**Department of Economics**
**University of Toronto**
**ECO2500H1F – Monetary Theory**
**Fall 2016**

**Instructor:**

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Office Hours: Friday 2:30-3:30PM or by appointment

**Course objectives:**

This course explores a wide range of topics on monetary theory. The strategy of the course is to examine simple models to explore the importance of money, banks, and other financial institutions in the way economies work. The topics examined in this framework include: role of money, determination of the medium of exchange, effects of inflation, role of banks, control of the money supply, and effect of the National Debt on saving and investment. The targeted audience is master students in Economics and Financial Economics.

**Course materials:**

The topics of the course do not follow a textbook. However, the following book covers the first part of the course:

> Bruce Champ and Scott Freeman, "Modeling Monetary Economies," Cambridge University Press. Second edition. (2001)

This book has been republished as:

> Bruce Champ, Scott Freeman, and Joseph Haslag "Modeling Monetary Economies," Cambridge University Press. Third edition. (2011)

You probably do not need to buy this book. The second part of the course will be based on original articles. A set of lecture notes, posted in the course web site, covers the main ideas from all the topics in the course.

**Grade allocation:**

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|---|---|---|
| Test 1 | Oct. 3 | 10 % |
| Test 2 | Oct. 31 | 10 % |
| Test 3 | Nov. 21 | 10 % |
| Test 4 | Dec. 7 | 10 % |
| Problems | | 8 % |
| Final Exam | | 52 % |

The four tests will be conducted in class at the beginning of a lecture and will take 10 to 15 minutes. Each test will ask questions related to a problem set and the topics that the problem set deals with. The problem set will be due at the beginning of the test. Your answers to the problem sets will be collected, and credit will be given for their completion. However, they will not be graded. There will not be make-up tests. If students miss a test, they should provide me with proper justification during the week following the test. If this justification is well documented and compelling, then the weight of the missed test will be transferred to the final exam.

**Announcements:**
Please, make it a habit of checking the course web site for announcements.

**Academic misconduct:**
Students should note that copying, plagiarizing, or other forms of academic misconduct will not be tolerated. Any student caught engaging in such activities will be subject to academic discipline ranging from a mark of zero on the assignment, test or examination to dismissal from the university as outlined in the academic handbook. Any student abetting or otherwise assisting in such misconduct will also be subject to academic penalties.

# List of Topics

### 1 - Money and Inflation in the Ovelapping Generations Model

- The seminal contribution for this material goes back to Samuelson (1958).
- Many textbooks have excellent expositions. The terminology and notation used in the class is basically that of Chapters 1 and 3 in Champ and Freeman (2001). Blanchard and Fisher (1989) and Ljungqvist and Sargent (2000) are good alternatives at a higher level.
- References:
  - Blanchard, O. and S. Fischer (1989), *Lectures on Macroeconomics*, MIT Press.
  - Champ, B. and S. Freeman (2001), *Modelling Monetary Economies,* 2nd edition, Cambridge Univ. Press.
  - Ljungqvist L. and T.J. Sargent (2000), *Recursive Macroeconomic Theory*, MIT Press.
  - Samuelson, P.A. (1958) "An Exact Consumption-Loan Model of Interest With or Without the Social Contrivance of Money," *Journal of Political Economy* 66, pp. 467-82.
- Policy paper (required pp. 41- 56 of the original paper, the remaining pages are recommended):

- Sargent, Thomas J. (1982), "The Ends of Four Big Inflations," in *Inflation: Causes and Effects* edited by Robert E. Hall. University of Chicago Press. ( http://www.nber.org/chapters/c11452.pdf )

**2 - Money and Capital in the Overlapping Generations Model**

- The original contribution for the model covered in this topic is from Diamond (1965).
- Many textbooks have excellent expositions. The presentation in class borrows heavily from Blanchard and Fischer (1989). An alternative exposition is Ljungqvist and Sargent (2000).
- References:
  - Diamond, Peter (1965), "National Debt in a Neoclassical Growth Model," *American Economic Review* 55, pp. 1126-1150.
  - Blanchard, O. and S. Fischer (1989), *Lectures on Macroeconomics*, MIT Press.
  - Ljungqvist L. and T.J. Sargent (2000), *Recursive Macroeconomic Theory*, MIT Press.
- Policy paper (required):
  - Bernanke, Ben (2015), "Why Are Interest Rates so Low, Part 1" ( https://www.brookings.edu/2015/03/30/why-are-interest-rates-so-low/ )

**3 - Liquidity Role of Banks**

- The seminal contribution on the issues dealt in this topic is due to Diamond and Dybvig (1983).
- After Diamond and Dybvig there has been several papers dealing with the optimal demand deposit contract that prevents bank runs when $t$ is stochastic. A good example among those is Green and Lin (2003).
- References:
  - Diamond, Douglas W. and P. H Dybvig (1983), "Bank Runs, Deposit Insurance, and Liquidity," *Journal of Political Economy* 91, pp. 401-419.
  - Green, Edward, and Ping Lin (2003), "Implementing Efficient Allocations in a Model of Financial Intermediation, " *Journal of Economic Theory* 109, 1–23.
- Policy papers (required):
  - Bernanke, Ben (2015), "Why Are Interest Rates so Low, Parts 2, and 3" ( https://www.brookings.edu/2015/03/31/why-are-interest-rates-so-low-part-2-secular-stagnation/
    https://www.brookings.edu/2015/04/01/why-are-interest-rates-so-low-part-3-the-global-savings-glut/ )

**4 - Monitoring Role of Banks**

- Seminal work on this area of research goes back to Diamond (1984). The model presented here was developed by Williamson (1986, 1987a, and 1987b) in a series of papers in 1980's.

- References:

  - Diamond, Douglas W. (1984), "Financial Intermediation and Delegated Monitoring," *Review of Economic Studies* 51, 393-414.
  - Williamson, Stephen D. (1986), "Costly Monitoring, Financial Intermediation, and Equilibrium Credit Rationing" *Journal of Monetary Economics* 18, pp. 159-179.
  - Williamson, Stephen D. (1987a), "Financial Intermediation, Business Failures, and Real Business Cycles," *Journal of Political Economy* 95, pp. 1196-1216.
  - Williamson, Stephen D. (1987b), "Costly Monitoring, Loan Contracts and Equilibrium Credit Rationing," *Quarterly Journal of Economics* 102, 135-146.

- Policy paper (required):

  - Wachtel, Paul (2013), "Is Macro Prudential Regulation Possible?". (http://pages.stern.nyu.edu/~pwachtel/images/4MacroPrudentialRegMay2013.pdf).

**5 - Financial Intermediation and Business Cycles**

- The idea developed in this topic goes back to the work by Bernanke and Gertler (1989). The presentation here uses some of the tools introduced in the previous topic.

- References:

  - Bernanke, Ben, and Mark Gertler (1989), "Agency Cost, Net Worth, and Business Fluctuations," *American Economic Review* 79, pp. 14-31.

- Policy paper (required):

  - Chatterjee, Satyajit (2013), "Debt Overhang: Why Recovery from a Financial Crisis Can Be Slow," *Business Review,* Federal Reserve Bank of Philadelphia, issue 2nd quater, pages 3-11. (http://www.phil.frb.org/research-and-data/publications/business-review/ once at the link enter year 2013 - 2nd quarter).