

**Modern Portfolio Theory & Asset Management**  
**B40.3332**  
**Fall 2008**

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Class Meets: Monday 6:00 – 9:00pm  
Office Hours: Monday 1:00 - 5:00pm or by appointment  
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This is a course in the theory and application of portfolio management techniques. In addition to the lectures on the material listed below, the courses will include 3 or 4 lectures by outstanding professionals in the field of portfolio analysis.

**Course Materials**

1. Elton, Edwin, Martin Gruber, Stephen J. Brown , and William Goetzmann, Modern Portfolio Theory and Investment Analysis, 7<sup>th</sup> Edition (John Wiley, 2007) and accompanying software, “The Investment Portfolio”
2. Reading package available at the bookstore and in the library (optional purchase)
3. Notes package available on Blackboard

All chapters are from Elton, Gruber, Brown, and Goetzmann. Readings are from the reading package and are identified by number and author name.

Numbers in parenthesis indicate the approximate number of half classes which will be spend on the topic.

**I. Portfolio Analysis**

A. Introduction	Chapter 1
B. The Basics of Portfolio Theory (4)	
The Two Security Cases	Chapter 4: pp. 44-56
Generalizing to Multiple Assets	Chapter 4: pp. 56-67
The Impact of Correlation	Chapter 5: pp. 68-84
Riskless Lending and Borrowing	Chapter 5: pp. 84-90
Calculating the Efficient Frontier	Chapter 6
C. Selecting From Feasible Portfolios (1)	Chapter 11: pp. 210- 234
D. Simplifying the Portfolio Management Process (3)	
The Single Index Model	Chapter 7
Multi-Index Model	Chapter 8
Recalculating the Efficient Frontier	Chapter 9

**II. Model of Relative Prices (3)**

The Standard Capital Asset Pricing Model  
Non Standard Forms of the Capital Asset Pricing Model  
Test of Capital Asset Pricing Model Arbitrage Theory  
Arbitrage Pricing Theory

Chapter 13  
Chapter 14  
Chapter 15  
Review Chapter 8,  
pp. 167-174;  
Read Chapter 16

### III. Performance

#### A. Open End Mutual Funds (4)

The Structure of the Industry Performance  
Overview

Lecture Notes  
Chapter 25

Reading 1: Elton, Gruber, Das Hlavka  
Reading 2: Elton, Gruber, and Blake  
Reading 3: Gruber  
Reading 4: Sharpe  
Reading 5: Sharpe  
Reading 6: Modigliani and Modigliani  
Reading 7: Statement of Senior Financial Economists Roundtable  
Reading 8: Elton, Gruber, and Blake

#### B. Other Managed Portfolios (4)

1. Commodity Funds  
Reading 9: Elton, Gruber, and Rentzler  
Reading 10: Elton, Gruber, and Rentzler
2. Hedge Funds
3. Closed End Mutual Funds  
Reading 11: Elton, Gruber, and Busse
4. Exchange Traded Funds  
Reading 12: Elton, Gruber, Comer, and Li
5. Institutional Managers
6. Pension Funds  
Reading 13: Elton, Gruber, and Blake

#### C. Summary and Discussion

### Grading

Grades will be based primarily on the midterm (45%), and final (55%). Homework assignments are intended to help you understand the material. While the grading distribution will vary slightly according to the quality of the class in general I follow the Finance Department Guidelines of

A 20-25%  
B 55-70%  
C and below 10-20%

In addition to my normal office hours, I will schedule one additional day at the convenience of the class before the final to be available to meet with you as individuals or in groups to discuss the course

of answer any questions you have about portfolio management of finance in general. There will be a reduction of one letter grade for missing the final and requesting a make-up.

Exam Dates: Midterm, Nov. 10, 2008  
Final, Dec. 15, 2008

### Readings

1. Elton, Edwin, Martin Gruber, Sanjiv Das, and Matthew Hlavka, "Efficiency with Costly Information: A Reinterpretation of Evidence from Managed Portfolios," Review of Financial Studies, 1993 pp. 1-22.
2. Elton, Edwin, Martin Gruber, and Christopher Blake, "Survivorship Bias and Mutual Fund Performance," Review of Financial Studies, Winter 1996 pp. 1097-1120.
3. Gruber, Martin, "Another Puzzle: The Growth in Actively Managed Mutual Funds," Journal of Finance, July 1996 pp. 783-810.
4. Sharpe, William, "Asset Allocation: Management Style and Performance Measurement," Journal of Portfolio Management, Winter 1992 pp. 1-19.
5. Sharpe, William, "The Sharpe Ratio," Journal of Portfolio Management, Fall 1994 pp. 49-58.
6. Modigliani, Franco, and Leah Modigliani, "Risk-Adjusted Performance," Journal of Portfolio Management, Winter 1995 pp.45-54.
7. "Statement of Financial Economists Roundtable on Risk Disclosure of Mutual Funds," Journal of Financial Engineering, June 1997 pp. 367-373.
8. Elton, Edwin, Martin Gruber, and Christopher Blake, "Incentive Fees and Mutual Funds," Journal of Finance, April 2003 pp. 779-804.
9. Elton, Edwin, Martin Gruber, and Joel Rentzler, "Professionally Managed, Publicly Traded Commodity Funds," Journal of Business, April 1987 pp. 175-199.
10. Elton, Edwin, Martin Gruber, and Joel Rentzler, "New Public Offerings, Information, and Investor Rationality: The Case of Publicly Offered Commodity Funds," Journal of Business, April 1989 pp. 1-13.
11. Elton, Edwin, Martin Gruber, and Jeff Busse, "Do Investors Care of Sentiment?," Journal of Business, October 1998 pp. 175-199.
12. Elton, Edwin, Martin Gruber, George Comer, and Kai Li "Spiders: Where are the Bugs?," Journal of Business.

13. Elton, Edwin, Martin Gruber, and Christopher Blake, "Participant Reaction and the Performance of Funds Offered by 401(k) Plans," Journal of Financial Intermediation.

14. "Beta Management Company." Harvard Business School, November 17, 1993, pp. 1-5.

### **Problem Assignments**

#### **Problem Set 1**

1. Chapter 4      Problems 2 (part A & B and only the three security portfolios in part D) and 3
2. Chapter 5      Problems 2 and 5

#### **Problem Set 2**

1. Chapter 7      Problem 1 and 2
2. Chapter 8      Problem 5
3. Chapter 9      Problem 1 and 2
4. Beta Management Company

#### **Problem Set 3**

1. Cherry Hill Investments
2. Chapter 13      Problem 1, 2, 4, and 8
3. Chapter 16      Problem 1

#### **Problem Set 4**

1. Chapter 25      Problem 1, 2, 3, and 4