

Economics 450 D1-001
Advanced Economics Theory - Honours

“The consequences for human welfare involved in questions like these (*related to growth*) are simply staggering: Once one starts to think about them, it is hard to think about anything else”
Robert E. Lucas Jr.

Credits: 3

Method: Two lectures per week, last 3 weeks class presentations.

Meeting Times and Location: Tue and Thu 10:05-11:25 a.m. LEA 14

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Learning Objectives: The course offers a thorough overview of the modern growth literature. Emphasis is placed on the construction of growth models with microeconomic foundations. The objectives of the course are:

1. Provide an introduction to the mathematical tools required to understand the scientific literature in this field.
2. Provide an overview of the evolution of growth theory over the last 50 years.
3. Build a connection between these theoretical exercises and the actual policies followed by developing/developed countries.
4. Introduce you to the most recent topics under debate in this literature.

Math Requirements: Calculus is freely used in this course, furthermore we will make use a set of mathematical techniques that you might not be familiar with. The first 2 lectures will be devoted to the introduction of these techniques at a user level.

Prerequisites: ECON 250D1/ECON 250D2 and ECON 352D1/ECON 352D2
Students must register for both ECON 450D1 and ECON 450D2. No credit will be given for this course unless both ECON 450D1 and ECON 450D2 are successfully completed in consecutive terms

Textbook: You should read the following book during the course: “The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics” by William Easterly. This is not a formal textbook but the author discusses the applications of some of the theoretical models that we are going to be exploring in class.

There are several books on growth theory that might be helpful. Some of them cover the topics at a lower technical level than the attempted in this course, Economic Growth, David N. Weil, Pearson Addison Wesley, 2005
Introduction to Economic Growth, Charles I. Jones, W.W.Norton & Company, 2002

There is one book that covers the topics at a more advanced level, Economic Growth, Robert J. Barro and Xavier Sala-i-Martin, MIT Press, 1999

Grading policy: There will be one in-class exam, three homework sets and one presentation. The 100 points of the grade will be distributed in the following way.

Homework (6 points)

Exam (54 points)

Presentation (40 points). Besides presenting and sometimes discussing other paper, each student needs to attend at least 8 presentations to obtain the presentation points.

Exam date: During class, on **Thursday, Oct. 29th**. You can only miss an exam if you have a medical reason (doctor's note required).

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see www.mcgill.ca/integrity for further information).

According to Senate regulations, instructors are not permitted to make special arrangements for final exams. Please consult the calendar, section 4.7.2.1, General University Information and Regulations, at www.mcgill.ca.

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. Here is an outline of the course, with the associated readings (Starred () readings are required, Chapters from the book correspond to the 2nd Edition). Given that our lecture time is limited, some of the readings are aimed to complement the material covered in class.*

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0. Some mathematical tools (partially covered in 352)

ODE, systems of ODE's, qualitative solutions (phase diagram) and stability, intertemporal optimization.

Barro, R. and X. Sala-I-Martin, *Economic Growth*. Appendix on Mathematical Methods. MIT Press.

Chiang, A. *Fundamental Methods of Mathematical Economics*, McGraw-Hill, Inc.

1. Growth Facts and the world income distribution (covered in 352)

* Easterly Ch. 1

* The Economist, "More or less equal", March 11th, 2004

* The Economist, "Pessimistic on Poverty", April 7th, 2004.

Ravallion, M. (2013) "The Idea of Antipoverty Policy" NBER WP 19210

Jones, C. (1997) "On the Evolution of the World Income Distribution" JEP

Sala-i-Martin, X. (2006) "The World Distribution of Income: Falling Poverty and ...convergence, period", QJE

Bourguignon, F. and C. Morrisson (2002) "Inequality among World Citizens: 1820-1992" AER

Dollar, David and Kraay, Aart, (2002) "Growth Is Good for the Poor," JEG.

2. Keynesian Growth: Harrod-Domar Model.

*Easterly Ch. 2

Solow (2000), Growth Theory: An Exposition. Ch.1

3. Physical Capital: The Solow Model. (partially covered in 352)

* Easterly Ch. 3 and 11

Solow (1956), "A Contribution to the Theory of Economic Growth" QJE

Phelps (1961), "The Golden Rule of Accumulation: A Fable for Growthmen" AER

Solow (2000), Growth Theory: An Exposition. Ch. 2 and 3

5. Endogenous Fertility and the Demographic Transition.

* Easterly Ch. 5

* Galor and Weil (1999) "From Malthusian Stagnation to Modern Growth" AER

Brander and Taylor (1998) "The Simple Economics of Easter Island: A Ricardo-Malthus Model of Renewable Resource Use" AER

Becker, Glaeser and Murphy (1999) "Population and Economic Growth" AER

4. Evaluation of the Neoclassical Growth Model.

Pritchett, L. (1997) "Divergence, Big Time" JEP

Solow (1957) "Technical Change and the Aggregate Production Function" RES

6. Human Capital in the Neoclassical Growth Model.

* Easterly Ch. 4

* Lucas, R. (1990), "Why Doesn't Capital Flow from Rich to Poor Countries" AER

* Mankiw, G. D. Romer and D. Weil (1992) "A Contribution to the Empirics of Economic Growth" QJE

Lucas, R. (1988) "On the Mechanics of Economic Development" JME

7. Ideas: The Economics of Technical Change.

* Easterly Ch. 8 and 9

* Solow R. (1994) "Perspectives on Growth Theory" JEP

* Romer, P. (1994) "The Origins of Endogenous Growth" JEP

* The Economist "The growth of growth theory". May 18th 2006

* "Economic Growth" by Paul M. Romer. The Concise Encyclopedia of Economics.

<http://www.stanford.edu/~promer/EconomicGrowth.pdf>

Murphy, K., A. Shleifer and R. Vishny (1989) "Industrialization and the Big Push"
JPE

Grossman, G. and E Helpman (1994) "Endogenous Innovation in the Theory of Growth" JEP

Romer, P. (1986) "Increasing Returns and Long-Run Growth" JPE

Irwin, D. and P. Klenow (1994) "Learning-by-doing Spillovers in the Semiconductor Industry" JPE

Jones, C. (1995) "Time Series Tests of Endogenous Growth Models" QJE

8. Beyond K, H and Ideas : Growth and Institutions

*Easterly remaining chapters.

Olson, M. (1996) "Big Bills Left on the Sidewalk: Why Some Nations are Rich, and Others Poor" JEP

Hall, R. and C. Jones (1999) "Why Do Some Countries Produce So Much More Output per Worker than Others?" QJE

Presentations

Presentations should last between 45 and 60 minutes. The discussants will have 10 minutes to present their case. Then, the group presenting will have time to respond to the presenters and to answer questions from the rest of us. A week before each presentation the group should send me a three-page summary of the material they will present that I will post in WebCT. Everyone attending the presentation should read this summary in advance (at random, in the day of the presentation, I might choose to conduct a five-minute quiz of any of these summaries, the grade of such a quiz will never be more than 3% of the presentation grade)

A. Measurement.

1. It is capital (Human and Physical).

Mankiw, G, D. Romer and D. Weil (1992) "A Contribution to the Empirics of Economic Growth" QJE

DeLong, J.B. and L. Summers (1992) "Equipment Investment and Economic Growth: How Strong Is the Nexus?" Brookings Papers on Economic Activity (Fall)

Manuelli, R. and A. Seshadri (2014) "Human Capital and the Wealth of Nations" American Economic Review

Lagakos, D, B. Moll, T. Porzio and N. Qian (2012) "Experience Matters: Human Capital and Development Accounting" NBER Working Paper 18602

Young, A. (1995) "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience." *Quarterly Journal of Economics*

Krugman, P. (1995) "The Myth of Asia's Miracle" *Foreign Affairs*

Discussant: Group 2

2. It is not capital.

Klenow, P.J. and A. Rodriguez-Clare (1997) "The Neoclassical Revival in Growth Economics: Has It Gone Too Far?" NBER Macroeconomics Annual.

Easterly, W. and R. Levine (2001) "It's Not Factor Accumulation: Stylized Facts and Growth Models" *World Bank Economic Review*

Caselli, F. (2005) "Accounting for Cross-Country Income Differences" *Handbook of Economic Growth*

Discussant: Group 1

3. Misallocation

Hsieh, C.T. and P. J. Klenow (2010) "Development Accounting," *American Economic Journal: Macroeconomics*

Vollrath, D. (2009) How Important are Dual Economy Effects for Aggregate Productivity?, *Journal of Development Economics*, 2009, 88, pp. 325-334.

Gollin, D., D. Lagakos and M. Waugh (2014) "The Agricultural Productivity Gap in Developing Countries," *Quarterly Journal of Economics* 129(2): 939-993.

Hayashi, F. and E. C. Prescott, (2008) "The Depressing Effect of Agricultural Institutions on the Prewar Japanese Economy," *Journal of Political Economy*.

Hsieh, C.T. and P. J. Klenow (2009) "Misallocation and Manufacturing TFP in China and India," *The Quarterly Journal of Economics*

Discussant: None

B. Fundamental causes of growth.

4. Institutions

Acemoglu, D. and J.A. Robinson (2012) *Why Nations Fail: the origins of power, prosperity, and poverty*.

(it might be helpful to organize the material in the book to take a look at Acemoglu, D., S. Johnson and J. Robinson (2004) "Institutions as the Fundamental Cause of Long-Run Growth" NBER)

Discussants: Group 5

5. Geography

Diamond, J., *Guns, Germs and Steel*, W.W. Norton & Co. (in the library they have a documentary based on the book that should do the job)

Bloom, D. and J. Sachs. (1998) “Geography, Demography, and Economic Growth in Africa” *Brookings*

Sachs, J. (2003) “Institutions don’t rule: Direct effects of geography on per capita income” NBER

Alsan, M. (2015) “The Effect of the TseTse Fly on African Development” *American Economic Review*

Discussants: Group 4

6. History

Nunn, Nathan, (2009) “The Importance of History for Economic Development”, *Annual Review of Economics*

Nunn, Nathan and Leonard Wantchekon, (2011), “The slave trade and the origins of mistrust in Africa” *AER*

Banerjee A, Iyer L, Somanathan R. (2005) “History, social divisions and public goods in rural India”. *J. Eur. Econ. Assoc.*

Dell, M. (2010) “The Mining Mita: Explaining Institutional Persistence”, *Econometrica*

Discussant: None

7. Two Views on Property Rights

Ostrom, E. (1990) *Governing the Commons*

De Soto, Hernando (1989) *The Mystery of Capital*

Discussant: None

C. Policies.

8. Policy I

Kevin M. Murphy, Andrei Shleifer and Robert W. Vishny (1989) “Industrialization and the Big Push” *Journal of Political Economy*

Burnside, C. and D. Dollar, (2000) “Aid, Policies, and Growth” *American Economic Review*

Sachs, J. (2005) *The End of Poverty*

Discussants: Group 9

9. Policy II

Easterly, W. (2006) *The White Man’s Burden*

Easterly, W. (2008) "Institutions: Top Down or Bottom Up?" American Economic Review
 Easterly, W. (2006) "The Big Push Déjà Vu: A Review of Jeffrey Sachs's The End of Poverty: Economic Possibilities for Our Time" Journal of Economic Literature

Discussants: Group 8

10. Policy III

Henry, P.B. and C. Miller (2009) "Institutions versus Policies: A Tale of Two Islands," American Economic Review.

Rodrik, D. (2004) "Growth Strategies" Handbook of Economic Growth

R. Hausmann, B. Klinger, and R. Wagner (2008) "Doing Growth Diagnostics in Practice: A 'Mindbook'"

Rodrik, D. (2008) "Second-Best Institutions," AER

Discussant: None

Articles: Articles can be downloaded from JSTOR (www.jstor.org), the library or the web. The NBER articles can be downloaded from www.nber.org.

Date	Contents	HW (tentative)
08-Sep-15	Tuesday Hello	
10-Sep-15	Thursday Math	
15-Sep-15	Tuesday Math	HWI
17-Sep-15	Thursday Math / Harrod Domar	
22-Sep-15	Tuesday Solow	
24-Sep-15	Thursday RCK	Due
29-Sep-15	Tuesday RCK	HWII
01-Oct-15	Thursday RCK	
06-Oct-15	Tuesday Fertility	
08-Oct-15	Thursday Fertility	Due
13-Oct-15	Tuesday Fertility / Evaluation Evaluation / Human	HWIII
15-Oct-15	Thursday Capital	
20-Oct-15	Tuesday Human capital / Ideas	
22-Oct-15	Thursday Ideas	
27-Oct-15	Tuesday Beyond K,H and A	Due
29-Oct-15	Thursday Exam	
03-Nov-15	Tuesday Presentation 1	
05-Nov-15	Thursday Presentation 2	
10-Nov-15	Tuesday Presentation 3	
12-Nov-15	Thursday Presentation 4	
17-Nov-15	Tuesday Presentation 5	
19-Nov-15	Thursday Presentation 6	
24-Nov-15	Tuesday Presentation 7	
26-Nov-15	Thursday Presentation 8	
01-Dec-15	Tuesday Presentation 9	
03-Dec-15	Thursday Presentation 10	