# DRE 7004 Topics in Macroeconomics

**Programme**
Economics

**Responsible for the course**
Hilde C Bjørnland

**Department**
Department of Economics

**Term**
According to study plan

**ECTS Credits**
6

**Language of instruction**
English

**Introduction**

**Please note that this course will be revised before it is offered again.**

This course is divided in three parts. The first part gives an introduction to Computational Methods and Applications in Dynamic General Equilibrium Modeling. The second part studies frontier research on international macroeconomics while the third part analyses selected topics in monetary policy.

**Learning outcome**

After taking this course the students should have a solid knowledge of numerical methods used to solve problems in macroeconomics and understand basic and advanced models of open economy and monetary policy. The students should master and produce sophisticated research on dynamic general equilibrium models and models of international macroeconomics.

**Prerequisites**
Admission to a PhD Programme is a general requirement for participation in PhD courses at BI Norwegian Business School.

External candidates are kindly asked to attach confirmation of admission to a PhD programme when signing up for a course with the doctoral administration. Candidates can be allowed to sit in on courses by approval of the course leader. Sitting in on courses does not permit registration for courses, handing in exams or gaining credits for the course. Course certificates or conformation letters will not be issued for sitting in on courses

**Compulsory reading**
**Books:**
Corsetti, Giancarlo. 2008. "New Open Economy Macroeconomics". New Palgrave Dictionary of Economics. 2nd ed. Palgrave
Heer, Burkhard and Alfred Maussner. 2009. Dynamic general equilibrium modeling : computational methods and applications. 2nd ed. Springer
Obstfeld, Maurice, and Kenneth Rogoff. 1996. Foundations of international macroeconomics. MIT Press
Obstfeld, Maurice, and Kenneth Rogoff. 2000. The six major puzzles in international macroeconomics : is there a common cause?. NBER. NBER working paper series ; 7777
Walsh, Carl E. 2010. Monetary theory and policy. 3rd ed. MIT press

**Articles:**
Bache, Ida W., Tommy Sveen and Kjersti N. Torstensen. 2012. "Revisiting the Importance of Non-Tradable Goods' Prices in Cyclical Real Exchange Rate Fluctuations". European Economic Review 57, 98-107
Bjørnland, Hilde C. 2009. "Monetary policy and exchange rate overshooting: Dornbusch was right after all". Journal of International Economics, Elsevier, vol. 79(1), pages 64-77
Engel, Charles. 1999. "Accounting for US Real Exchange Rate Changes". Journal of Political Economy 107, 507-38

**Recommended reading**

**Course outline**

(i) Introduction, Linear Algebra Boot Camp and Markov Chains

(ii) Numerical Integration and Function Approximation

(iii) Dynamic Programming and Parameterized Expectations and/or Projection Methods

(iv) International macroeconomics

(v) Robust monetary policy

**Computer-based tools**
The course uses modern programming software such as MATLAB.

**Learning process and workload**

**Workload (6 ECTS)**
Lectures

    30 hours
Specified learning activities (including reading)
    75 hours
Autonomous student learning (including exam preparation)
    75 hours
Total

    180 hours

**Course structure and grading:**
The course will we taught in 10 intensive modules. Each module consists of 3 hours.

Students are required to participate in class – both in discussions and by presenting models/material from the reading lists – as well as solve and hand in solutions to exercises and problems.

## Examination
Hand in an assignment ( individually ) consistent of maximum 10 pages ( plus references and appendix ).

## Examination code(s)
DRE 70042 ( The assigment ) counts for 100% of the grade in DRE 7004

## Examination support materials

## Re-sit examination
Re-takes are only possible at the next time a course will be held. When the course evaluation has a separate exam code for each part of the evaluation it is possible to retake parts of the evaluation. Otherwise, the whole course must be re-evaluated when a student wants to retake an exam.

## Additional information

**Honour Code**
Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honour code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honour code system, to which the faculty are also deeply committed.

Any violation of the honour code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honour code and academic integrity. If you have any questions about your responsibilities under

the honour code,
please ask.