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ECO 6120
Macroeconomic Theory IV
Course Outline preliminary

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Office Hours – Tuesday and Thursday from 2 to 3PM

Goals of the Course
The purpose of the course is to introduce the student to selected elements of modern
macroeconomics. I try to keep a good balance between empirical and theoretical
studies. The focus of the course is on economic growth with a special emphasis on the
Ramsey growth model, output fluctuations, and monetary and fiscal policy.

Evaluation
Two exams, 60 %, two empirical exercises 40 %.

Book
*Economic Growth second edition*, by Robert J. Barro and Xavier Sala-i-Martin, MIT
Press 2004 (BSiM 2004). Note, the first edition of this book is not appropriate.

books can be purchased at the Bookstore, 85 University.
Course outline and reading list

A – Economic Growth

1 – The Solow growth model

- The basic model, dynamics of the model
- Determinants of balanced growth path
- The golden rule
- Empirical implications (cross-country growth regressions)
- Growth accounting
- Cross-Country Income differences
- first homework


2 – Economic growth and intertemporal optimization

- The Ramsey-Cass-Koopmans model
- Euler equation in discrete and continuous time
- The phase diagram – comparative dynamics
- Government in the Ramsey Growth Model
- Government budget constraint and the Ricardian Equivalence

BSiM (2004) sections 2.1 to 2.6, section 3.1, and Appendix A.3
Romer (2012) sections 2.7, sections 12.1 to 12.3

3 – New growth models

- The AK model
- Endogenous Growth with Transitional dynamics
- Models with Learning by Doing and Knowledge Spillovers
- Problems with quantitative implications of neo-classical growth models
- Human capital accumulation and economic growth
- The open economy model
- R&D and growth

BSiM (2004) section 1.3 (excluding 1.3.4), sections 4.1 to 4.3, and sections 3.3 and 3.4,
Romer (2012) sections 3.1 to 3.3.
- First exam
B – Business cycles, unemployment and inflation

References

1 – Traditional Keynesian theories of fluctuations

- The IS-LM-AD model
- The liquidity trap and the 2008-2009 Great recession
- The supply curve
- The open economy and exchange rate overshooting
- The Phillips curve
- The natural rate of unemployment
- The Canonical New Keynesian Model

2 – Permanent versus transitory shock: RBC contributions

- The traditional view on business cycle and permanent shocks
- Unit root tests
- Structural break
- Hodrick-Prescott filter
- Empirical applications Second homework
  Professor’s notes

3 – RBC model

- The approach
- Household behavior
- The basic model
- Technological shocks
- Empirical applications
  Romer (2012) section 5.1 to 5.5 and 5.8 to 5.10
4 – Lucas imperfect-information model

- The model
- Lucas’ Phillips curve
- The Lucas critique
- Empirical applications
  Romer (2012) sections 6.9 and 6.10

C- Selected topics in macroeconomics

References

- Romer (2012), sections 8.1 to 8.5 (with the exception of the Equity-Premium Puzzle) – chapter 11 (with the exception of 11.4 and 11.5), 12.9 and 12.10

1 – The consumption function

- The permanent income hypothesis and traditional theory of consumption
- Hall’s random walk hypothesis
- Empirical applications: the use of instrumental variables
- Interest rates and saving

2 - Inflation and monetary policy

- Inflation, money growth and interest rates
- The term structure of interest rates
- Control of Monetary Aggregates
- Interest-rate rules
- Dynamic inconsistency
- The conduct of Monetary policy: credibility, reputation, and rule
- Seignorage and Inflation

3 – Fiscal Policy

- Tax Smoothing
- Cost of deficits and debt crisis