### University of Utah David Eccles School of Business

Finance 6360 Investments and Portfolio Management Spring 2010 Thursday 6 - 10, CRCC 205 Elizabeth Tashjian KDGB 410 (801) 585-3212 elizabeth.tashjian@business.utah.edu

**Course Overview** This course consists of three parts. The first part builds upon several topics in investments covered in Finance 6020 or 6022. We will begin with a discussion of the relationship between the risk of a security and its return and the idea of market efficiency. We will review these concepts briefly, discuss the empirical evidence regarding the theories, and discuss their practical applications in investing, including methods for evaluating portfolio performance.

The second part of the course focuses on several securities, specifically on fixed income securities with a brief introduction to derivatives. We will define common securities in these areas, examine pricing models, and discuss how the securities can be used in investing.

The third portion of the class will cover the environment in which investing occurs. We will examine market "microstructure," taxes, and behavioral finance. Microstructure examines factors typically abstracted from in traditional pricing models. Our discussion will include discrete pricing, the effect of differential information on the willingness of market participants to trade, and the effect of trading mechanisms such as a single market maker (e.g., NYSE) or multiple competitive dealers (e.g., NASDAQ).

You will have the opportunity to investigate some of the theories discussed in class first-hand through a portfolio competition, a simulated trading exercise, and problem sets. You will need daily access to security prices to complete those assignments.

On <u>Thursday, January 21, class will meet in the Marriott Library labs from 6 - 8 p.m.</u> It is important that you be on time that evening. The second half of class will continue in our regular room in CRCC that evening.

**Course Materials** The required text for this course is *Investments*, eighth edition by Bodie, Kane, and Marcus (McGraw Hill-Irwin, 2010). You will also need to register for and pay for an account with Stock-Trak. You may wish to subscribe to the *Wall Street Journal* or some other newspaper. Other materials will be handed out in class.

**Grades** The course grade will be determined by your performance on five items: a midterm exam, a final exam, the trading game, and several problem sets. An assignment sheet is attached to this syllabus. Because I would like to grade and return assignments promptly, it is important that you turn in assignments on the scheduled date.

The point distribution will be the following.

problem sets	20%
portfolio game	15
midterm	30
final exam	35

**ADA Policy** The University of Utah David Eccles School of Business seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the instructor and to the Center for Disability Services, <u>http://disability.utah.edu</u>, 160 Olpin Union Building, (801) 581-5020 (V/TDD) to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notice to the Center for Disability Services.

#### Finance 6360 Class Schedule and Reading Assignments

**Readings** refer to chapters in Bodie, Kane, and Marcus, eighth edition unless otherwise specified. The textbook is encyclopedic. We will not cover all of the material in the chapters.

#### Week 1 (January 14)

Topic: Institutional aspects of investing and the investment game

Readings: Chapters 2, 3 and 4; Stock-Trak rules <u>http://v2.stocktrak.com/public/content/tradingrules.aspx</u>

Exercise: Follow the link before to register for the investment game. There is a cost to register. You will receive a discount with a code from the front of the textbook.

http://v2.stocktrak.com/public/members/registrationstudents.aspx?p=UofU-Fin6362-Spring10

#### Monday, January 18: Portfolio Competition Begins

#### Week 2 (January 21)

<u>From 6 - 8 p.m.</u>, Class will be held in the computer labs in the Marriott Library – <u>it is important that</u> you arrive on time

Last names A -H will meet in Marriott 1110 Last names I - Z will meet in Marriott 1120

Topic:6 - 8 p.m.:Trading simulation8 - 10 p.m.:The motive to invest and portfolio theory

Readings: Chapters 6, 7 and 8

### Week 3 (January 28)

Topics:Asset pricing: theory and evidenceMarket efficiency: theory and evidence

Readings: Chapters 9, 11, and 13

Exercise: Assignment 1 is due in class

### Week 4 (February 4)

Topics:	Portfolio performance evaluation Fixed income securities: spot and forward rates
Readings:	Chapter 24; Chapter 14 and handout (print from WebCT)
Exercise:	Assignment 2 is due in class

### Finance 6360 Class Schedule and Reading Assignments

# Week 5 (February 11)

Topics:	Fixed income securities: term structure, duration and immunization
Readings:	Chapters 14, 15, and 16 and handout
Exercise:	Assignment 3 is due <u>at the beginning of class – no late assignments accepted</u>

# Week 6 (February 18)

# MIDTERM EXAM: 6 – 8 p.m.

Topics: Fixed income securities, continued

### Week 7 (February 25)

Topics:	Options and Futures
Readings:	Chapters 20, 21, and 22; handout (available from WebCT)
Exercise:	Assignment 4 is due in class

# Week 8 (March 4)

Topics:	Taxes and the Individual Investor Market Microstructure and the Trading Environment	
Readings:	Chapter 3 and handout (available from WebCT)	
Exercise:	Assignment 5 is due in class	

## Week 9 (March 11)

Topics:	Behavioral Finance
Readings:	Chapter 12 and in-class materials
Exercise:	Assignment 6 is due <b>at the beginning of class – no late assignments accepted</b>
	<b><u>Friday</u></b> , March 12: Portfolio Competition Ends

# Finance 6360 Class Schedule and Reading Assignments

# Week 10 (March 18)

Topics: <u>Historical Asset Returns</u>

Readings: Chapter 5

Exercise: Portfolio Game Report Due

FINAL EXAM in class

### **Finance 6360 Assignment Sheet**

Assignments are due in class on the date indicated. **Please hand in hard copies of assignments**. Except in special circumstances, <u>electronic copies are not acceptable</u>. In most cases, assignments will be accepted with a late penalty <u>prior to</u> the next class meeting. Later assignments will not receive credit. Note that assignments due the week prior to exams must be turned in by the beginning of class, as we will go through solutions during class. Problem numbers refer to **Problems** in the end of chapter problems in Bodie, Kane, and Marcus unless otherwise stated.

**Assignment 1**: due in class on Thursday, January 28. Chapter 6: Problems 10 and 13, (p. 182)

Assignment 2: Due in class Thursday, February 4. Chapter 6: Problem 14 (p. 182) Chapter 8: Problem 6 (p. 274) Chapter 9: Problems 1, 6-12 (pp. 312-313) Chapter 11: Problem 13 (p. 378)

**Assignment 3**: due <u>at the beginning of class</u> on Thursday, February 11. [You may want to make a copy to prepare for the midterm; no late assignments accepted] Chapter 24: Problem 10 (p. 859) and CFA problems 4-6 (p. 862)

Assignment 4: due in class Thursday, February 25. Chapter 14: Problems 12 and 13 (p. 479) Chapter 15: Problem 8, part a only (p. 505) Chapter 16: Problems 4, 7, and 10 (pp. 543-544)

Assignment 5: due in class Thursday, March 4.

Chapter 20: Problems 5 and 6 (p. 705)

Chapter 21: Problems 11 and 12 (p. 751)

Use data from a recent newspaper or from <u>http://online.wsj.com/home-page</u> to answer the following questions. Please indicate the source of your data, and show all calculations. Pick dates that correspond as closely as possible to those in the questions, but don't worry about interpolation. Assume the pure expectations model holds. Express your answers in annual terms.

- a. Find the 6-month and 12-month spot default risk-free interest rates.
- b. Find the 6-month forward rate six months from now.
- c. Find a coupon bond (either a T-note or a T-bond) maturing in a year. Compute the invoice price using prices from the *Wall Street Journal*.
- d. Value the same bond using your answers from part a. Do you get the same answer?

## **Finance 6360 Assignment Sheet**

Assignment 6: due <u>at the beginning of class</u> on Thursday, March 11. [You may want to make a copy to prepare for the final; no late assignments accepted]

Chapter 22: Problem 8 (p. 784) Chapter 3: Problem 8 (p. 84)

Consider the following investment opportunities.

Asset class	Total Return	Interest/div return
money market	3%	3%
municipal bond portfolio	5	5
corporate bond portfolio	7	7
large-cap stock portfolio	11	3
401-k qualified pension plan	11	3
Roth IRA	11	3

Assume you invest the equivalent of \$2,000 of your current <u>pre-tax</u> income in each of these investments on December 31, 2010, and hold your investment, reinvesting any interest or dividends. Assume you pay applicable taxes on December 31 each year and that interest and dividends are paid on December 31 each year. After five years (December 31, 2015), you withdraw your proceeds from each investment. Calculate the expected after-tax value at the end of year 5 for each of these investments using the following tax rates. (Assume all bonds are bought and sold at par and that all dividends "qualify.")

year(s)	ordinary income	long term capital gains	dividends
2010-2014	35%	15%	15%
2015	25	15	15