University of Toronto Department of Economics Course Outline ECO425H1F Professor M. Alexopoulos malex@chass.utoronto.ca

Times and location: We will meet for class every Wednesday from 11-1 in BF214. The time slot Friday 11-12 (also in BF214) will be used for makeup classes, tutorials and extra office hours. Specific details on which Fridays will be utilized will be announced in class and on Blackboard.

TA for the course: Stephen Ayerst (Stephen.ayerst@mail.utoronto.ca)

Office Hours: For Professor Alexopoulos - By appointment

For Stephen - Fridays from 11-12 for days without tutorials and by appointment

Overview: This course builds on material covered in ECO208Y. Students will learn about the role business cycle fluctuations play in the macroeconomy and we will review a number of theories concerning the sources of business cycle fluctuations. As part of the course, we will discuss aspects of monetary policy, fiscal policy, theories of unemployment, effects of innovation on economic fluctuations, the Great Depression and the Financial Crisis.

Grading Scheme:

40% of the grade will be determined by a midterm test, held during class time on October 26. A makeup midterm will only be given in the case of illness or a death in the immediate family occurring within a few days prior to the midterm. Illnesses must be verified by a medical doctor using the University's verification of illness form. To receive consideration for a death in the family, a letter for the funeral home confirming the date of the service(s)/death, and your relationship to the deceased will be accepted as valid documentation.

15% of your grade will be based on an assignment that will be distributed during the term. Assignments will be *due at the beginning of class* the date they are due. There will be a late penalty of 10% per day (including holidays and weekends). The late penalty may be waived if the student is ill and provides appropriate medical documentation. If a student fails to submit an assignment during the course for any reason, he/she will receive a grade of zero for the assignment.

10% of the grade will be based on a short in class presentation (~15 min) on a paper assigned from the reading list. The presentation should summarize the main points in the paper and explain how the paper contributes to the literature. The grade will be based on your presentation skills and understanding of the material. **Copies of all presentation materials should be provided to me no later than THREE days in advance of the presentation.

35% of the grade will be determined by a literature review that will be based on topics I will assign to you during the fourth week of classes. An outline of the papers you will use as the

basis of your literature review should be handed in no later than November 1 for approval. The literature review will be due Friday Dec 2 and will be submitted online through Blackboard.

There is no final exam for this course.

Policy on Illness:

Only the University of Toronto's official "Verification of Student Illness of Injury" form signed by a medical doctor will be accepted as proof of illness for missed work/tests. On the form, the doctor must confirm that the student is too ill to complete the assignment by the due date or to write the test. In the event that this occurs for the assignment, the student is required to contact Prof. Alexopoulos notifying her of the illness on the date the assignment is due, and the student must hand in the medical form within one week. The student is expected to hand in the assignment by the date the doctor indicates as 'the anticipated end date' on the form. The assignment will be considered late after that date and the late penalties will apply unless a new medical form is provided with updated medical information that would enable a further extension on medical grounds. If the student is ill for his/her presentation, a new date will be assigned. If the student is ill for the midterm, a makeup midterm will be scheduled. However, there is no guarantee that the makeup midterm will be given and graded prior to the drop date. Therefore, it is in the student's best interest to write the regularly scheduled midterm if able.

Re-grading Policy: Students who wish to have a term test or assignment re-graded must submit a re-grade form *within two weeks of receiving the grade*. The re-grade form is available on the class website.

Web-Site: Announcements, lecture notes, suggested problems, and any other class-related material will be posted on Blackboard.

Academic integrity

The University of Toronto seeks to maintain the highest levels of Academic integrity to protect the value of your education and the degrees earned here at the University. As such, it is important for all students to familiarize themselves with the University's Code of Behaviour on Academic Matters. The following link outlines offences under the code: http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun011995.pdf

According to Section B, it is an offence for students to:

- (1) Receive unauthorized assistance on any assignment, test or examination.
- (2) Provide unauthorized assistance to any other student on tests, assignments or examinations.
- (3) Falsify or alter any documentation required by the University.
- (4) Use or possess any unauthorized aids in any test or exam
- (5) Continue writing on any test or exam papers when the time is up.
- (6) Submitting medical documentation for missed work, tests or examination when the student is not actually sick.
- (7) Plagiarize.

These are among the most common offences. However, it should be noted that there are other offences covered under the Code, and students are responsible for being familiar with all of them. The website of the Office of Student Academic Integrity has some tips on how to avoid academic misconduct at <u>http://www.artsci.utoronto.ca/osai/students/avoid-misconduct</u>.

Important dates:

October 26: Midterm given in class

Nov 7, 2016: Last day to drop courses with F section codes from academic record and GPA. After this deadline a mark is recorded for each course, whether course work is completed or not (a 0/zero is assigned for incomplete work), and calculated into the GPA.

November 30: last day of class. December 2: Literature review due

Preliminary List of Topics Covered

1. The Business Cycle Facts.

Cooley, Thomas and Edward Prescott. 1994. Economic Growth and Business Cycles in *Frontiers of Business Cycle Research*. Thomas Cooley Editor. Princeton University Press.

Prescott, E. 1986. Theory Ahead of Business Cycle Measurement. *Federal Reserve Bank of Minneapolis Quarterly Review*, Fall, 9-22

2. Real Business Cycle Theory.

Class notes Romer, D. 2012. Chapter 5

3. Basic Monetary Business cycle Models: Sticky Prices and Limited Participation

Christiano, Lawrence, Martin Eichenbaum and Charles Evans. (1997). ``Sticky Price and Limited Participation Models of Money: A Comparison'', *European Economic Review* 41, 1201-49.

4. Some Basic Theories of Unemployment

4.1. Indivisible Labour

4.2. Efficiency Wages

4.3. Search and Matching

Class notes Romer, D. 2012. Chapter 10 Hansen, Gary D. (1985). ``Indivisible Labor and the Business Cycle'', *Journal of Monetary Economics* 16, 309-27. 5. Are Technology shocks and innovation key sources of business cycle fluctuations?

Total Factor Productivity Shocks

Basu, Susanto, John Fernald and Miles Kimball. "Are Technology Improvements Contractionary?" Manuscript, University of Michigan, 2004 (also available from www.nber.org as a working paper).

Gali, Jordi. "Technology, Employment, and the Business Cycle: Do Technology Shocks Explain Aggregate Fluctuations?" American Economic Review 89 (March 1999), 249-71.

Christiano, Lawrence, Martin Eichenbaum and Robert Vigfussen. 2004. "What happens after a technology shock?" Manuscript, Northwestern University. (download from http://www.faculty.econ.northwestern.edu/faculty/eichenbaum/)

Shea, John , 1998. "What Do Technology Shocks Do? "NBER macroeconomics annual 1998. pp. 275-310

Alexopoulos, Michelle. 2011 "Read all about it!! What happens following a technology shock?" American Economic Review

Investment specific shocks

Greenwood, Jeremy & Hercowitz, Zvi & Krusell, Per, 2000. "The role of investment-specific technological change in the business cycle," European Economic Review, Elsevier, vol. 44(1), 91-115.

Jonas D. M. Fisher, 2006. "The Dynamic Effects of Neutral and Investment-Specific Technology Shocks," Journal of Political Economy vol. 114(3), 413-451.

6. Are Monetary Policy Shocks a key source of fluctuations?

Christiano, Lawrence J. & Eichenbaum, Martin & Evans, Charles L., 1999. "Monetary policy shocks: What have we learned and to what end?," Handbook of Macroeconomics, in: J. B. Taylor & M. Woodford (ed.), Handbook of Macroeconomics, edition 1, volume 1, chapter 2, pages 65-14

7. Exploring sources of the Great Depression and the Great Recession

Cole, H. & L. Ohanian, 1999. "<u>The Great Depression in the United States from a neoclassical</u> <u>perspective</u>," <u>Quarterly Review</u>, Federal Reserve Bank of Minneapolis, issue Win, pages 2-24

Romer, C., 1990. "The Great Crash and the Onset of the Great Depression" *The Quarterly Journal of Economics* 105 (3), 597-624

Alexopoulos, M and J. Cohen, 2009. "<u>Measuring our ignorance, one book at a time: New indicators</u> of technological change, <u>1909-1949</u>" Journal of Monetary Economics 56(4), 450-470 Bloom, N. 2008. The credit crunch may cause another great depression. VoxEU, 8 October 2008.

Bloom, N. 2009 will be the Nightmare on Main Street. VoxEU, 18 November 2008.

Alexopoulos, M. and J. Cohen 2008 "Uncertainty and the credit crisis" VoxEU, 23 December 2008

*****Most of the published papers on this list can be downloaded from Jstor and/or the other electronic sources available through the UofT library.