

UNIVERSITY OF WATERLOO

Department of Economics

Economics 302 - Winter 2012

Macroeconomic Theory 2

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Office Hours: MW 11:00-11:30a and 1:00-2:00 pm or by appointment

Location: MC 2054

Time: 14:30-15:50 MW

1 Course Objectives and Textbooks

This course is an introduction to macroeconomics at an advance undergraduate level. The course will emphasize various important topics in macroeconomic theory. A large part of the course will be devoted to the Solow growth model, two-period models, business cycle theory, the role of money and theories of inflation. You will learn how these theoretical frameworks can be used to understand and interpret actual macroeconomic events. To this end, we will use journal articles, articles in newspapers and the Economist magazine to apply concepts learned in class to the real world. Every two weeks, we will devote 15-20 minutes of class to a current and important topic in macroeconomics.

Students are assumed to have been exposed to basic calculus and linear algebra during their 200's courses. Although not compulsory, you are **strongly advised** to attend classes and participation is strongly encouraged.

Your primary source of material for this course are my lecture notes. The lecture notes will be posted in advance of the lectures on LEARN at <http://learn.uwaterloo.ca>. You will need to be registered to access the lecture notes. The lecture notes will be based on several sources, including journal articles, textbooks and various other articles. Although I will recommend a textbook, I do not intend to make extensive use of it. I will, however, in most cases follow the structure of the book but at times may deviate substantially from it. Note that a lot of the materials taught in class will not be included in the lecture notes; this is why attendance is strongly encouraged.

In addition to lecture notes, an important number of journal articles and articles from the Economist will also be posted on LEARN. Many of these articles will be the subjects of discussion in class at the end of each lecture topic. You are required to read these short and non-technical articles as you may be asked questions on the exam regarding their content.

1.1 Textbook

The textbook that is recommended for this course is *Macroeconomics, second Canadian Edition* by Williamson, S. D. [SDW]. There are other numerous useful textbooks for this course. They are in no particular order of preference:

1. Bain, Keith., and Peter Howells. 2003. *Monetary Economics* [BH]
2. Barro.R. 1997. *Macroeconomics* 5th edition
3. Champ, B. and S. Freeman. 2001. *Modeling Monetary Economies*, Second Edition, Cambridge Press. [CF]
4. Jones, C. 2001. *Introduction to Economic Growth*, Second Edition, W. W. Norton & Company [CJ]
5. Romer, D. 2005. *Advanced Macroeconomics*, Third Edition, McGraw-Hill/Irwin. Chapters 1,2,3. [DR]
6. Weil, D.N. 2004. *Economic Growth*, Second Edition, Pearson, Addison Wesley. [DW]

If you feel that you have a weak background in mathematics, I recommend the following book (the book is often used in Econ 211 and 311):

- Simon, Carl, P., and Lawrence Blume, *Mathematics for Economists*, W. W. Norton & Company, 1994. [SB]

You are also required to read the business section of one of the main national newspaper (National Post and/or Globe and Mail) and the Financial Times particularly articles on the Canadian economy and the Bank of Canada. The following websites are very useful for current events:

1. Bank of Canada Review: <http://www.bankofcanada.ca/en/review/index.html>
2. Bank of Canada Monetary Policy Report: http://www.bankofcanada.ca/en/mpr/mpr_previous.html
3. Federal Reserve Bank of San Francisco Economic Letter: <http://www.frbsf.org/publications/economics/letter/index.php>
4. Federal Reserve Bank of St. Louis Review: <http://research.stlouisfed.org/publications/review/>
5. Federal Reserve Bank of St. Louis Economic Synopses: <http://research.stlouisfed.org/publications/es/>
6. Federal Reserve Bank of Richmond Economic Quarterly: http://www.richmondfed.org/publications/research/economic_quarterly/index.cfm
7. VOXEU: <http://www.voxeu.org/>

2 Evaluation

1. Final exam (2h30mins) at the end of the term scheduled by the registrar (worth 40%).
2. Two midterms (each worth 20%) held on Wednesday February 15 and Wednesday March 14. You will receive a further announcement regarding the location of the midterms.

3. Two assignments (each worth 10%) **due in class** on Wednesday February 8 and Wednesday March 7. You will have 10 days to do the assignment. **Late assignments will receive a mark of zero.** NO exceptions whatsoever are allowed.

3 Lecture Topics and References

3.1 Exogenous Growth Model

- Stylized facts about economic growth
- What are we trying to explain?
- Malthus model of economic growth
- Solow model of economic growth
- Growth accounting
- Income disparity and convergence

Readings:

- Williamson chapter 6
- Jones, chapter 2.
- “Growth Theory and Policy,” *The Economist* print edition, October 27, 2005
- “Growth Theory,” *The Economist* print edition, May 18, 2006
- “Calling Across the Divide” *The Economist* print edition
- Solow, R.M. 1994. “Perspectives on Growth Theory,” *Journal of Economic Perspectives*, 8:1, 45–54.

3.2 Endogenous Growth: A Model of Human Capital Accumulation

- Stylized facts: Human capital in the form of education and health
- Augmented Solow Growth model: The role of education

Readings:

- Williamson chapter 7
- Mankiw, N.G., D. Romer and D.N Weil. 1992. “A Contribution to the Empirics of Growth,” *Quarterly Journal of Economics*, 107: 407—437.

- Romer, P. M. 1994. “The Origins of Endogenous Growth.” *Journal of Economic Perspectives* 8:1, 3–22.
- Pritchett, L. 1997. “Divergence Big Time,” *Journal of Economic Perspectives*, 11:3, 3–17.
- Barro, R. J. 2001. “Human Capital and Growth,” *American Economic Review*, 91:2, 12–17.

3.3 Two Period Models: a simple OLG model

- Consumption-saving decision
- Economic Growth in the simple OLG model
- Ricardian equivalence Theorem
- Social Security and savings

Readings:

- Ehrlich, I., and J. Kim. 2005 “Social Security, Demographic Trends, and Economic Growth: Theory and Evidence from the International Experience,” National Bureau of Economic Research (NBER) Working Paper No. 11121
- Zhang, J., and J. Zhang. 2004. “How Does Social Security Affect Economic Growth? Evidence From Cross-Country Data,” *Journal of Population Economics* 17: 473—500.

3.4 Money, Inflation and Banking

- What is money?
- Money in an OLG model
- Measuring, forecasting inflation and the costs of inflation
- The Phillips curve: Phillips, Adaptive and Rational expectations..
- Financial intermediation and Banking

Readings:

- Williamson chapter 15
- BH chapters 8
- Lucas, R. E. 1996. “Nobel Lecture: Monetary Neutrality,” *Journal of Political Economy*, 104:661—682.
- Coletti, D., and B. O’Reilly. 1998. “Lower Inflation: Benefits and Costs,” Bank of Canada Review Autumn 1998.

- Lacker, J.M. and J. A. Weinberg. 2007. “Inflation and Unemployment: A Layperson’s Guide to the Phillips Curve,” Federal Reserve Bank of Richmond Economic Quarterly, Summer 2007
- Lansing, K. 2002. “Can the Phillips Curve Help Forecast Inflation?” FRBSF Economic Letters 2002-29.
- Diamond, D. W. 2007. “Banks and Liquidity Creation: A Simple Exposition of the Diamond-Dybvig Model” *Federal Reserve Bank of Richmond Economic Quarterly* 93: 189—200.
- Diamond, D. W., and P.H. Dybvig. 1983. “Bank Runs, Deposit Insurance, and Liquidity,” *Journal of Political Economy* 91: 401—19.

Policy on Missed Midterms and Final Exams: No make-up midterms will be provided. Students who do not have a relevant medical certificate will receive a mark of zero on any missed midterm or final exam. For students who miss one or more midterms and have a relevant medical certificate, or medical certificates, the weight of the missed midterms will be automatically transferred to the final exam. Note that you have to hand in your medical certificate WITHIN a week of the midterm/final. Failure to do so will result in an automatic mark of Zero.

Note on avoidance of academic offences: All students registered in the courses of the Faculty of Arts are expected to know what constitutes an academic offence, to avoid committing academic offences, and to take responsibility for their academic actions. When the commission of an offence is established, disciplinary penalties will be imposed in accord with Policy #71 (Student Academic Discipline). For information on categories of offences and types of penalties, students are directed to consult the summary of Policy #71 which is supplied in the Undergraduate Calendar (section 1; on the Web at http://www.adm.uwaterloo.ca/infoucal/UW/policy_71.html.) If you need help in learning how to avoid offences such as plagiarism, cheating, and double submission, or if you need clarification of aspects of the discipline policy, ask your TA or course instructor for guidance. Other resources regarding the discipline policy are: your academic advisor and the Undergraduate Associate Dean.

Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance, <http://www.adm.uwaterloo.ca/infosec/Policies/policy70.html>.

Note for students with disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.