

HARVARD UNIVERSITY

Course: ECON E – 1500. The Economics of Financial Markets
Sessions: January 4-23. Week 1: M, T, W, Th. Week 2: M, T, W, Th. Week 3: T, W, Th.
Instructor: Mark Tomass, Ph.D.
E-mail: tomass@fas.harvard.edu

Optional TA Sessions are contingent on a minimum enrollment of 25 credit students, which will be known on Jan 6 after registration is final.

Course Description

This course sharpens your analytical skills for understanding the economic forces that determine prices of financial assets, derivatives, and stocks. The course is divided into six parts: The first part familiarizes you with the basic structure of the money market. It explains how money market agents, such as the public, the banking system, and the Central Bank act to determine the supply and the price of money. The second part develops the structure of the bond market and examines how prices of bonds and interest rates are determined. The third part explains the differences in exchange rate regimes with a special focus on how long-term exchange rates are determined in a floating foreign exchange market. Part four develops a model to demonstrate the how short term exchange rates are determined simultaneously with interest rates in the loanable funds markets. This model is also used to explore links between Central Bank actions, the behavior of capital market agents, international capital movements, and the merchandise trade balance. Part five focuses on how stock markets function and how market agents assess the value of stocks. Part six shows how market agents use the derivatives markets, such as futures, options, and swaps for hedging against risk or for speculating.

Course Materials

1. A course packet including a summary of my lecture notes and homework is available to the class list of students on CANVAS
2. Textbook: Stephen Cecchetti and Kermit Schoenholtz. *Money, Banking, and Financial Markets*. McGraw Hill/Irwin, 2015. Fourth Edition. Earlier editions are also acceptable.

Assigned chapters are specifically related to the analytical materials of the course contents; non-assigned chapters are recommended background readings.

Textbook Supporting Materials available on:

http://highereducation.com/sites/007802174x/student_view0/index.html

Course Objectives

Upon completion of this course, you should be able to:

1. Understand financial market news.
2. Understand how the collective action of the Central Bank, the Banking System, and the public determine prices of financial and real assets.
3. Understand how business cycle forces influence prices of bonds, stocks, and exchange rates.
4. Understand the relevance of economic indicators to profit maximizing or loss minimizing strategies of your firm's domestic or international operations in the immediate future.
5. Use the derivative markets to reduce risks of capital losses or to speculate for profit.

Course Contents

Part I. The Money Market:

Monday & Tuesday, January 4 & 5.

1. What is money?
2. What constitutes the supply side of the money market?
 - a. How does the Central Bank influence money market conditions?
 1. Tools for money creation.
 2. Operating Targets
 3. Intermediate Targets
 4. Ultimate Targets
 - b. What role do banks play in the creation of money?
 - c. What role does the public play in the creation of money?
 - d. How can we summarize the supply side of the money market in one formula?
3. What constitutes the demand side of the money market?

Reading: Chapters 1, 2, 3, 12, 17, and Lecture notes 1, 2, 3, 4 & 5.

Wednesday, January 6: Homework 1 Due

Part II. The Bond Market:

Wednesday, January 6

1. What is the relationship between interest rates and bond prices?

2. What is the difference between interest rates and rates of return?
3. What is the difference between nominal and real interest rates?
4. What is the difference between primary and secondary bond markets?
5. What are the economic forces that determine bond prices?

Reading: Chapters 4, 6, and Lecture notes 6.

Thursday, January 7: Homework 2 Due

Part III. How are the Credit Market, Foreign Exchange Market, and international flows of capital and commodities related?

Thursday & Monday, January 7 & 11

1. What is the relationship between interest rates, international capital flows, exchange rates, and the balance of payments?
2. How do business cycles affect prices of interest rates, prices of bonds, and short-term exchange rates?

Reading: Chapter 10 and Lecture notes 7.

Monday, January 11: Homework 3 Due

Tuesday, January 12: Midterm Exam

Part IV. Exchange Rate Regimes & the Foreign Exchange Market:

Wednesday, January 13

1. Fixed Exchange Rates
2. Floating Exchange Rates
3. Managed Float Exchange Rates
4. Pegged Exchange Rates
5. How and when do speculative attacks on a currency take place?
6. What are the long-run determinants of floating exchange rates?

Reading: Chapters 10, 19, and Lecture notes 7, 8 & 9.

Part V. The Stock Market:

Thursday, January 14

1. Initial Public Offerings (IPOs) and the underwriting of securities.
2. The secondary stock markets.
3. How do portfolio investors evaluate stocks?

Reading: Chapter 8 and Lecture notes 10, 11, & 12.

Part VI. The Derivatives Markets:

Tuesday & Wednesday, January 19 & 20.

1. Hedging and speculating with commodities Futures and Option contracts.
2. Case Study: How foreign corporations may hedge against a declining dollar.
3. Hedging and speculating with Financial Futures.
Case Study: How a bank hedges against an increase in the rate of interest.
4. Hedging and speculating with Financial Swaps.
Case Study: How two corporations may swap fixed with variable interest rate payments.

Reading: Chapter 9 and Lecture notes 13, 14, 15 & 16.

Wednesday, January 20: Homework 4 Due

Thursday, January 21: Final Exam

General Course Policies and Rules

Course Requirements & Due Dates

Mid-term Exam ¹	30 points
Homework assignments ²	20 points
Final Exam ³	50 points
Total 100 points	

¹ The Mid-term exam is 120 minutes long. It is in short questions form. The questions are based on material covered in the text, handouts, or lectures. They are based on these materials, but they are not identical to them. Exam questions do not ask you to reproduce the same information that you find in these materials. They ask you to analyze situations with a method based on the material that you discussed in class, or covered in the text. Therefore, do not be surprised if I ask you to respond to a question that is not specifically answered during the lectures or in the text.

² Four homework assignments are attached to the end of my Lecture Notes packet. They should be emailed to the Teaching Assistant by the due date and **before** the class meets. I will provide you with answer keys to the homework assignments after the due date so that you can see the correct answers. **Homework will not be individually graded.** Each question is assigned a ½ point for Pass and 0 point for Fail. A Pass grade **must demonstrate a serious attempt** to answering all of the questions. Late submissions are not accepted. You must submit a doctor's note for proof of severe illness that prevented you from submitting the homework.

³ The final exam is a 120-minute comprehensive one that requires your understanding of material discussed up to the mid-term exam. The questions in this exam are similar in form to the questions of the mid-term exam.

Grading Scale

95 - 100.....A	71 - 74.9.....C
91 - 94.9.....A-	67 - 70.9.....C-
87 - 90.9.....B+	64 - 66.9.....D+
83 - 86.9.....B	62 - 63.9.....D
79 - 82.9.....B-	60 - 61.9.....D-
75 - 78.9.....C+	0 - 59.9.....F

Academic Honesty

The University's rules on academic dishonesty, such as cheating, plagiarism, submitting false information will be strictly enforced.

Make-up Exams, Incompletes, Late Homework, Work for Extra Credit

A make-up exam for the midterm will be given only if a medical report is presented showing that you will not or were not capable of taking it. An Incomplete grade and a make-up for the final exam are handled through the Dean's office. If you miss an exam, you will receive a zero grade. For other rare emergencies, you must present a request in writing explaining the reason for an absence. I will review your note and let you know if your excuse is acceptable. Exams are given only once. If you are not satisfied with your performance in the midterm exam, then work harder for the final. When homework is due, you must submit it by the deadline. Late homework is not accepted. Please **DO NOT** request that I give you work for extra credit.

Etiquette of Grade Disputing

You are encouraged to discuss your performance in any exam. Do this by setting up an appointment with me. I will not discuss a dispute over a grade in class, especially in the same day after I handed you your exam. You ought to review your exam after you get home and consult the text first. Then if you still have a concern to debate with me, please do it after class hours. You are also welcome to review your exam with me even if you have no desire to dispute your grade.

Attendance Policy

There is no formal policy regarding your class attendance; however, it is doubtful that you will perform well in the class with frequent absences. I may record attendance during each session in case an advisor inquires about you.

Tardiness or leaving the class early

Try to arrive in class five minutes before it starts in order to review your latest notes and get ready for the new material. Late arrivals are distracting to me and to your fellow students. If you have a good reason to leave the class before it ends, let me know before the class starts and sit next to the nearest exit so that you cause a minimum distraction.

*Maximizing your learning potential in this course:
Some obvious notes for first-time students of advanced economics*

To advocate efficient decision-making, economics applies deductive logic to facts. Its complexity arises from its syntheses of many forces that operate simultaneously and in different directions. Your success in this course depends on your ability to synthesize these forces correctly and on your familiarity with the definitions of the terms used to describe the relevant facts. If this is your first course in economics, I suggest that you read the section below to maximize your learning experience:

First: Read each assigned chapter before you come to class and highlight the concepts, phrases, and ideas that you had difficulties in comprehending. This is an important part of your preparation for the course because attending class will not substitute for reading the textbook. You need to work on the material independently to become familiar with the logic of economic reasoning.

Second: Participate in class discussion. Do not hesitate to ask about the definition of a term that is being used in the presentation. Key definitions are crucial to comprehending the lecture material. Be certain to identify any possible weaknesses you may have towards any topic.

Third: Concentrate on my presentation while you are in the class. Referring back and forth to the textbook may be a confusing process. After class, get back to those issues that you highlighted and see if you now have a better understanding of them. If you still have difficulties with them make sure that you ask me to clarify whatever you are unclear about in the next class. If you feel uncomfortable about asking questions in class, please feel free to consult me after the class is over.

Fourth: The lectures are interdependent and they will gradually become more complex. Therefore, if you do not deal with any difficulties promptly, you will fall behind the class and feel confused as the rest of the class progresses. Try to be in the forefront. Do not wait for the last class meeting to ask for help. It may then be too late. Always remember that my cooperation will improve your performance only if you are willing to work hard independently.