

SYLLABUS
Macroeconomics
ECON 256 sections 01, 02
Prof. Miles Cahill
Spring 2008

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Office Hours: Mon. 1-3, Tues. 3:30-4:30, Wed. 9-11, Thurs. 3:30-4:30, and by appointment/drop-in

Course meeting time: Tuesdays and Thursdays, 12:30-1:45 (01) or 2:00-3:15 (02), Stein 319

Important web resources

Blackboard/Course Management System:

address: <http://cms.holycross.edu>, *password:* your Novell logon id and password

Reserve articles (ERes):

address: <http://eres.holycross.edu/coursepage.asp?cid=330>, *password:* macro

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OVERVIEW

What is this course about?

Much of this course is an extension of what you covered in your *Principles of Macroeconomics* class. However, this class will delve deeper into the issues you studied in *Principles*, and analyze problems in new ways, often using new methods. The four basic parts of the class can be listed as follows:

1. Measurement issues. How are GDP, inflation, unemployment and other variables measured? Are they measured correctly or incorrectly? In most cases, we will show that official statistics are systematically wrong.
2. The economy in the long run. What determines the long run growth rate of the economy? How are important economic variables determined in the long run?
3. The economy in the short run. What determines economic fluctuations? How does the economy behave when subjected to outside shocks? How are economic variables determined in the short run?
4. The transition between the short run and long run. Why does the economy always return to the long run equilibrium? How long does it take to return to the long run? What are the optimal policies after the economy has been shocked out of the long run equilibrium?

We will use a variety of models (often mathematical in nature) to analyze the economy in parts 2, 3, and 4. We will use Microsoft Excel to analyze our models from time to time. We will also use data to evaluate our models at every stage. Sometimes, you will be required to use the Internet to find appropriate data, and Microsoft Excel to manipulate the data. A full list of topics can be found on the last two pages of this syllabus.

Prerequisites

- ECON 111 *Principles of Macroeconomics*
You are expected to have a basic understanding of the standard Keynesian AS/AD model, the concepts of “long run” and “short run,” and fiscal and monetary policy. In addition, you should understand the basics of money creation, inflation and unemployment. These concepts will be reviewed in class.
- ECON 112 *Principles of Microeconomics*
You will be expected to be able to use supply and demand models fluently, and understand the basic theories of perfect and imperfect competition. Most of these concepts will be reviewed in class.
- High School Mathematics
Aside from arithmetic and percent calculations, you will be expected to be able to understand and use equations (and systems of equations); solve equations and systems of equations; and construct, understand and interpret graphs.
- MATH 125-126/131-132 *Calculus sequence (or other full year Calculus sequence)*
You will be expected to be able to differentiate simple functions, understand the concept of the derivative and differential, and be able to do simple maximization problems. See the Math Tools for Economists handout and Homework 1.

COURSE MATERIALS**Required materials**

You are required to purchase the following text:
Dornbusch, Rudiger, Fischer, Stanley and Startz, Richard (2008), *Macroeconomics*, 10th edition, New York: McGraw Hill-Irwin.

Recommended materials

Available for purchase at the bookstore is:

Basistha, Arabinda, *Study Guide for Macroeconomics*, 10th edition, 2008

- This study guide summarizes the main objectives of each chapter as well as key terms and concepts. It also provides several practice problems with answers. But, beware: the practice questions are significantly easier than many of the homework and exam problems. However, these problems may be a good place to start if you are having difficulties.

Available for purchase online is:

Pfitzer, C. Barry, *Mathematical Fundamentals of Microeconomics*, Atomic Dog publishing. Purchase directly from www.atomicdog.com; see instructions on Blackboard under course materials.

- This online text is a good resource to help you through the mathematics you will need for this course. If your math skills are rusty, you may want to purchase this text

Course documents – Blackboard/Course Management System (CMS)

I have set up a Blackboard page for this course, which can be accessed through <http://cms.holycross.edu/>. Here I will post announcements, information, homework answers, etc. From this site you can also make use of the discussion boards. Both sections will be merged to the same Blackboard site after add/drop. Let me know if you do not have access to this course on Blackboard.

ERes Reserve readings

You will be required to read and understand several outside readings. Reserve readings are available through ERes (<http://eres.holycross.edu/coursepage.asp?cid=330>), password macro. The list of readings can be found on page 4 of this syllabus, and their associated topics on the course outline. You can access ERes from Blackboard without a password.

Microsoft Excel

You will be required to use Microsoft Excel to display and manipulate data, graph data, model concepts, and solve models. I will make myself available to help you with Excel when the time comes. Excel is available in the computer labs. Answers to Excel assignments will be put on the course Blackboard page.

ASSIGNMENTS**Exams**

There will be two in-class midterms and one cumulative final exam during finals week. The exams will be a combination of problems, short answer and essay questions. Even if you study hard, you can expect to need the entire class period to complete the midterms, while you will not be time constrained on the final. Be warned: many questions will require you to apply your knowledge in a way that you probably will have not previously considered. This is to test your ability to use the material rather than memorize the material. The midterm and final exams are scheduled as follows: (300 points total)

Midterm 1: Thursday February 21, in class, 75 points

Midterm 2: Thursday, April 3, in class, 75 points

Final Exam: 01: Tuesday, May 6, 2:30 p.m.; 02: Monday, May 5, 8:30 a.m., 90 points

Quizzes

There will be six short (10-15 min.) quizzes during the semester, date and content announced one class ahead of time, 10 points each.

Homework problem sets

Throughout the semester, you will be assigned individual homework problems and problem sets. Although homework will not be collected or graded, you are strongly encouraged to complete them on time. Not only will exams and quizzes have questions based on individual homework problems, but they will give you good practice applying economic theory and this will be useful for all questions on exams. Answers will be posted on Blackboard prior to relevant quizzes and exams. Individual problems will be discussed in class from time to time, when pre-announced in class.

Attendance

Attendance at every class is required. Be on time and prepared for class. 3 (1%) bonus points will be added to the grades of all students who do not miss quizzes or classes without an acceptable excuse. If at all possible, let me know before you miss a class; if not, as soon as possible afterwards. A note from your class dean may be required for an absence to be excused; I will certainly require a note for a missed quiz or exam. If you do miss a quiz or test for an acceptable reason, your other tests and/or quizzes will be re-weighted to compensate. Make-ups will only be given in extreme cases.

Grade distribution

Expect the mean GPA for an average class to be approximately 2.8 (between a B and a B-), and the median grade to be a B. Final grades will be based on the total of final points; the grade distribution will be determined then. However, you will be informed of your class standing throughout the semester. In particular, you will be given a letter grade for each exam, and will be told after each exam what your letter grade is for all your course work up to, and including the exam. For example, after the second exam, you will be told your letter (and number) grade based on the two midterms and the first four quizzes. As an insurance policy for you, you are guaranteed that the minimum distribution of grades corresponds to the “straight scale.”

OTHER NOTES

Office hours

You are very strongly encouraged to meet with me during my office hours if you need any assistance understanding material covered in class or the readings; if you would like to go over exams, quizzes or other questions; have any questions about the economics major or economics courses; or if you would like to ask about and/or discuss any economic issue. Stop by!

Academic dishonesty

Cheating of any form will be prosecuted to the fullest extent possible. Academic dishonesty includes using or providing materials prohibited on an exam or assignment, or turning in work that is not your own. Aside from a grade penalty, a first offense will result in probation, an offense on probation will result in suspension from the College, and a third violation will result in expulsion. Consult the College *Catalogue* for academic dishonesty policies, including the right to appeal.

Tips for success in this class

There are a few simple things you can do to help you do as well as possible in this class:

- Do not miss any classes, and spend a few minutes before class reading the previous class notes.
- Read the assigned material in the text book and reserve readings before class.
- Complete all suggested homework assignments soon after relevant materials are presented, working as far into the problems as possible before consulting the answers.
- Take an active approach to studying: do not just read over your notes and make sure the material makes sense to you – make sure you can use the material. Constantly ask yourself questions as you go over your notes, like: How does this material relate to previous material? How can this material be applied to real world questions?
- Come to office hours if you are having difficulty with material, starting early in the semester.

COURSE OUTLINE AND READINGS

On the next two pages, you are provided with a list of topics covered in this course, the expected number of classes that will be spent on each topic, the textbook chapter readings for each topic, and the reserve reading for each topic (indicated by {#}). If a significant amount of material is not covered in the text, an asterisk * is given.

The readings are available on ERes (<http://eres.holycross.edu/coursepage.asp?cid=330>), password macro. The number codes refer to the topics on the course outline. On ERes, the articles are named as they appear below (with no number designation). The documents are Adobe Acrobat (*.pdf) files of articles. If you do not have the Acrobat Reader, you can download it for free at <http://www.adobe.com>. All campus labs have the Acrobat Reader installed. For your convenience, the URL of each article is provided in the citation where available. You may use these URLs to access the articles as well; however beware sometimes URLs change.

- {1} Lansing, Kevin J. (2003), "Growth in the Post-Bubble Economy," *FRBSF Economic Letter*, No. 2003-17, June 20. <http://www.frbsf.org/publications/economics/letter/2003/el2003-17.pdf>
- {2} Wirtz, Ronald (2002), "Exchange Roller Coasters," *The Region* (Fed-Minneapolis), December. <http://www.minneapolisfed.org/pubs/region/02-12/exchange.cfm>
- {3} Fernald, John, Thippavong, and Trehan, Bharat (2007) "Will Fast Productivity Growth Persist?" *FRBSF Economic Letter*, 2007-9; April 9. <http://www.frbsf.org/publications/economics/letter/2007/el2007-09.pdf>
- {4} Jones, Charles I. (2002), "Using Chain-Weighted NIPA Data," *FRBSF Economic Letter*, August 2. <http://www.frbsf.org/publications/economics/letter/2002/el2002-22.pdf>
- {5} Valderrama, Diego (2007), "The U.S. Productivity Acceleration and the Current Account Deficit," *FRBSF Economic Letter*, 2007-8; March 30. <http://frbsf.org/publications/economics/letter/2007/el2007-08.pdf>
- {6} Motley, Brian (1997), "Bias in the CPI: 'Roughly Right or Precisely Wrong'", *FRBSF Economic Letter*, May 23. <http://www.frbsf.org/econsrch/wklyltr/el97-16.html>
- {7} Wu, Tao (2003), "Improving the Way We Measure Consumer Prices", *FRBSF Economic Letter*, August 22. <http://www.frbsf.org/publications/economics/letter/2003/el2003-24.html>
- {8} Garfinkel, Michelle R. (1989), "What is an 'Acceptable' Rate of Inflation? -- A Review of the Issues", *Review* (Fed-St. Louis), 71 (4, July/August), pp. 3-15. http://research.stlouisfed.org/publications/review/89/07/Inflation_Jul_Aug1989.pdf
- {9} Barrow, Lisa (2004), "Is the Official Unemployment rate Misleading?" *Economic Perspectives* (Fed-Chicago), 2nd quarter, 21-35. http://www.chicagofed.org/publications/economicperspectives/ep_2_Qtr_2004_Part_2.pdf
- {10} Saving, Jason L. and Alan D. Viard (2005), "Social Security and Medicare: No Free Lunch," *Southwest Economy*, January/February, pp. 1, 8-12. <http://www.dallasfed.org/research/swe/2005/swe0501b.html>
- {11} Diamond, Jared (1999), "Chapter 13: Necessity's Mother," *Guns, Germs and Steel: The Fates of Human Societies*, revised edition, New York: W. W. Norton and Co., 239-64.
- {12} Marquis, Milt (2002), "What's Behind the Low U.S. Personal Saving Rate?" *FRBSF Economic Letter*, March 29. <http://www.frbsf.org/publications/economics/letter/2002/el2002-09.pdf>
- {13} Trehan, Bharat (2007) "Changing Productivity Trends" *FRBSF Economic Letter*, 2007-25; August 31. <http://www.frbsf.org/publications/economics/letter/2007/el2007-25.pdf>
- {14} McCandless, George T. and Weber, Warren (1995), "Some Monetary Facts," *Quarterly Review* (Fed-Minneapolis), Summer. pp. 2-11. <http://www.minneapolisfed.org/research/qr/qr1931.pdf>
- {15} Santomero, Anthony M. (2004), "Great Expectations: The Role of Beliefs in Economics and Monetary Policy," *Business Review* (Fed-Philadelphia), 2nd quarter, pp. 1-6. <http://www.phil.frb.org/files/br/br204as.pdf>
- {16} Federal Reserve Bank of Chicago (2000), "The Fed: Our Central Bank," *Federal Reserve Bank of Chicago*. <http://www.chicagofed.org/publications/fedcentralbank/fedcentralbank.pdf>
- {17} Federal Reserve Bank of San Francisco (2004), "U. S. Monetary Policy: An Introduction: Parts 1-4," *FRBSF Economic Letter*, Jan. 16, 23, 30, Feb. 6. <http://www.frbsf.org/publications/economics/letter/2004/>
- {18} Sill, Keith (1999), "Forecasts, Indicators, and Monetary Policy," *Business Review* (Fed-Philadelphia), May/June, pp. 3-14. <http://www.phil.frb.org/files/br/brmj99ks.pdf>

TOPIC	DFS Chapter	RESERVE
UNIT 1: Introduction (2½ classes)		
Overview of course and review of principles	1	
Review of macroeconomic principles	1, 5	
The aggregate demand model	"	
Recent economic history and the state of U. S. economy today	1, *	{1}
The international currency market (exchange rates)	12-1, 12-2	{2}
Nominal exchange rate meaning, use and determination	12-1	
Real exchange rate meaning and determination	12-2	
UNIT 2: Measuring economic variables (5½ classes)		
Balance of Payments accounting	12-1(281-3)	
National Income and Product Accounts	2	
GDP and national income accounting, critiques	2-1 - 2-4	{3}
Chain-weight measures of real GDP	*	{4}
National Income identities: saving and investment	2-3	{5}
Inflation	2-5, *	
Real and nominal interest rates	2-7, p. 350	
Traditional price index measurement and criticisms	2-5	{6}, {7}
Costs of inflation	7-2, 7-6 - 7-8	{8}
Labor market statistics	2-6, 7-1, 7-3 - 7-5, *	
Unemployment	2-6, 7-1, 7-3 - 7-5	
Types, measurement	7-3, 7-4, 7-1	
Natural rate of unemployment theory, Okun's Law	7-1, 7-4, 7-5	{9}
Productivity and compensation measures	*	
Government deficit, surplus and debt statistics	19-6, 19-7, *	{10}
Measures, costs and benefits	"	
UNIT 3: The long run (growth) (4 classes)		
Assumptions of the long run model and introduction	3 (intro), 3-2	
The production function	2-1, *	
The long run labor and capital markets	*	
Determinants of growth and the Solow growth accounting	3-1, 3-2, 3 apdx	{11}
The Solow/neoclassical long run balanced growth model	3-3, *	{12}
Endogenous growth theory	4-1	
The slowdown (and resurgence?) in growth, growth policy	4-2, *	{3}, {13}
Interest rate determination in the long run	*	
Price level determination in the long run	18-3, *	
{14}		
The money market, long run monetary policy	"	
UNIT 4: The short run (fluctuations) (4 classes)		
Assumptions of the short-run model	5	
Short-run macroeconomic model: building the AD curve	5, 9, 10, 11	
Keynesian cross/multiplier model	9-1 - 9-4	
The IS-LM model	10, 11	
The effect of interest rates in the real sector (IS curve)	10-1, 10-5	
The effect of output on the financial sector (LM curve)	10-2, 10-5	
Introduction to money market	"	
Equilibrium: income and interest rate determination	10-3, 10-5	
Policy in the IS-LM model	11	
The aggregate demand curve: effect of price level on output	10-4	

TOPIC	DFS Chapter	RESERVE
<u>UNIT 5: The medium run and the price adjustment process</u> (5 classes)		
Assumptions of the medium run model	6	
The Phillips Curve, augmented with expectations	6-2, 6-3	
Inflation expectations, price adjustment model	6-3, 6-5, 6-6, 21-6	
Phillips curve and the AS curve	6-6	
Expectations formations: Rational vs. Adaptive	6-4	{15}
Price adjustment and aggregate demand	6	
Price adjustment and shocks to aggregate demand	6-1	
PA after random shocks	"	
Optimal policy responses, targets	8	
Long run effects of monetary and fiscal policy	6-1	
Price adjustment and shocks to the price level	6-6	
Optimal policy responses, targets	8, 17	
Long run inflation and policies of disinflation:	19-3,*	
Problems with policy, rules	8-2 - 8-4, 17	
Lucas supply model (imperfect information aggregate supply)	21-3	
Summary of price and wage adjustments over business cycle	6-3, 21-1, *	
Empirical analysis of model	6-3, *	
Overview of "new macro"	21-1	
<u>UNIT 6: More detailed macroeconomic models</u> (4 classes)		
Consumption	13	
Forward-looking theories	13	
Life Cycle Hypothesis/Permanent Income Hypothesis	13-1	
Uncertainty, real interest rates	13-2, 13-3	
Investment	14	
Optimal plant, equipment, housing, and inventories	14-1, 14-2	
Rental cost, Investment functions, lags, policy	14-1	
Money	15, 16	
Overview of money and money measurement	15-1, 15-2	
Money demand	15-3 - 15-5	
Motives, theory, velocity and empirical studies	15-3, 15-4, 15 apdx, 15-5	
Overview of the Federal Reserve	*	{16}, {17}
Money supply	16	
Monetary base multiplier and money supply equation	16-1	
Monetary policy details	16-2 - 16-4, 17-4	
The LM curve and monetary policy	16-5	
Monetary policy targets	16-5 - 16-7	
Optimal policy responses to shocks	8, 17	
Shortcomings of policy (reviewed)	8, 17	{18}
Summary of policy issues	17	
Lags and uncertainty	17-1, 17-3	
Importance of expectations	8-3, 17-2	
Policy targets and policy instruments	17-5 - 17-6	
Dynamic policy	8-4, 17-5	
Rules vs. discretion	17	