Advanced Investments  
Course Syllabus

Spring 2008       Professor Russell Read  
University of California at Davis    MGT 292-1 (CRN: 54691)  
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Course Objective: This course presents an overview of the concepts and techniques used to value investments and manage investment portfolios. By the end of this course, the student should be able to (1) assess value for a wide range of potential investments, (2) understand and interpret major portfolio management and risk concepts, (3) construct basic portfolio and risk models, and (4) apply portfolio management and risk management concepts/techniques to their specific business problems. Through the study of valuation, portfolio construction, and risk measurement/management techniques, the student should also gain a better understanding of what drives risk and return in the financial system.

Course Requirements:  
(1) 4 problem sets (30%)—Due by the beginning of each class during weeks 2-5, to be submitted on paper or to rread555@yahoo.com (10% off for each day late)  
(2) Team Presentations and Paper (30%)—team presentations will be given after the final (7 June 2007) and final papers should be submitted on the same day; papers should not exceed 10 pages, excluding appendices; topic should be chosen by the teams in consultation with professor  
(3) Final Examination (30%)—to be held on Saturday 7 June 2007 at 9am-11am, 2 hours in length (multiple choice and short answer)  
(4) Class Participation (10%)—attendance to all classes is mandatory for students taking the course for a grade. (CFA test takers on June 7 may take the final on an alternative (earlier) date and deliver their presentation/paper in class on May 31.)

Office Hours: Before and after class and by appointment

Pre-Requisites: Basic finance and/or investments  
Facility with Excel  
Basic Statistics

Class Dates: Saturdays (4/5, 5/3, 5/17, 5/31) 9am-noon, 1pm-4pm  
Final & Presentations: Saturday 6/7, 9am-noon, 1pm-4pm
Teams of 4 (+/- 1) are recommended for working on the paper and presentation. Although problem sets/labs may be worked on in teams, they should be written up and submitted individually. The paper and presentation should be submitted as a team.

Materials:  
(1) Supplemental Readings (available free from professor)  

(Please read/skim assigned materials prior to class discussion.)  
(When possible, bring laptops loaded with Excel to class.)  
(Class notes will be the most important resource for this course.)

**Weekly Course Outline**

1\textsuperscript{st} Week—Saturday 5 April 2007 (9am-noon, 1pm-4pm)  
**Valuation and Risk of Investments**
Key Concepts: Calculating historical returns, volatilities, and correlations  
- Implications of the Central Limit Theorem on return distributions  
- Return Distributions—normal, lognormal, Chebyshev’s Inequality  
- Discounted Present Value  
- Utility Theory and Risk Aversion  
- Behavioral Finance & Prospect Theory

Readings: Elton and Gruber, Chapters 1-3 (skim), 11, 18, 20 (skim)  
Shefrin (in Reader)  
Brunel (in Reader)  
Sharpe (in Reader)

2\textsuperscript{nd} Week—Saturday 3 May 2007 (9am-noon, 1pm-4pm)  
**Risk and Reward from Equity, Fixed-Income, Currency, Real Estate and Commodity Investments**
Key Concepts: Capital Asset Pricing Model and Equity Market Beta Risk  
- Fixed-Income Duration and Convexity  
- Currency risks in international investment  
- Private market illiquidity risks  
- Commodity price sensitivities

Readings: Elton & Gruber, Chapters 12-14 (skim), 16, 22  
O’Shaughnessy (in Reader)  
Greer (in Reader)  
Weisdorf (in Reader)  
Wilkerson (in Reader)

Problem Set I Due: 1\textsuperscript{st} week lab + E&G 1(odd), 11(1-6), 18(1,5,6,8)
3rd Week—Saturday 17 May 2007 (9am-noon, 1pm-4pm)
Introduction to the Range and Use of Derivatives for Managing Investment and Firm Risks
Key Concepts: Options Fundamentals: Put-Call Parity, Black-Scholes Formulas
Calculating and using implied volatilities
Fundamentals of futures contracts
Changing the profile of risks and returns using futures and options
Readings: Elton & Gruber, Chapters 23-24
Problem Set II Due: 2nd week lab + E&G 12(odd), 13(odd), 22(all)

4th Week—Saturday 31 May 2007 (9am-noon, 1pm-4pm)
Portfolio Management from the Range of Institutional and Retail Perspectives
Key Concepts: Objectives of mutual funds, plan sponsors, high net worth, etc. investors
Optimization techniques which incorporate diverse fund objectives
Pension Funding and Risks
Life-Cycle Investing
Readings: Elton & Gruber, Chapter 27
Beckers (in Reader)
Bertram (in Reader)
Welch (in Reader)
Ibbotson (in Reader)
Salisbury (in Reader)
Problem Set III Due: 3rd week lab + E&G 23(even), 24(even)

6th Week—Saturday 7 June 2008 (9am-noon, 1pm-4pm)
Final Examination and Student Presentations
Problem Set IV Due: 4th week lab only
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Reader Contents


Bertram, Robert G. “Balancing the Opportunities in Real Return Investments.” *CFA Institute Conference Proceedings Quarterly*, CFA Institute, September 2007, pp. 41-49.

