, O. (2009), "The State of Macro," *Annual Review of Economics* 1, pp. 209-228.

Gali, J. (1999), "Technology, Employment, and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?" *The American Economic Review* 89(1), pp. 249-271.

Gali, J., and M. Gertler (1999), "Inflation Dynamics: A Structural Econometric Analysis," *The Journal of Monetary Economics* 44 (1999), pp. 195-222.

Hall, R.E. (2005), "Employment Fluctuations with Equilibrium Wage Stickiness," *The American Economic Review* 95(1), pp. 50-65.

Rotemberg, J.J., and M. Woodford (1996), "Real-Business-Cycle Models and the Forecastable Movements in Output, Hours, and Consumption," *The American Economic Review* 86(1), pp. 71-89.

Shimer, R. (2005), "The Cyclical Behavior of Equilibrium Unemployment and Vacancies", *The American Economic Review* 95(1), pp. 25-49.

*Note:* More readings to be added.

### **Academic integrity policy**

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Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.