Economics 136. Financial Economics
Syllabus 08/18/2009

Fall 2009
Tuesday, Thursday, 11-12:30
100 LEWIS

Instructor: Adam Szeidl, 517 Evans Hall
szeidl@econ

Office Hours: Tuesday 2-4
course website: http://econ.berkeley.edu/~szeidl/ec136/ec136index.htm

This course is an introduction to financial economics. We will cover the analytical tools and finance theory necessary to make good investment decisions and to understand the paradigm of security valuation. Important themes in the course include individual decision making, risk and return, arbitrage, and market equilibrium.

Financial economics is a quantitative subject, and we will use calculus and statistics, as well as the analytical tools developed during the course. Calculus, statistics, and microeconomics are prerequisites. Use of a spreadsheet package like Excel will be important for the homework assignments.

Requirements

The course requirements are two midterm exams, a final, and ten graded problem sets. Some of the problem sets will involve data work. Your course grade will be determined as follows:

Problem sets	20%
Midterms	40% (20% each)
Final	40%

The first midterm will be on September 29, Tuesday; the second midterm will be on November 3, Tuesday. The date for the final exam is December 15, Tuesday, 5-8pm.

Meeting times, Sections, GSIs

The class will meet for lectures Tuesdays and Thursdays 11-12:30 in 100 Lewis. In addition, sections will meet once a week for one hour. Sections will review background material needed to understand the lectures, including statistics and probability. The GSI's will also hold weekly office hours. If the sections or meetings with the GSI's do not resolve your questions, you are welcome to stop by my office (517 Evans) during office hours (Tuesdays 2-4) or other times by appointment.

The GSIs and section times are as follows (note, these are subject to change):

Pedro Castro (pcastro@econ.berkeley.edu)
Sections: Monday 2-3pm, 5 Evans; Monday 4-5pm, 259 Dwinelle
Office hours: Monday 3-4pm, 508-5 Evans; Monday 5-6pm, 508-5 Evans

Xing Huang (xhuang@econ.berkeley.edu)
Sections: Friday 1-2pm, 106 Wheeler; Friday 4-5pm, 101 Wheeler
Office hours: Friday 2-4pm, 608-1 Evans

Sung Bin Sohn (sungbin@econ.berkeley.edu)
Sections: Wednesday 8-9, 321 Haviland; Wednesday 2-3, 54 Barrows
Office hours: Wednesday 9:30-11:30, 608-1 Evans

Erin Syron (esyron@econ.berkeley.edu)
Sections: Monday 8-9, 321 Haviland; Tuesday 2-3pm, 321 Haviland.
Office hours: Monday 4-6pm, 608-3 Evans.

Texts
The textbook for the course is

Bodie, Zvi, Alex Kane and Alan Marcus, *Investments*, McGraw-Hill/Irwin, 6th, 7th or 8th Edition.

You are free to use any of the 6th, 7th or 8th editions. I will assign weekly required readings from this book, and I assume that you read the material as the course proceeds.

Recommended texts (optional but provide further insight):
Malkiel, Burton, *A Random Walk Down Wall Street*, W.W. Norton.
Siegel, Jeremy, *Stocks for the Long Run*, McGraw-Hill.

In addition, I will post lecture slides on the course website. These provide an outline of the course discussion.

Learning goals
As part of Berkeley's Undergraduate Student Learning Initiative (USLI), the Economics Department has developed learning goals for the Economics major.
See http://emlab.berkeley.edu/econ/ugrad/ugrad_goals.shtml.
The learning goals for this course include CT1,3,4, QT1,2,3, PS1,2, SP1, CS1,2, LL3.

Course Outline

The following is an outline of the topics covered in this course. As the course proceeds, required readings and other details may be added to the outline.

1. Introduction

Overview of financial markets, returns, historical review of returns.

BKM Chapters 1-3 and 5, including appendix to chapter 5. Appendix A.

2. Prices, portfolios and arbitrage.

State space, Arrow-Debreu prices, complete/incomplete markets. Asset pricing by no arbitrage. Put-call parity. BKM Chapter 20.1, 20.2, 20.4

3. Introduction to fixed income securities.

Discounting, the present value formula, time value of money. Valuation of zero coupon and coupon bonds. The term structure of interest rates. Mortgage backed securities. Bank runs. BKM Chapter 14.1-14.4, 15.1, 16.1 (also 15.2 in edition 8).

4. Introduction to stock valuation.

The dividend discount model. The Gordon growth model. Return on equity, the source of dividend growth. Valuation ratios. The Internet bubble. The 2008 crash. The long term stock market outlook. BKM Chapter 18.1-18.4, 18.7 (18.6 in edition 8).

5. Market efficiency.

The efficient markets hypothesis. Conditional expectations. Mispricing and behavioral finance. BKM Chapters 4 and 12 (also chapter 11 in edition 8).

6. Risk aversion. Introduction to asset allocation.

Expected utility. Mean-variance analysis. Demand for risky asset. Participation, diversification. BKM Chapters 6-8 (chapters 6-7 in edition 8).

7. Market equilibrium. The Capital Asset Pricing Model.

Empirical performance of CAPM. BKM Chapters 9.1-10.2 (Chapter 9 and 8.1-8.3 in edition 8).

8. Multifactor Models, Arbitrage Pricing Theory.

The cross-section of stock returns. The Fama-French three-factor model. Growth vs glamour. BKM Chapters 11.1-11.5 (Chapters 10.1-10.5 in edition 8).

9. Forwards, futures and options.

Derivative pricing. Dynamic spanning using the binomial model. The Black-Scholes model. BKM Chapters 22.1-22.4 and 21.1-21.3