

# Macroeconomics 5

Module 5, 2020-2021

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**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:** TBA

**Class Time:** TBA

**Room Number:** TBA

**TAs:** Anna Horuzhenko [ahoruzhenko@nes.ru](mailto:ahoruzhenko@nes.ru) and Viktor Postonogov [vpostonogov@nes.ru](mailto:vpostonogov@nes.ru)

## 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 four problem sets (20% of final grade) and the final exam (80%). 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. (2019), *Advanced Macroeconomics*, McGraw-Hill Irwin, 5th ed.; earlier editions are also acceptable – selected chapters

Blanchard, O.J., and S. Fischer (1989), *Lectures on Macroeconomics*, MIT Press – selected chapters

### **Additional materials**

#### Empirical facts:

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

Ng, S., and J.H. Wright (2013), "Facts and Challenges from the Great Recession for Forecasting and Economic Modeling," *Journal of Economic Literature* 51(4), 1120-1154

Uribe, M., and S. Schmitt-Grohé, M. (2017), *Open Economy Macroeconomics*, Princeton University Press, chapter 1

Stock, J.H., and M.W. Watson (2001), "Vector Autoregressions," *Journal of Economic Perspectives* 15(4), 101-115

Ramey, V.A. (2016), "Macroeconomic Shocks and Their Propagation," in *Handbook of Macroeconomics*, Volume 2A, Elsevier B.V.

#### Real Business Cycle model:

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

Prescott, E.C. (2016), "RBC Methodology and the Development of Aggregate Economic Theory," in *Handbook of Macroeconomics*, Volume 2B, Elsevier B.V.

#### Information frictions:

Angeletos, G.-M., and C. Lian (2016), "Incomplete Information in Macroeconomics: Accommodating Frictions in Coordination," in *Handbook of Macroeconomics*, Volume 2A, Elsevier B.V.

#### New Keynesian model:

Taylor, J.B., "The Staying Power of Staggered Wage and Price Setting Models in Macroeconomics," in *Handbook of Macroeconomics*, Volume 2B, Elsevier B.V.

Walsh, C.E., *Monetary Theory and Policy*, MIT Press, 4<sup>th</sup> ed., 2017 – selected chapters

Galí, J., *Monetary Policy, Inflation, and the Business Cycle*, Princeton University Press, 2<sup>nd</sup> ed., 2015 – selected chapters

#### Unemployment:

Mortensen, D.T., and C.A. Pissarides, "Job Reallocation, Employment Fluctuations, and Unemployment," Chapter 18, Volume 1B, *Handbook of Macroeconomics*, J. Taylor and M. Woodford eds, North Holland, 1171-1228

Shimer, R. (2010), *Labor Markets and Business Cycles*, Princeton University Press – selected chapters

#### Financial frictions:

Brunnermeier, M.K., T.M. Eisenbach, and Y. Sannikov (2013), "Macroeconomics with Financial Frictions: A Survey," in D. Acemoglu, M. Arellano and E. Deikel (eds.), *Advances in Economics and Econometrics*, Tenth World Congress of the Econometric Society, Vol. II: Applied Economics, Cambridge University Press, New York, 4-94

#### State of macro:

Christiano, L.J., M.S. Eichenbaum, and M. Trabandt (2018), "On DSGE Models," *Journal of Economic Perspectives* 32(3), 113-140

Galí, J. (2018), "The State of New Keynesian Economics: A Partial Assessment," *Journal of Economic Perspectives* 32(3), 87-112

Gertler, M., and S. Gilchrist (2018), "What Happened: Financial Factors in the Great Recession," *Journal of Economic Perspectives* 32(3), 3-30

Kaplan, G., and G.L. Violante (2018), "Microeconomic Heterogeneity and Macroeconomic Shocks," *Journal of Economic Perspectives* 32(3), 167-194

Kehoe, P.J., V. Midrigan, and E. Pastorino (2018), "Evolution of Modern Business Cycle Models: Accounting for the Great Recession," *Journal of Economic Perspectives* 32(3), 141-166

Mian, A., and A. Sufi (2018), "Finance and Business Cycles: The Credit-Driven Household Demand Channel," *Journal of Economic Perspectives* 32(3), 31-58

Nakamura, E., and J. Steinsson (2018), "Identification in Macroeconomics," *Journal of Economic Perspectives* 32(3), 59-86

#### **Academic integrity policy**

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