**Syllabus**

**Macroeconomic Theory II**

* **Instructor:** Michael Reiter ([mreiter@ihs.ac.at](mailto:mreiter@ihs.ac.at))
* **Credits:** 5.0
* **Term:** Spring
* **Course level:** PhD
* **Prerequisites:** Macroeconomic Theory I
* **Course description**

The aim of the course is to give students a thorough understanding of the methods and models of modern business cycle theory. Starting from basic real business cycle models, we discuss models of labor market dynamics, as well as the New Keynesian models that are the core of the Dynamic Stochastic General Equilibrium (DSGE) models used in applied policy analysis. Students will learn to solve DSGE models on the computer, using the software toolkit Dynare. The second half of the course will deal with financial frictions and heterogeneous agent models.

**Learning outcomes**

By the end of the course, students will

* understand the concepts and models of modern business cycle theory
* be able to solve business cycle models on the computer, using standard software tools.
* be able to analyze and interpret the numerical solution of business cycle models
* understand the policy implications of these models, and apply their knowledge to current questions of macroeconomic policy

**Learning activities and teaching methods**.

This course relies on a combination of lectures, in-class discussions and problem sets. The lectures will introduce the basic concepts and theories. Students are expected to come to class prepared, that means, having read the required articles, so that the content, methods and difficulties of the article can be discussed in class. The problem sets will contain theoretical exercises, as well as computational problems, because programming a model provides a deeper understanding of the model structure than just a theoretical discussion.

**Reading list**

See articles below

**Assessment**

The grade will be based on a sequence of problem sets (30%), a midterm exam (30%) and a final exam (40%).

**Course schedule and materials for each session**

Weeks 1: The basic real business cycle model

Cooley and Prescott (1995, Chapter 1)

Greenwood, Hercowitz, and Hu man (1988)

Week 2: Solving business cycle models on the computer

Sims (2001)

Blanchard and Kahn (1980)

Weeks 3-4: Labor markets and the business cycle

Pissarides (1990, Chapter 1)

Merz (1995)

Shimer (2005)

Costain and Reiter (2008)

Hall and Milgrom (2008)

Coles and Kelishomi (2018)

Week 5: Foundations of New Keynesian models

Gali (2015, Chapter 3)

Week 6: The conduct of monetary policy

Clarida, Gali and Gertler (1999)

Gali (2015, Chapters 4,5)

Week 7: Unconventional monetary policy

Joyce, Miles, Scott, and Vayanos (2012)

Gertler and Karadi (2011)

Week 8: Fiscal policy

Blanchard and Perotti (1999)

Christiano, Eichenbaum, and Rebelo (2011)

Auerbach and Gorodnichenko (2012)

Gali , Lopez-Salido, and Valles (2007)

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Week 10: Financial frictions

Carlstrom and Fuerst (1997)

Gertler and Kiyotaki (2010)

Week 11: Financial crises

Brunnermeier (2008)

Jorda, Schularick, and Taylor (2016)

Week 11: Medium-scale macroeconomic models

Smets and Wouters (2003)

Christiano, Motto, and Rostagno (2014)

Week 12: Heterogeneous agent models

Krusell and Smith (1998)

Kaplan, Moll, and Violante (2018)

References

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Blanchard, O. J. and C. M. Kahn (1980). The Solution of Linear Difference Models under Rational Expectations. Econometrica 48 (5), 1305{1311.

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Gali, J., J. D. Lopez-Salido, and J. Valles (2007). Understanding the E ects of Government Spending on Consumption. Journal of the European Economic Association 5 (1), 227{ 270.

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