

# ECON\*6020: MACROECONOMIC THEORY I

## **College of Management and Economics Department of Economics and Finance**

# Winter 2012

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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.economics.uoguelph.ca/student-responsibilities-policies.asp

# **COURSE OUTLINE**

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

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

3 Homework Assignments (TBA)	20%
1 Midterm Examination (March 7th)	35%
1 Comprehensive Final Examination (TBA)	45%

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 and Finance policy regarding the conduct and use of these evaluations will be found at:

http://www.economics.uoguelph.ca/course-evaluation.asp

### **COURSE CONTENT**

### Chapter 1 A One-Period Model with Production

#### Part 1 A Decentralized Economy

C. I. Jones, Macroeconomics, 2<sup>nd</sup> 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. Stockey, 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.