Department of Economics
Fall AY09

Business Cycles

(FE 436)

Brendan M. Cunningham
Office: Nimitz 51B
Office hours: M 11 - 12, F 13-14
all others by appointment
Phone: 410.293.6894
E-mail: bcunning@usna.edu
Web: http://www.usna.edu/Users/econ/bcunning

Required Texts

Stephen D. Williamson. *Macroeconomics*, third edition (Pearson Addison Wesley, 2007).

Overview

This course is designed as an advanced treatment of the empirical and theoretical issues surrounding business cycles. In this course, we will first discuss the techniques for quantifying the nature of business cycles and the associated regularities observed in business cycles. We will then investigate models of inventory cycles, labor and credit markets, technology shocks, and the international transmission of cycles. We will also consider the role of fiscal policy and monetary policy in economic stabilization along with the international transmission of cycles. Throughout the course, we will employ numerical and simulation-based methods in order to assess the predictions of various business cycle models.

Formal Requirements

Problem Sets

The problem sets are a critical component of this course. They enable you to practice the skills and techniques we will be employing throughout the course (both in class and on exams). You **may** work together on problem sets but you must hand in your own copy of your solutions. However, I may assign problems which you should complete independently. I will make note of this requirement in the problem set.

Problem set solutions will be posted to my web page. You should compare your own answers to the questions against these solutions in order to develop further understanding of the course material.

Problem sets are due on the dates listed below. To grade problem sets, I will randomly choose one of the problems assigned and the same problem will be graded for everyone in the class. I will disregard the lowest grade you receive on a problem set when calculating your final grade.

Problem sets will be distributed via email and my web page.

Class Participation

During our time together in class, I highly encourage questions regarding the course material. In addition, I will often pose questions regarding the course material to the class at large. Please attempt to answer these questions to the best of you ability since simply attempting to answer will benefit you in the form of class participation points.

Examinations

There are two examinations given in the course. The dates of the examinations are listed below. Examinations will primarily consist of multi-part, long-answer questions and will heavily draw upon the theories developed in the textbook and in class. I do not employ multiple choice questions on the exams.

Summary of formal requirements and grading

Assignment	Weight
Problem Sets	25%
Class Participation	5%
Mid-term	30%
Final Examination	40%

Late and Missing Assignments

Late assignments must be handed in within a week of the due date. You will receive reduced credit for a late assignment depending upon the reason for its tardiness.

Studying Guidelines

The following are a minimum set of guidelines you should follow in order to learn as much as possible in this course. The order of these suggestions indicates the relative importance of these suggestions:

1. **Complete all assigned readings before we cover the material in class**. We will cover a diverse set of topics in this course at a fairly steady pace. By reviewing the course material in advance, our in-class discussions will more significantly supplement your understanding of the course material. Periodically, we will conduct in-class exercises in order to assess your understanding of the assigned readings.
2. **Take notes in class**. While it may seem like concepts are coming across clearly in class, it can often be difficult to remember the details of our discussions without an accurate set of notes. Should you miss a class (either physically or mentally), be sure to obtain high-quality notes from a classmate.
3. **Work on problem sets on your own first**. You may collaborate on problem sets, but you may not collaborate on problems during exams. Therefore, it is in your best interest to grow accustomed to solving problems on your own. Moreover, problem sets are one of the best ways to prepare for an exam.
4. **Come to office hours and review sessions with questions**. If we are reviewing material together (in a group or individually) I can only provide you with tailored assistance if you have looked at the information in advance and generated a notion of where the material is most challenging. If I simply repeat class material verbatim during these sessions, our efforts will be fairly unproductive.

Policy on Examinations and Papers

Calculators may only be used on examinations in order to add, subtract, multiply and divide. Calculators may not be used in text mode during the course of an examination. If a calculator is employed outside of these boundaries, I will need to notify the Brigade Honor Staff. If you have any questions regarding use of calculators on exams, please contact me.

Schedule

Week 1: **Introduction to Business Cycles** *8/20-8/22*

History of the business cycles, current conditions.

Readings: Williamson, Chapter 2

Week 2: **Measurement of Business Cycles I** *8/25-8/29*

Definitions of cycles, trend / cycle decomposition.

Readings: Williamson, Chapter 3, pp. 67-83

Week 3: **Measurement of Business Cycles II** *9/2-9/5*

Potential GDP, output gaps, dynamic correlations.

Readings: Williamson, Chapter 3, pp. 83-93

Problem Set 1: due at the beginning of class, 9/4

Week 4: **The Keynesian Model I: Labor Markets and IS-LM** *9/8-9/12*

Sticky wages, aggregate supply, monetary non-neutrality.

Readings: Williamson, Chapter 12 pp. 441-458

Week 5: **The Keynesian Model II: Implications** *9/15-9/19*

Government policy, criticisms.

Readings: Williamson, Chapter 12, pp. 458-480

Week 6: **Open Economy IS-LM** *9/22-9/26*

Exchange rates, international shocks

Readings: Williamson, Chapter 14, pp. 521-532

Problem Set 2: 9/23

Week 7: **Microeconomic Foundations of Consumer Choice** *9/29-10/3*

Preferences and constraints, labor markets

Readings: Williamson, Chapter 4, pp. 99-109

Week 8: **Shocks and Labor Markets** *10/6-10/10*

Labor-leisure tradeoffs, stylized facts.

Readings: Williamson, Chapter 4, pp. 109-121

Mid-Term Examination: 10/7

Week 9: **Simulations of Consumer Behavior** *10/14-10/17*

Specifications, Optimization

Week 10: **Microeconomic Foundations of the Firm** *10/20-10/24*

Objectives, productivity, labor and capital

Readings: Williamson, Chapter 4, pp. 121-128

Week 11: **Shocks and Factor Demands** *10/27-10/31*

Profit maximization and factor prices

Readings: Williamson, Chapter 4, pp. 128-133

Problem Set 3: 10/28

Week 12: **Real Business Cycles and General Equilibrium** *11/3-11/7*

Competitive equilibria, government expenditures, optimality

Readings: Williamson, Chapter 5, pp. 139-152

Week 13: **Shocks and RBC Predictions** *11/10-11/14*

Inefficiencies, government policy, stylized facts

Readings: Williamson, Chapter 5, pp. 152-176

Week 14: **Classical Views of Money and Cycles** *11/17-11/21*

Roles of money, money demand, quantity theory and neutrality

Readings: Williamson, Chapter 10

Week 15: **Market-Clearing Cycles** *11/24-11/26*

Productivity shocks and money, Friedman-Lucas

Readings: Williamson, Chapter 11, pp. 403-423
Problem Set 4: 11/25

Week 16: **Neo-Keynesian Models I** *12/1-12/5*

Coordination failures, returns to scale

Readings: Williamson, Chapter 11, pp. 423-431

Week 17: **Neo-Keynesian Models II** *12/8-12/9*

Coordination failures, returns to scale

Readings: Williamson, Chapter 11, pp. 431-436