

## **ECON 402 Business Cycles**

**Fall 2009  
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### ***Office Hours***

Walk in: M/W 11am – 12pm and 2pm – 3pm; Friday 11am – 1pm; Email: M 3pm – 5pm; and by appointment.

**Course Web Page:** <http://facstaff.uww.edu/ahmady/courses/econ402/>

This is the web page for the course. Here you can find the course schedule, lecture notes, problem sets and more.

### **Prerequisites**

ECON 202 – Principles of Macroeconomics AND  
MATH 243 or MATH 250 or MATH 253

In this course, we will be using mathematics extensively. In particular, you should be able to algebraically manipulate equations, solve equations, and calculate slopes of functions. As such, you will find it beneficial to review concepts such as partial and total derivatives.

### **Required Resources**

1. Text: Abel, A., Bernanke, B. and Dean Croushore (2008), *Macroeconomics*, 6<sup>th</sup> edition, Addison-Wesley. ISBN: 0-3214-5140-6
2. The Course Homepage: <http://facstaff.uww.edu/ahmady/courses/econ402/>

Recommended:

- Text: Mankiw, N. Gregory (2007), *Macroeconomics*, 6<sup>th</sup> edition, Worth. ISBN: 0-7167-6213-7
- Text: Blanchard, Olivier (2006), *Macroeconomics*, 6<sup>th</sup> edition, Pearson/Prentice Hall. ISBN: 0-13-186026-7

### **Course Description Objectives and Assessment**

This course is intended to provide a thorough working knowledge of business cycle theories and their policy implications. Keynes provides the foundation for the static IS/LM model, along with the Phillips Curve. However, more recent models, such as Neoclassical and New Keynesian models, are dynamic in nature and based on micro foundations. We will use academic papers to study the design of fiscal and monetary policies that are intended to prevent or shorten recessions in the context of these and other models. Topics will include the plausibility of various models, both in theory and in practice; the absolute and relative effectiveness of various (monetary and fiscal) policies. Particular episodes in the macroeconomic history of the US will provide us case studies in which to study these topics.

### **Course Requirements and Grading**

This course will require you to write summaries of papers that are on the reading list as we study different topics; conduct a group presentation of a particular paper that you will be asked to read thoroughly and whose thesis you are required to communicate to the rest of

the class; participate in workshops designed to help you understand modern real business cycle theory, which will include problem sets. There will be a midterm and final exam. Finally, you will be required to write a paper summarizing current developments in the literature on business cycles.

I will divide students into groups of approximately 3 students to work together at the beginning of the semester. Please note that I would like to encourage students to work together since some of the concepts that will be presented in class are pretty challenging. Peer learning is an effective tool and having others to talk to will help facilitate learning these difficult concepts. Each group may turn in a single paper summary when reviewing a paper.

Grades at the end of the semester will be allocated using the following scheme:

**Group Work: 30%**

Paper Summaries:	3 x 5%=	15%
Workshops:		10%
Group Peer Evaluation		<u>5%</u>
		<u>30%</u>

**Individual Work: 70%**

Presentation (Individually Scored)		10%
Final paper		30%
Midterm		10%
Final exam		<u>20%</u>
		<u>70%</u>
Total:		<u>100%</u>

**Warnings:** Summaries of papers that we will review that are turned in late (i.e. after the due date) will not be accepted, or counted towards your overall course grade. Similarly, the deadline for the final version of the paper will be absolute. This schedule is not flexible at all, so it is your responsibility to make sure that you can turn assignments and papers in on time.

**A Note on Letter Grades:**

As a general guideline, grades will be assigned based on the raw scores from the grading scheme above as follows:

A:	>=85	D:	50-61
B:	74-84	F:	<50
C:	62-73		

**Please note that the scale above is only an approximation.** I will curve the raw scores obtained from the grading scheme above at the very end of the semester.

**Attendance Policy**

Enrollment in this course is taken as a commitment from you that you have made room in your life to fulfill the obligations of this course - coming to class, being there for exams when they are scheduled, etc. I will not record attendance, but you will find yourself at a significant disadvantage if you miss class. **It is the student's responsibility to obtain any materials or information missed due to absence.**

## Advice

The key piece of advice that I would say to you is to make sure you spend sufficient time trying to grasp the ideas that are being presented in class and in the papers you will read. These ideas are often complex and it takes time to fully grasp the issue at hand. You may find it useful as well to attend my office hours with any questions that you have. However, if you choose to use office hours, please come prepared with a list of questions, as that will probably allow us to use the time more effectively.

There is a lot of math in this course. If you get stuck or feel like you're falling behind, talk to your group members and do come use my office hours! Come and see me if you have any questions whatsoever, be it about the material, or some concept you haven't fully grasped yet. It will be easier for me to put you on the right track rather than have you struggle through something that you do not understand.

## Policy Statement

*The University of Wisconsin-Whitewater is dedicated to a safe, supportive and non-discriminatory learning environment. It is the responsibility of all undergraduate and graduate students to familiarize themselves with University policies regarding Special Accommodations, Misconduct, Religious Beliefs Accommodation, Discrimination and Absence for University Sponsored Events. (For details please refer to the Undergraduate and Graduate Timetables; the "Rights and Responsibilities" section of the Undergraduate Bulletin; the Academic Requirements and Policies and the Facilities and Services sections of the Graduate Bulletin; and the "Student Academic Disciplinary Procedures" [UWS Chapter 14]; and the "Student Nonacademic Disciplinary Procedures" [UWS Chapter 17].*

## UWW Student Honor Code

*As members of the University of Wisconsin – Whitewater College of Business & Economics community, we commit ourselves to act honestly, responsibly, and above all, with honor and integrity in all areas of campus life. We are accountable for all that we say and write. We are responsible for the academic integrity of our work. We pledge that we will not misrepresent our work nor give or receive unauthorized aid. We commit ourselves to behave in a manner that demonstrates concern for the personal dignity, rights and freedoms of all members of the community. We are respectful of college property and the property of others. We will not tolerate a lack of respect for these values.*

*This code originated at Wheaton College.*

## Course Outline and Reading List

This course outline is tentative and I reserve the right to amend the schedule as I see fit. These changes will be announced in class and posted on the course webpage. We will cover as many topics as time permits, which in turn will depend on the pace of the class.

Key: † - Required reading; \* - difficulty of paper: 0 stars to 3 stars.

- [†] Mankiw, N. Gregory, 1990, 'A Quick Refresher Course in Macroeconomics', *Journal of Economic Literature*, Dec 1990, 28:4, pp. 1645-1660

### 1. Introduction to Business Cycles

- Definition of Business Cycle, History of US Business Cycles:

- Abel, A. and B. Bernanke (henceforth AB): Chapter 8, pg. 282-290.
- Romer, Christina, 1999, “Changes in Business Cycles: Evidence and Explanations”, *Journal of Economic Perspectives*, 13:2, Spring 1999, pp. 23-44
- Basu, S. and A. Taylor, 1999, “Business Cycles in International Historical Perspective”, *Journal of Economic Perspectives*, 13:2, Spring 1999, pp. 45-68
- Zarnowitz, V. , 1999, “Theory and History Behind Business Cycles: Are the 1990’s the Onset of a Golden Age?”, *Journal of Economic Perspectives*, 13:2, Spring 1999, pp. 69-90

- Stylized Facts:

- AB: pg. 290-300.
- [†] Kydland, F. and Edward Prescott, 1990, ‘Business Cycles: Real Facts and a Monetary Myth,’ *Quarterly Review*, Federal Reserve Bank of Minneapolis, Spring, 3-18. Pages 9-17.
- [\*] Cecchetti, S., A. Flores-Lagunes and S. Krause, ‘Assessing the Sources of Changes in the Volatility of Real Growth’. In C. Kent and D. Norman (Eds.), *The Changing Nature of the Business Cycle*, October 2005, pp. 115-138
  - Focus on sections 1, 3-5.

## 2. The IS/LM Model and AS/AD

- Equilibrium in the Goods and Money Markets
- General Equilibrium
  - AB: Chapter 9, pg. 310 – 336 and Appendix 9.A
- The Supply Side and General Equilibrium
  - AB: Chapter 9, pg. 336 – 343 and Appendices; Chapter 10.3, pg. 380 – 390; Chapter 11.2, pg. 406 - 412
  - [†,\*\*] Jo Anna Gray, 1976, “Wage Indexation: A Macroeconomic Approach”, *Journal of Monetary Economics*, 2:2, pp. 221-235
  - [\*\*\*] Blanchard, Olivier J. and Nobuhiro Kiyotaki (1983), “Monopolistic Competition and the Effects of Aggregate Demand”, *American Economic Review*, 77, pp. 647 – 666.
  - [\*\*\*] Julio Rotemberg, 1982, “Monopolistic Price Adjustment and Aggregate Output”, *Review of Economic Studies*, 49:4, pp. 517 - 531

## 3. Economic Policy

- The Phillips Curve
- Fiscal and Monetary Policy in IS/LM and AS/AD models.
- Economic Policy
  - AB: Chapter 11 including appendices; skip section 11.1
  - [†] Bernanke, B. and F. Mishkin, 1997, “Inflation Targeting: A New Framework for Monetary Policy”, *Journal of Economic Perspectives*, 11:2, pp. 97 – 116.
  - [†] Romer, Christina D. and David H. Romer, 1989, “Does Monetary Policy Matter? A New Test in the Spirit of Friedman and Schwartz”, in Olivier Blanchard and Stanley Fischer (eds.), *NBER Macroeconomics Annual 1989*, Cambridge: MIT Press. (Long Paper)
  - [†,\*\*] Clarida, R., J. Gali and Mark Gertler, 2000, “Monetary Policy Rules and Macroeconomic Stability: Evidence and Some Theory”, *Quarterly Journal of Economics*, February 2000, pp. 147 – 180.
  - [\*\*\*] Robert E. Lucas, J.r., 1976, “Econometric Policy Evaluation: A Critique”. In Karl Brunner and Allan Meltzer (Eds.), *The Phillips Curve and Labor Markets*, Carnegie-Rochester Conference on Public Policy, 1, Amsterdam: North Holland, pp. 19 – 46.

- [\*\*] Kydland, F. and E. Prescott, 1977, “Rules Rather Than Discretion: The Inconsistency of Optimal Plans”, *Journal of Political Economy*, 85:3, June, pp. 473 – 492
- [\*\*] Barro, R. and D. Gordon, 1983, “A Positive Theory of Monetary Policy in a Natural Rate Model”, *Journal of Political Economy*, 91:4, August, pp. 589 – 610.
- Mishkin, F., 1995, “Symposium on the Monetary Transmission Mechanism”, *Journal of Economic Perspectives*, 9:4, pp. 3-10
- Bernanke, B. and M. Gertler, 1995, “Inside the Black Box: The Credit Channel of Monetary Policy Transmission”, *Journal of Economic Perspectives*, 9:4, pp. 27-48
- Meltzer, A., 1995, “Monetary, Credit and (Other) Transmission Processes: A Monetarist Perspective”, *Journal of Economic Perspectives*, 9:4, pp. 49-72

#### 4. Real Business Cycle Models

##### • The RBC Model

- AB: Chapter 10 including appendices
- Mankiw’s textbook, “Macroeconomics”, Chapter 19.1
- [\*,†] Stadler, G., 1994, ‘Real Business Cycles,’ *Journal of Economic Literature* XXXII, 1750-1783.
- [\*,†] Plosser, C., 1989, ‘Understanding Real Business Cycles,’ *Journal of Economic Perspectives* 3:3, 51-77. Focus on pages 51-66. Students comfortable with calculus should also read the appendix.
- [\*,†] Mankiw, N.G., 1989, ‘Real Business Cycles: A New Keynesian Perspective,’ *Journal of Economic Perspectives* 3:3, 79-90.
- [\*\*,†] King, R., C. Plosser and S. Rebelo, 1988, “Production, Growth and Business Cycles I: The Basic Neoclassical Model”, *Journal of Monetary Economics*, 21, 195- 232

#### 5. New Keynesian Models and Modern Developments in Monetary Policy

##### • Wage and Price Rigidities, Real and Nominal Rigidities

- Gordon, R.J., 1990, ‘What is New-Keynesian Economics?’ *Journal of Economic Literature* 28:3, 1115-1171.
- [†] Romer, D., 1993, ‘The New Keynesian Synthesis,’ *Journal of Economic Perspectives* 7:1, 5-22.
- King, R. G., (1993), “Will the New Keynesian Macroeconomics Resurrect the IS-LM Model?”, *Journal of Economic Perspectives*, 7:1, pp. 67-82
- [\*\*] Ahmad, Y., 2005, “Money Market Rates and Implied CCAPM Rates: Some International Evidence”, *Quarterly Review of Economics and Finance*, 45, pp. 699 - 729
- [\*\*,†] Clarida, R., J. Gali and M. Gertler, 1999, “The Science of Monetary Policy: A New Keynesian Perspective”, *Journal of Economic Literature*, 37, pp. 1661 - 1707
- [\*\*\*] Goodfriend, M. and R. King, 1997, “The New Neoclassical Synthesis and the Role of Monetary Policy”. In B. S. Bernanke and J. J. Rotemberg (Eds.), *NBER Macroeconomics Annual*, 1997, 2:1, pp. 231 – 283. Cambridge, MA: MIT Press
- [\*\*\*] Rotemberg, J. and M. Woodford, 1997, “An Optimization Based Econometric Framework for the Evaluation of Monetary Policy”. In B. S. Bernanke and J. J. Rotemberg (Eds.), *NBER Macroeconomics Annual*, 1997, 2:1, pp. 297 – 346. Cambridge, MA: MIT Press
- [\*\*\*] Erceg, C., D. Henderson and A. Levin, 2000, “Optimal Monetary Policy with Staggered Wage and Price Contracts”, *Journal of Monetary Economics*, 46, pp. 281 - 313