

**Syllabus**  
ECON 312 Monetary Theory  
Prof. Miles Cahill  
Fall 2003

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**Office Hours:** Mondays: 1:00-3:30, Wednesdays: 9:30-11:00, Thursdays 3:30-4:30  
And by appointment and drop-in

**Course meeting time:** Tuesdays and Thursdays, 01: 12:30-1:45, 02: 2:00-3:15, Stein 304

### Important web resources

Reserve articles (ERes):

*address:* <http://eres.holycross.edu/coursepage.asp?cid=213>

*password:* greenspan

Blackboard/Course Management System:

*address:* <http://cms.holycross.edu>

*password:* your Novell logon id and password

Course web page:

*address:* <http://www.holycross.edu/departments/economics/mcahill/econ312.html>

### Overview of course

The title of this course is only somewhat descriptive. While this course uses economic theory to examine monetary issues, it also uses theory to understand financial markets as a whole, and examines the structure of the financial markets and its participants. The central purpose of this course is to build a model of the financial sector and use it to understand the workings of the financial system. We will use this theory to make predictions of the effects of events on the financial system and economy as a whole. A particular emphasis will be placed on understanding the workings of the Federal Reserve System and monetary policy. Overall, this course will seek to answer the following questions: What is money? How is money measured? How are important interest rates determined? How are stock and bond prices determined? What affect does money and the financial system have on the economy? What effect does the Federal Reserve have on the economy?

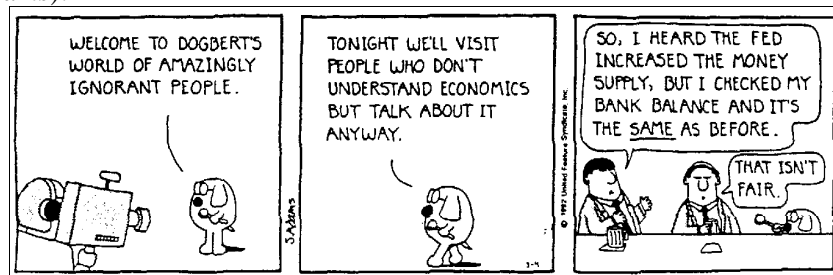
### Why Study Monetary Theory?

Let's see what important people have said about monetary theory:

*George McLean, Member of Congress, quoted in the 1910s (right before the Great Depression which was caused in large part by bank failures):* "There is not one man in ten thousand who cares anything about [the banking system]...There is not one man in ten thousand who knows anything about the principles or details of banking, and his ignorance is as natural and excusable as his ignorance of the Chinese language."

*Woody Allen:* "Economics is the theory of money and why it is good."

*Dilbert (Scott Adams):*



## **COURSE MATERIALS**

### **Prerequisites**

This is an advanced economics course, suitable for 3<sup>rd</sup> and 4<sup>th</sup> year students. The prerequisites include ECON 255 and 256, as well as the prerequisites for ECON 255 and 256 (including the Calculus requirement).

### **Required Texts**

Roger LeRoy Miller and David VanHoose (“M&V”), *Money, Banking, and Financial Markets*, 2<sup>nd</sup> edition Cincinnati, OH: South-Western College Publishing, 2004.

### **Suggested Supplements**

*The Wall Street Journal*: You are strongly encouraged to subscribe to the *WSJ*. If you are planning on any type of financial career, it is required daily reading.

*The New York Times*: The *NYT* has an excellent business and financial section, and is free on the web (<http://www.nytimes.com>).

### **Additional Readings - ERes**

There are several reserve readings listed on the course outline below. All reserve readings will be available through this class' ERes page (<http://eres.holycross.edu/coursepage.asp?cid=213>). During the semester other short readings will be distributed in class.

### **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, etc. From this site you can also make use of the discussion boards. Let me know if you do not have access to this course on Blackboard

### **The ECON 312 Home Page on the Internet**

I have also set up a home page for this class on the College's web site. The address for the class web page is: <http://www.holycross.edu/departments/economics/mcahill/econ312.html>. This page is used to post general information about the class. Assignments and readings will be posed on Blackboard and ERes.

### **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
- would like to go over exams, quizzes or other questions
- would like to discuss your paper topic or sources for your paper
- have any questions about the economics major or economics courses
- would like to ask about and/or discuss any economic issue

The most unfortunate mistake many students make is not utilizing office hours, especially early in the semester.

## GRADING

### 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 75 minute period to complete the midterms, while you will not need the entire 3 hour period to complete the final. Be warned: many questions will require you to apply your knowledge in a way that you previously have not considered. Dates for exams are given below.

### Quizzes

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

### Homework assignments

Throughout the semester, you will be assigned individual problems and problem sets in homework assignments. Although homework will not be collected or graded, you are strongly encouraged to complete them on time. They will be of great assistance in mastering the material, and preparing for exams and quizzes. Answers will be posed on Blackboard (<http://cms.holycross.edu>).

### Paper

You will be required to submit a research paper of 10-15 pages on one of the general topics given on the paper handout. Write your paper on a more specific sub-topic under any of the general topics; if the topic was covered in class, your paper must be much more detailed than class discussion. If you have your own topic in mind, it is possible I will permit you to use it – make sure to clear it with me ahead of time, before you hand in your overview. I also encourage you to discuss your paper with me during the various stages of writing it. The deadline for choosing a topic is given below. Aside from giving me your topic, on this date you must also hand in a short (approx. 2 pg.) overview of the plan for your paper, and a preliminary list of references (at least three). On a date given below, you may hand in your paper for an initial grade and comments. You may then revise it and resubmit your paper by the final deadline, at which point your paper will be re-graded. The final grade you get on your paper will be at least as high as the grade you get on the initial submission. Your paper will lose 1/3 of a letter grade for each day it fails to meet the deadline. Your paper must properly cite all sources you use according to the guidelines of the handout.

### Win money

There are several awards with significant monetary prizes for which you may be able to submit your paper. The deadline for submissions is usually the first week in March. Come see me at the start of the Spring semester for more details. Prizes include The John J. Cummings Jr./BAI award (for the best essay or research paper on a subject relating to financial institutions; prize is a medal and interest on \$10,000); The Freeman M. Saltus Prize (for excellence in writing essays on labor or economics); and The John J. Crowley Purse (for the best essay on an economic, religious, literary, historical or scientific project).

### Academic dishonesty

The College policy on academic dishonesty is clear. Academic dishonesty includes cheating on exams (by using or providing (to others) prohibited materials), and plagiarism, which includes the deliberate or accidental use of another's ideas or language without proper attribution. See the paper handout for specific guidelines. I am required to report any act of plagiarism (intentional or not) that resulted in any grade reduction to your Class Dean for academic dishonesty disciplinary proceedings. For a first offense of any academic dishonesty, the penalty is academic probation; a second offense results in suspension and a third offense results in expulsion.

**Attendance**

Attendance at each class is mandatory. If you have a serious problem that forces you to miss class, make sure you let me know, ahead of time if possible. Furthermore, I reserve the right to demand a note from the class dean or other authority. If you miss a quiz or test due to an excused absence, either your final score will be reweighted, except in extreme circumstances. If you do not miss classes (without an excuse), you will be awarded 5 bonus points on to your final grade.

**Weighting of final grades**

The importance of each part of your grade in making up your final score is as follows:

<u>Total</u>	<u>500 points</u>
Quizzes	10 points each, 60 points total (12% of final grade)
Paper:	100 points total (20% of final grade)
Overview	20 points (4% of final grade)
Final draft	80 points (16% of final grade)
Midterm 1	100 points (20% of final grade)
Midterm 2	100 points (20% of final grade)
Final	140 points (28% of final grade)
Attendance	5 bonus points (a bonus 1% on final grade)

**Final grade distribution**

Final grades will be based on the sum total of final points, not on an average of letter grades on each assignment. Expect the average GPA for the class to be approximately 2.8 (between a B and a B-). 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 overall letter (and number) grade based on the two midterms, the first four quizzes, and the paper overview. As an insurance policy for you, the guaranteed minimum number of points (out of 500) needed to achieve each score is given below:

<u>Grade</u>	<u>Points</u>	<u>Grade</u>	<u>Points</u>
A:	475	C+:	385
A-:	450	C:	365
B+:	435	C-:	350
B:	415	D+:	335
B-:	400	D:	325

**Assignment dates**

Midterm 1: Tuesday, October 7 in class

Midterm 2: Thursday, November 13 in class

Final exam: 01: Thursday, December 18, 8:30 a.m.; 02: Friday, December 19, 2:30 p.m.

Quizzes: Announced one class ahead of time

Paper topic and overview: Thursday, September 25, in class

Paper initial submission: Tuesday, November 4, 4:30 p.m.

Paper final due date: Thursday, December 4, 4:30 p.m.

## COURSE OUTLINE AND READINGS

On the following pages, a list of topics organized by “units,” and associated readings are provided. Make sure you keep careful track of where you are in the class at all times. The approximate number of classes spent on each topic are given in parentheses after each unit title. The appropriate chapter(s) in the text “M&V” is given next to each topic, and specific page numbers for chapters are given when only part of a chapter needs to be read. When a significant amount of material is not found in the text, an asterisk (\*) is given. Reserve readings are coded by brackets { } where appropriate. This list of reserve readings is as follows:

### List of Reserve readings

The following readings are available on ERes (<http://eres.holycross.edu/coursepage.asp?cid=213>). The number codes refer to the topics on the course outline. On ERes, the articles are named exactly as they appear below (though 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} McCandless, George T. and Weber, Warren, “Some Monetary Facts,” *Quarterly Review* (Fed-Minneapolis), Summer 1995. pp. 2-11. <http://www.minneapolisfed.org/research/qr/qr1931.pdf>
- {2} Duca, John V., “The Changing Meaning of Money,” *The Southwest Economy* (Fed-Dallas), Issue 6, 1995, p. 6-9. (only these pages) [http://www.dallasfed.org/htm/pubs/pdfs/swe/swe\\_95\\_6.pdf](http://www.dallasfed.org/htm/pubs/pdfs/swe/swe_95_6.pdf)
- {3} Moreno, Ramon, “What Caused East Asia’s Financial Crisis?” *FRBSF Economic Letter*, August 7, 1998. <http://www.frbsf.org/econsrch/wklyltr/wklyltr98/el98-24.html>
- {4} Valderrama, Diego, “Financial Development, Productivity, and Economic Growth,” *FRBSF Economic Letter* (Fed-SF), No. 2003-18, June 27, 2003. <http://www.frbsf.org/publications/economics/letter/2003/el2003-18.html>
- {5} Yunus, Mohammad, “The Grameen Bank,” *Scientific American*, Vol. 281, No. 5, November 1999, pp. 114-9.
- {6} Duca, John V., “The Democratization of America’s Capital Markets,” *Economic and Financial Review* (Fed-Dallas), 2<sup>nd</sup> quarter, 2001: pp. 10-19. <http://www.dallasfed.org/htm/pubs/pdfs/efr/efr0102b.pdf>
- {7} Ergungor, O. Emre, “Securitization,” *Economic Commentary*, August 15, 2003. <http://www.clevelandfed.org/Research/Com2003/0815.pdf>
- {8} Gomme, Paul, “Iowa Electronic Markets,” *Economic Commentary*, April 15, 2003. <http://www.clevelandfed.org/Research/Com2003/0415.pdf>
- {9} Sill, Keith, “The Economic Benefits and Risks of Derivative Securities,” *Business Review* (Fed-Philadelphia), January/February 1997, pp. 15-26. <http://www.phil.frb.org/files/br/brjf97ks.pdf>
- {10} Carlson, John B. and Pelz, Eduard A., “Investor Expectations and Fundamentals: Disappointment Ahead?” *Economic Commentary* (Fed-Cleveland), May 1, 2000. <http://www.clev.frb.org/research/com2000/0501.pdf>
- {11} Kwan, Simon, “On the Relation between Stocks and Bonds - Part I & II,” *FRBSF Economic Letter*, June 28 and July 5, 1996. (2 articles) <http://www.frbsf.org/econsrch/wklyltr/el96-19.html>, <http://www.frbsf.org/econsrch/wklyltr/el96-20.html>
- {12} Rudebusch, Glenn, “Interest Rates and Monetary Policy,” *FRBSF Economic Letter*, June 13, 1997. <http://www.frbsf.org/econsrch/wklyltr/el97-18.html>
- {13} Altig, David E. and Nosal, Ed, “Why Haven’t Long-term Interest Rates Fallen?” *Economic Commentary* (Fed-Cleveland), January 1, 2002. <http://www.clev.frb.org/research/Com2002/0102.pdf>

- {14} Bosner-Neal, Catherine and Morley, Timothy R., "Does the Yield Spread Predict Real Economic Activity? A Multicountry Analysis," *Economic Review* (Fed-Kansas City), Third Quarter 1997. <http://www.kc.frb.org/Publicat/econrev/pdf/3q97bons.pdf>
- {15} Park, Sangkyun, "Explanations for the Increased Riskiness of Banks in the 1980's," *Review* (Fed-St. Louis), July/August 1994, pp. 3-23.
- {16} Furlong, Fred., "The Gramm-Leach-Bliley Act and Financial Integration," *FRBSF Economic Letter*, No 2000-10, March 31, 2000. <http://www.frbsf.org/econsrch/wklyltr/2000/el2000-10.html>
- {17} Jordan, Jerry L., "Effective Supervision and the Evolving Financial Services Industry," *Economic Commentary* (Fed-Cleveland), June 2001. <http://www.clev.frb.org/research/Com2001/06.pdf>
- {18} Santomero, Anthony M., "Does Bank Regulation Help Bank Customers?" *Business Review* (Fed-Philadelphia) 2<sup>nd</sup> quarter, 2002, pp. 1-6. <http://www.phil.frb.org/files/br/brq202as.pdf>
- {19} Parry, Robert T., "The October '87 Cash Ten Years Later," *FRBSF Economic Letter*, October 31, 1997. <http://www.frbsf.org/econsrch/wklyltr/el97-32.html>
- {20} Lambert, Michael J., and Stanton, Kristen D., "Opportunities and Challenges of the U.S. Dollar as an Increasingly Global Currency: A Federal Reserve Perspective," *Federal Reserve Bulletin* (Board of Governors), September 2001, pp. 567-75. <http://www.federalreserve.gov/pubs/bulletin/2001/0901lead.pdf>
- {21} Ragan, Kelly, and Trehan, Bharat, "Is It Time to Look at M2 Again?" *FRBSF Economic Letter*, March 6, 1998. <http://www.frbsf.org/econsrch/wklyltr/wklyltr98/el98-07.html>
- {22} Blinder, Alan S., "Central Banking in a Democracy," *Economic Quarterly* (Fed-Richmond), Fall 1996, pp. 1-14. <http://www.rich.frb.org/pubs/eq/pdfs/fall1996/blinder.pdf>
- {23} Broaddus, J. Alfred Jr., "Transparency in the Practice of Monetary Policy," *Economic Quarterly* (Fed-Richmond), Summer 2001, pp. 1-9. <http://www.rich.frb.org/pubs/eq/pdfs/summer2001/broaddus.pdf>
- {24} Garfinkle, Michelle R., "What Is an 'Acceptable' Rate of Inflation? -- A Review of the Issues," *Review* (Fed-St. Louis), July/August 1989. [http://research.stlouisfed.org/publications/review/89/07/Inflation\\_Jul\\_Aug1989.pdf](http://research.stlouisfed.org/publications/review/89/07/Inflation_Jul_Aug1989.pdf)
- {25} Tootell, Geoffrey M. B., "How Farsighted Is the FOMC?" *New England Economic Review* (Fed-Boston), Jan/Feb 1997, pp. 49-65.
- {26} Judd, John P., and Rudebusch, Glenn D., "Describing Fed Behavior," *FRBSF Economic Letter*, December 25, 1998. <http://www.frbsf.org/econsrch/wklyltr/wklyltr98/el98-38.html>
- {27} Sill, Keith, "Forecasts, Indicators, and Monetary Policy," *Business Review* (Fed-Philadelphia), May/June 1999, pp. 3-14. <http://www.phil.frb.org/files/br/brmj99ks.pdf>
- {28} Browne, Lynn Elaine, "U.S. Economic Performance: Good Fortune, Bubble or New Era?" *New England Economic Review* (Fed-Boston), May/June 1999, pp. 3-20. <http://www.bos.frb.org/economic/neer/neer1999/neer399a.pdf>
- {29} Jones, Charles I., "The Future of the New Economy", *FRBSF Economic Letter*, May 11, 2001 <http://www.frbsf.org/publications/economics/letter/2001/el2001-14.html>
- {30} Lansing, Kevin J., "Growth in the Post-Bubble Economy," *FRBSF Economic Letter*, No. 2003-17, June 20, 2003. <http://www.frbsf.org/publications/economics/letter/2003/el2003-17.pdf>

<b>Unit</b>	<b>Chapters in M&amp;V</b>	<b>Reserve readings</b>
<b>UNIT 1: INTRODUCTION TO MONEY AND FINANCIAL SYSTEM</b> (2½ classes)		
Review of money supply creation	*	
Review of money: role, definitions, types	1	
Review of short run effects of money on economy	1	
Review of long run effects of money on economy	1	{1}
Measuring money: M1, M2, M3, alternatives	"	
Introduction to money demand	"	{2}
Velocity of money		
Instability of money demand		
<i>Optional: electronic money</i>	2	
<b>UNIT 2: SECURITIES AND SECURITIES MARKETS</b> (2 classes)		
Purpose of financial system	3(52)	
Asymmetric information: Moral hazard/adverse selection	3(66-8)	{3}
Government vs. self regulation	2(39-41)	
Benefits of a strong financial system	3(87-90)	{4},{5},{6}
Types of financial institutions	3(70-3), 10-11 ( <i>optional</i> )	
Types of securities and markets	3(53-5, 61-5)	{7}
Example of a market: Iowa electronic markets	*	{8}
Definitions of specific securities	3(56-61)	
<b>UNIT 3: INTEREST RATES</b> (8½ classes)		
Portfolio choice: demand for assets	7(148-55)	
Return	4(80-7)	
Calculating rate of return	"	
Defining the interest rate	"	
Approximate return	*	
Discounting and exact return	4(80-7)	
Other rate of return measures	" , *	
Real vs. nominal	4(97-8)	
Rate of return for shares of stock	*	
Risk	4(87-90), 7(155-60), 8 (168-72)	
Types of risk	"	
Market (beta), idiosyncratic	"	
Diversification	"	
Determinants and measurement of risk	"	
term (duration), economy, key characteristics	"	
Risk aversion and portfolio choice	7(154), *	
Derivative securities: forwards, futures, options, swaps	8(172-85, 186-8)	{9}
Long vs. short; hedging vs. speculation	"	
Risk and the balance sheet of banks	13(290-3, 298-301), 15(351-5)	
The efficient markets hypothesis: defined, implications	9(194-203)	{10}
Review of determinants of asset demand	7(148-55)	
Bond market model	*	
Supply, demand and equilibrium	"	
Loanable funds market	"	
Stock markets vs. bond markets	"	{11}

<b>Unit</b>	<b>Chapters in M&amp;V</b>	<b>Reserve readings</b>
<b>UNIT 3: INTEREST RATES</b> (continued)		
Tax features and interest rates	4(90)	
The term structure of interest rates	4(91-7) , 27(683-6),*	{12}, {13}
Term structure theory and forward rates	4(91-7),*	
Information in term structure	4(91-7) , 27(683-6),*	{14}
<b>UNIT 4: THE FINANCIAL ENVIRONMENT</b> (1 class)		
Adaptive behavior of financial institutions/ regulatory cycle	14-15, *	
The changing financial environment	14-15, *	{15}-{19}
History of banking regulations	"	
<b>UNIT 5: DETAILS OF THE MONEY MARKET</b> (4 classes)		
Money demand theory	19	
Early theories: Quantity and Keynesian theory	"	
Modern (cash-inventory) theory with fixed deposit rate	"	
Modern precautionary, portfolio choice demand	"	
Currency demand	*	{20}
Money demand with market-determined deposit rates	12(164-81), 19(462),*	
Market for bank deposits & dep. rate determination	"	
Equilibrium deposit demand	"	
Regulated vs. deregulated money market demand	*	
Empirical investigations of money demand	19(463-7)	{21}
Money supply in detail	16(368-84, 92-3)	
Supply and demand for reserves	"	
Money supply equations, curve	", *	
<i>Credit multiplier</i>	16(486-88) ( <i>optional</i> )	
Overview of monetary policy	16(368-84, 92-3)	
Equilibrium in the Money market	*	
Relationship with bond market	*	
Monetary policy	*	
<b>UNIT 6: THE FEDERAL RESERVE SYSTEM</b> (2½ classes)		
Overview of Fed	17(405-17), 26(658-668)	{22}
Original and current purposes, functions	17(405-12)	
Organization and structure	17(412-7)	
Independence, Proposals for reform	26(658-68), 17, *	
Monetary Policy in Detail	20,25-27	{23}
Goals: low, stable inflation; low unemployment	25(618-23, 641-2)	{24}
Instruments, operating targets	20	
Intermediate targets	20,25(623-35)	
Current Fed policies	*	
Effect of monetary policy on money market	20,25(623-35),*	
Active policies and defensive operations	"	
Optimal targets and transmission mechanism	20, 25-27	
Interest rates vs. money vs. GDP	25(628-35)	
Complicating factors	26	
Lags, uncertainty, consistency	26	
Rules vs. discretion	26	{25}
Taylor Rule	*	{26}

<b>Unit</b>	<b>Chapters in M&amp;V</b>	<b>Reserve readings</b>
<b>UNIT 7: MONEY AND THE MACROECONOMY</b> (4½ classes)		
Review of Macroeconomic issues	21	
GDP measurement, growth, business cycles	21(502-7, 516-24)	
Short run macroeconomic model: IS-LM	23,*	
Expenditures, income and interest rates: IS curve	"	
Expenditures equilibrium, multiplier	"	
Movements along, shifts of IS	*	
Money market, interest rates and income: LM curve	*	
Movements along, shifts of LM	"	
Equilibrium interest rate and income (GDP)	23.*	
Shifts, monetary and fiscal policy in IS-LM	"	
Aggregate supply and demand model	24	
Aggregate demand	24(589-94)	
Effect of changes in price level on equilibrium GDP	"	
Aggregate supply	24(594-9)	
Long run (potential) aggregate supply and growth	*	
Effect of changes in output on price level	"	
Neoclassical (Lucas Supply) model of AS	24(602-5),*	
New Keynesian model of AS	24(594-9, 605-9, 611-12)	
Price adjustment from short run to long run	*	
Inflation theory	"	
Monetary policy in macro model	26	{27}
Shocks and optimal policy responses	"	
Lags, uncertainty, consistency	"	
Lucas critique	*	
Effectiveness of policy and neutrality of money	*	
Review of rules vs. discretion debate	26	
The current state of the U.S. economy	*	
A new economy?	"	{28},{29},{30}