**Bloomsbury PhD Programme**

**Topics in Applied Macroeconomics**  
2016/17

**Suitable for:** MPhil/PhD students.

**Prerequisites:** A knowledge of macro, micro and econometrics at the MSc level.

**Aims:** The course aims to help research students interested in applied macroeconomics to formulate and answer a research question. It provides an overview of a selection of advanced research methods and topics that are currently popular in applied macroeconomics and macroeconomic policymaking. Topics that will be covered include specification and estimation and calibration of small-scale macroeconomic models and the analysis of intertemporal macroeconomic models. Some programming issues in matlab/dynare will also be addressed.

**Teaching:** There will be weekly lectures and presentations on (mostly) Tuesday afternoons at 2.00 - 4.00pm in Room 745.

**Tentative Schedule:**

Yunus Aksoy: five sessions; weekly, starting Tuesday 15th of November.
Anne Sibert: five sessions; 10th of January, 17th of January, 24th of January, 28th of February, 7th of March
Stephen Wright: two sessions; 14th of March, 21st of March
Gylfi Zoega: three sessions; Spring term TBA

**Assessment**

Assessment will be based on two components: (1) in-class participation and presentations; (2) One short (indicatively between three and five thousand words) written paper submitted on a topic related to some of the material covered in the course. In principle, essays should be an original student paper on one of the topics discussed in the lectures. In exceptional circumstances an extensive literature survey may be admissible. The essay should be submitted by June the 30th, 2017.

**Reading List**

Will be distributed at the first lecture of each component.
Autumn Term:

Part I

Lecturer: Yunus Aksoy (Five sessions)

Topics include

- Data Uncertainty
- Parameter Uncertainty
- Model Uncertainty: Competing Monetary Models
- Macroeconomics and Medium Run

Spring Term:

Part II

Lecturer: Anne Sibert (Five sessions)

Topics include

- The classical economic growth problem: calculus of variations, linear second-order difference equations, phase diagrams, comparative dynamics
- Open and closed economy representative agent models with money in the utility function, the maximum principle
- Brock's representative agent model: necessary and sufficient conditions for optimality in intertemporal optimization problems
- The overlapping generations model of fiat money: the economics of infinity, exchange rate indeterminacy
- Bellman's optimality equation, dynamic programming, Markov equilibria

Part III

Lecturer: Gylfi Zoega (Three sessions)

Topics include

Part IV

Lecturer: Stephen Wright (Two sessions)

Topics include

- Information and “news” in macro models
- Time series perspectives on macro modelling