Graduate School of Management  
UC-Davis  

MGT/P 261: Investment Analysis  
Syllabus  
Fall Quarter, 2007  

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Prerequisites  
Required core courses of Finance and Data Analysis  

Course Overview  
This course will focus on the financial theories and empirical evidence useful for investment decisions. It covers optimal portfolio choice, asset pricing models, fixed-income securities, funds performance measurement, and a brief introduction to behavioral finance. These topics are important for any participants in the investments industry, whether as fund managers or as private investors. However, it will not cover individual stock picking techniques.  

We start this subject with a detailed coverage of investors’ risk preference and their portfolio choice under the mean-variance framework. The implications of rational portfolio choice among investors lead to the Capital Asset Pricing Model (CAPM), which will be later extended to allow some more relaxed assumptions. The multifactor models (such as Fama-French and Chen-Roll-Ross three factor models) and the Arbitrage Pricing Theory (APT) will be introduced as well. The second part mainly focuses on the fixed income securities. The variety of bonds, bond pricing, duration & convexity, innovations in bond markets, bond portfolio immunization will be learned, and the term structure and default structure of interest rates will be studied. The third topic is mutual funds management and performance measurement based on asset-pricing models. Some basic ideas of behavioral finance, which study how investor psychology may affect their investment decisions and asset prices in the market, will also be incorporated into the lectures.
Course Materials

The required textbook for the course is *Investments*, by Bodie/Kane/Marcus (BKM), 7th edition, McGraw-Hill. This is more or less a standard textbook in the MBA programs. It is superbly written. We will also cover some new material for which no adequate text exists at this point.

Teaching materials such as additional notes, homework solutions, and casual readings will be posted on the School’s website in a timely fashion.

Optional Reading Materials

The following books have been ordered and put on reserve in the library.

(3) *Liar’s Poker*, by Michael Lewis, 1990. An interesting (and somewhat sleazy) account of a young bond trader at Salomon Brothers. Meet John Meriwether (the guy at the LTCM) in his glory days. Also contains an account of the origin of mortgage-backed securities.

Students are encouraged to read the *Financial Times* and the *Wall Street Journal* regularly.

Assessment

Your course grade is based on one group assignment (20%), a midterm take-home test (20%), three sets of homework (15%), and a comprehensive final exam (45%). Class participation and attendance may change your grade at the margin.

The final exam will be closed-book, with a formula sheet provided. Calculators are needed.

Additional practice exam papers will be provided. The solution manual for the textbook will be placed on the website.
Group Assignment

The project on optimal asset allocation requires data collection and analysis. The length of the assignment should be less than 2500 words, excluding tables. Each group will have four to five students.

Consultation

Weekly Office Hours for day-time students: 3:30 to 5:00pm, every Thursday. For Bay Area WP students: after class. Special office hours may be offered if needed. Most questions can be answered through e-mail. I will check my e-mails regularly. In addition, you can make an individual appointment.

Course Schedule and Readings

The articles with asterisk (*) sign are strongly recommended.

Part 1: Portfolio Choice and Asset Pricing Models

Topics: risk aversion; mean-variance efficiency; the Capital Asset Pricing Model; liquidity premium; the Arbitrage pricing Theory; multifactor models (Fama-French, Chen-Roll-Ross); historical record equity risk premium; empirical tests of asset pricing models; market anomalies; macro variables and asset prices.

Readings:

BKM, Chapters 5 to 10, 13.
Gong, N., “Portfolio Theory and Asset Pricing,” teaching notes 1 and 2.

Part 2: Mutual Funds and Funds Performance Measurement

Topics: mutual funds and other investment companies; open-end vs. closed end funds; calculating investment returns; portfolio performance evaluation (Sharpe ratio, Treynor’s measure, Jensen’s measure, appraisal ratio, multi-factor model); benchmark portfolio, market timing; passive vs. active funds management.

Readings:

BKM, Chapters 4, 24.


Part 3: Fixed-Income Securities

Topics: bond prices and yields; duration; convexity; variety of bonds (such as floating rate bonds, convertible callable bonds, indexed bonds); portfolio immunization; term structure of interest rates; risk structure of interest rates, high-yield fixed income portfolio.

Readings:

BKM, Chapters 14 to 16.


Part 4: Introduction to Behavioral Finance

Readings:

BKM, Chapters 11, 12.

**My Teaching Style and Philosophy**

I treat investments mainly as a discipline of science: *analytic, systematic, and objective*. Anecdotal stories based on small samples or personal experience, while interesting, are not part of our studies. The theories I present to you are well grounded in economic, rational choice framework. The empirical evidences are drawn from researches based on large databases. The focus is firmly on the applications of well founded financial theories. The subject is taught in combinations of lectures, case studies, syndicate projects, and class discussions.

This subject is essentially a quantitative one. That means it is relatively easier for those who are better prepared quantitatively. However, understanding advanced calculus is not a prerequisite. A willingness to learn is perhaps more important.

My own best investment so far is in my human capital. I believe that is the case for you as well, since you have chosen us over less demanding programs. You are investing in your human capital. In the subjects I teach, I will ensure that you are being equipped with knowledge and skills that will generate a lifetime of returns. To achieve this goal, I expect you to study hard and maintain academic integrity throughout the course.

**Timetable (tentative)**

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<td>Lecture 7</td>
<td>Duration &amp; Convexity; Variety of Bonds;</td>
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<td>Lecture 8</td>
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Lecture 9 | Case Study: Arbitrage in Government Bonds; Market Efficiency & Investor Behavioral Bias | Ch. 11, 12, Note 5
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Lecture 10 | Project Discussion; Final Review | Final Exam

Note: for Bay Area WP class, each Saturday will cover materials from two lectures.

**Laptop and Mobile Phone Policy**

Students are encouraged to bring laptops in lectures because we have quite a few exercises using Excel. Laptops should be used in class only for class activities such as taking notes and doing in-class exercise. They should not be used to check email, surf the web, or to do other non-class activities during class time. Mobile phones should be switched off.

**Preliminary Readings (to be done prior to the first class)**

Please read the course syllabus, teaching note 1 (sections 1 and 2.1), and Chapters 6 and 7 of BKM.

**UC Davis Code of Academic Conduct**

Each student is expected to adhere to the UC Davis Code of Academic Conduct. Any suspected violations will result in an investigation and be dealt with seriously.

**About Me**

After finishing a B.S. degree in mathematics from Nanjing University in China, I came to the United States to pursue doctoral studies. My Ph.D. degree in finance was granted by the Olin School of Business, Washington University in St. Louis. Since 1997, I have been employed at the Melbourne Business School (MBS) in Australia, teaching the core Finance subject, Investments, Corporate Finance, and Global Financial Management electives. Recently, I won the Teaching Excellence Award, voted by the Class of 2007 full-time MBA students at the MBS. I also taught at the Australian Graduate School of Management and Washington University in St. Louis as a visiting faculty member. My main research interests are in the broad area of capital markets and corporate finance/governance. I won the best paper award for research papers published in the *Australian Journal of Management* in both years 2001 & 2004. My current research topics include the relation between corporate disclosure policy and share return volatility, and
efficiency and governance of for-profit and non-profit organizations. I have also
done a number of consulting projects with several companies. In my spare time, I
enjoy travel, classical music, and reading.