



Department of Economics and Finance

ECON*6040*01 Macroeconomic Theory II Fall 2013



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Lectures: Tues, Thu 10:00AM - 11:20AM MACK, Room 521

It is your responsibility as a student to be aware of and to abide by the University's policies regarding academic misconduct, e-mail communication, maintaining copies of out-of class assignments, what to do when you cannot meet a course requirement and the drop date for this semester. To better understand these policies, visit:

<http://www.uoguelph.ca/economics/node/1115>

COURSE OUTLINE

Objectives: The goal of this course is to provide graduate students with tools and techniques required to understand advanced macroeconomic theory.

Grades: Course grades will be determined according to the following weighting scheme:

3 Homework Assignments (TBA)	20%
1 Midterm Examination (October 25 th , 3:00PM - 6:00PM)	35%
1 Comprehensive Final Examination (TBA)	45%

Note:

There is no make-up exam. If a student misses the midterm (with appropriate documentation) its weight will be shifted to the final.

Online Course Materials: Lectures notes, homework assignments, and practice exercises will be available at:

<http://courselink.uoguelph.ca/>

Course Evaluation: You will be asked to complete an evaluation of this course at some time during the last two weeks of the semester. **The course evaluation will be held in class.** The department of Economics policy regarding the conduct and use of these evaluations will be found at:

<http://www.uoguelph.ca/economics/academics/courses/course-evaluation>

COURSE CONTENT

Chapter 1 A One-Period Model with Production

Part 1 A Decentralized Economy

C. I. Jones, *Macroeconomics*, 2nd U.S. edition, Chapter 4, p66-p96.

Part 2 A Centralized Economy

S. Williamson, *Macroeconomics*, Prentice Hall (2010); 4th edition, Chapters 4, 5 and Appendix Pages 664-672.

Chapter 2 Two-Period Overlapping Generations Models

E. Malinvaud, *The Overlapping Generations Model in 1947*, *Journal of Economic Literature*, 25, March 1987, Pages 103-105.

Part 1 Pure Exchange Economies

D. Gale, *Pure Exchange Equilibrium of Dynamic Economic Models*, *Journal of Economic Theory*, 6, (1972), Pages 12-36.

P. A. Samuelson, *An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money*, *Journal of Political Economy*, 66, (1958), Pages 467-482.

Part 2 Production Economies

P. A. Diamond, *National debt in a neoclassical growth model*, *American Economic Review* 55, (1965), Pages 1126-1150.

O. Galor and H. E. Ryder, *Existence, uniqueness, and stability of equilibrium in an overlapping generations model with productive capital*, *Journal of Economic Theory*, 49, (1989), Pages 360-375.

O. J. Blanchard and S. Fisher, *Lectures on Macroeconomics*, MIT Press (1996), Chapter 3 Pages 91-153.

Chapter 3 Long/Infinite Horizon Models with Production

Part 1 Examples of Long/Infinite Horizon Planning Problems

D. De La Croix and P. Michel, *A Theory of Economic Growth*, Cambridge University Press (2002), Chapter 2 Pages 72-128.

C. Azariadis, *Intertemporal Macroeconomics*, Blackwell Publishers Inc (1998), Part 1 Chapter 7 Pages 68-84.

T. J. Sargent, *Dynamic Macroeconomic Theory*, Harvard University Press (1987), Part 1 Chapter 1 Pages 11-56.

Part 2 Dynamic Programming Methods

A. K. Dixit, *Optimization in Economic Theory*, Oxford University Press, Second Edition, (1990), Chapter 10 Pages 145-161.

L. Ljungqvist, T. J. Sargent, *Recursive Macroeconomic theory*, MIT Press, (2000), Chapters 2, 3, 4 Pages 29-82.

N. L. Stokey, R. E. Lucas with E. C. Prescott, *Recursive Methods in Economic Dynamics*, Harvard University Press, selected chapters.

Chapter 4 Business Cycle Models

Part 1 Real Business Cycle Models

T. F. Cooley and E. C. Prescott, *Economic Growth and Business Cycles*, in *Frontiers of Business Cycle Research* (Thomas F. Colley. Ed), Princeton University Press (1995), Pages 1-39.

R. G. King, C. I. Plosser and S. T. Rebelo, *Production, Growth and Business Cycles: I. the Basic Neoclassic Model*, *Journal of Monetary Economics*, 21 (1988), Pages 195-232.

R. G. King, C. I. Plosser and S. T. Rebelo, *Production, Growth and Business Cycles: Technical Appendix*, Working Paper (2001).

R. G. King and S. T. Rebelo, *Resuscitating Real Business Cycles*, in *Handbook of Macroeconomics*, J. Taylor and M. Woodfords Eds., Elsevier Science Publishing, 1999.

J. H. Cochrane, *Solving Real Business Cycle Models by Solving System of First-Order Condition*, Lectures notes (2001).

Part 2 Endogenous Business Cycle Models

M. Boldrin, and M. Woodford, *Equilibrium Models Displaying Endogenous Fluctuations and Chaos: a Survey*, *Journal of Monetary Economics*, 25, Pages 189-222.

J. Benhabib and R. H. Day, *Erratic Accumulation*, *Economic Letters*, 6, (1980), Pages 113-117.

J. Benhabib and R. H. Day, *A Charaterization of Erratic Dynamics in the Overlapping Generations Model*, *Journal of Economic Dynamics and Control* 4, (1982) Pages 37-55.

J. M. Grandmont, *On Endogenous Competitive Business Cycles*, *Econometrica*, 53, (1985), Pages 995-1046.

R. E. A. Farmer, *Deficits and Cycles*, *Journal of Economic Theory*, 40, (1986), Pages 77-88.

P. Reichlin, *Equilibrium Cycles in an Overlapping Generations Economy with Production*, *Journal of Economic Theory*, 40, (1986), Pages 89-102.

Chapter 5 Models with Boundedly Rational Agents

Part 1 In Descriptive Models

G. W. Evans and S. Honkapohja, *Learning and Expectations in Macroeconomics*, Princeton Univ. Press, Princeton, New Jersey, (2001).

J. M. Grandmont, *Expectations Formation and Stability of Large Socioeconomic Systems*, *Econometrica*, Vol. 66, No. 4, (1998), Pages 741-781.

Part 2 In Overlapping Generations Models

J. P. Benassy and M. Blad, *On Learning and rational expectations in an overlapping generations model*, *Journal of Economic Dynamics and Control*, 13, (1989), Pages 379-400.

J. Bullard, *Learning equilibria*, *Journal of Economic Theory*, 64, (1994), Pages 468-485.

M. Schönhofer, *Chaotic learning equilibria*, *Journal of Economic Theory*, 89, (1999), Pages 1-20.

J. Tuinstra, *Beliefs equilibria in an overlapping generations model*, *Journal of Economic Behavior and Organization*, 50, (2003), Pages 145-164.

Part 3 In Long/Infinite Horizon Models with Production

L. L. Cellarier, *Constant Gain Learning and Business Cycles*, *Journal of Macroeconomics* 28: 51-81, 2006.

L. L. Cellarier, *Least square Learning and Business Cycles*, *Journal of Economic Behavior and Organization*, 68: 553-564, 2008.

R. H. Day, *Flexible Utility and Myopic Expectations in Economic Growth*, *Oxford Economic Papers*, 21: 299-311, 1969.

H. Dawid, *Long Horizon Versus Short Horizon Planning in Dynamic Optimization Problems with Incomplete Information*, *Economic Theory*, 25: 575-597, 2005.

G. W. Evans, and B. McGough, *Learning to Optimize*, Working Paper, 2009.

In keeping with the University's Learning Outcomes, the Department of Economics and Finance Learning Outcomes (skills and knowledge competencies) for this course are:

Skills:

- 1) **Written Communication:** Short answer essay questions which will be graded with the usual essay writing criteria except for the requirement of a bibliography.
- 2) **Numerical Problem Solving:** Students will have to **solve** various general equilibrium models namely one-period models, two-period models with overlapping generations, the Cass-Koopmans model and real business cycle models. Students will also have to make **quantitative predictions**. These numerical skills will be assessed with quantitative problems in the homework assignments, the midterm and final.
- 3) **Analytical Problem Solving:** Some chapters of the course rely on graphical **analysis** to **demonstrate** and **interpret** various economic models. This will be tested on the homework assignments, midterms and final.
- 4) **Problem solving in a Real World Context:** Students will have to **apply** the course materials to historical and current macroeconomic problems.
- 5) **Computer skills:** Students will have to use mathematical packages to answer some homework assignment questions.
- 6) **Professional and ethical awareness and conduct:** There will be no time extension to complete the homework assignments in order to master **time management** skills.

Knowledge:

- 1) **Mathematical Methodology:** Students are expected to **analyze** large systems of difference equations and to **solve** high dimensional optimization problems.
- 2) **Statistical and Econometric Methodology:** Students have to be **familiar** with data analysis, sampling, probability, hypothesis testing, confidence intervals, regression analysis, robustness)
- 3) **Microeconomic modelling:** Students are expected to **apply** the supply and demand framework to various markets, the theory of the firm and the theory of the consumer.
- 4) **Macroeconomic Modeling:** As a graduate course, ECON*6040 introduces students to advanced macroeconomic modelling. Students are expected to **remember** and **recognize** various concepts and models.
- 5) **Understanding of Specific Markets:** Several markets are **analyzed** such as goods market, the money market, the bond market, the labor market. Students are expected to **understand** and **remember** their specificities and commonalities.
- 6) **Historical and Global context:** Students will be required to **research** the values of current macroeconomic indicators and variables. Short essay questions will ask students to **construct** an argument about a macroeconomic issue from an historical perspective and to **formulate** a solution for a current macroeconomic problem.
- 7) **Economic Policy and Regulation:** Students must **understand** and **explain** the macroeconomic consequences of government intervention.