DRE 4007 Advanced Macroeconomics

Programme
Finance and Economics

Responsible for the course
Tommy Sveen

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.
Lecturers:
Professor Erling Steigum (ES). Department of Economics (Part I)
Professor Kai Leitemo (KL). Department of Economics (Part II)

Learning outcome

The students should be able to apply optimal control theory on intertemporal resource allocation problems of consumption, investment and economic growth. They should master the q-theory of investment, the optimal growth model (The Ramsey-Cass-Koopmans model), overlapping generations models for closed and open economies (of the Diamond type), and be able to analyze the real effects of government debt and pay-as-you-go pension programmes and other fiscal policy issues. They should also possess a good knowledge of the literature on empirical studies on the world income distributions and the fundamental causes of economic prosperity.

After completing the second part of the course, the student should have a good knowledge of the modern mainstream macro theory models used for business cycle analysis. They should be able to understand how sticky prices (and wages) produce inefficient deviations from the optimal allocation of resources and how a good monetary policy design can improve efficiency. The students should be able to derive the models based on optimizing behavior by the private sector where expectations are fully rational.

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. Other candidates may be allowed to sit in on courses by approval of the courseleader. 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

Recommended reading

Course outline

Part 1: Long-run economic growth and fiscal policy (ES)

List of topics:
Consumption and investment
Optimal resource allocation over time: The Ramsey-Cass-Koopmans model
Overlapping generations models of closed and open economies: Effects of public debt and pay-as-you-go pension systems.
Fiscal policy, intergenerational risk sharing

Endogenous growth theory, the role of social infrastructure/institutions.

Articles (part I)

Acemoglu, Daron, Johnson, Simon, and Robinson, James (2001), “The Colonial Origins of Comparative Development: An Empirical Investigation”, *American Economic Review* 91, pp. 1369-1401.
Jones, Charles I. (1995), “R&D-based Models of Economic Growth”, *Journal of Political Economy* 103, pp. 759-784.
Jones, Charles I. (2002), “Sources of U.S. Economic Growth in a World of Ideas,” *American Economic Review* 92, pp. 220-239.
Jones, Charles I. (2005), “Growth and Ideas”, in Aghion,P. and S. Durlauf (eds.) *Handbook of Economic Growth* , Volume 1 (Part 2), Elsevier, pp. 1063-1111.
Persson, Torsten (1985), “Deficits and intergenerational welfare in open economies”, *Journal of International Economics* 19, 1985, 67-84.
Gordon, R.H. and H. Varian, “Intergenerational risk sharing”, *Journal of Public Economics* 37, 1988, 185-202.
Sala-i-Martin, X. (2005), “The World Distribution of Income: Falling Poverty…” *Quarterly Journal of Economics* 121, pp. 351-397.
Summers, R. and A. Heston, “The Penn World Table (Mark 5): An Extended Set of International comparisons, 1950-1988, Quarterly Journal of Economics 106, pp. 327-368.
(Recent update: http://pwt.econ.upenn.edu)
Thøgersen, Øystein, “A note on intergenerational risk sharing and the design of pay-as-you-go pension programs,” *Journal of Population Economics* 11, 1998, 373-378.
Rodrik, Dani, Subramnian, Arvind, and Trebbi, Francesco (2004), “Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development”, *Journal of Economic Growth* 9, pp. 131-166.

Part 2: Monetary Policy, Inflation and the Business Cycle (KL)

List of topics:
Introduction and the standard monetary model.
The Basic New Keynesian Model.
Monetary policy design and trade-offs under discretion and commitment.
A model with Sticky Wages and Prices.
Monetary policy and the Open Economy.

Articles (Part II):

Clarida, Gali and Gertler (1999), The Science of Monetary Policy, *Journal of Economic Literature* 37 (4), pp. 1661-1707.

Computer-based tools

Learning process and workload

Course structure and grading
There will be 10 lectures, 5 lectures on each part. 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.

Workload (6 ECTS)

Lectures	30 hours
Specified learning activities (including reading)	60 hours
Autonomous student learning (including exam preparation)	90 hours
Total	180 hours

Examination
The final grade is pass/fail. 30 hours home exam.

Examination code(s)
DRE 40072 will account for 100% of the grade

Examination support materials
Not applicable

Re-sit examination
The next time the course is offered

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 honor code and academic integrity. If you have any questions about your responsibilities under the honour code, please ask.