Finance 367 Spring 2012 Sections: #03070 MW 8:00 - 9:30 am #03080 MW 9:30 - 11:00 am

## INVESTMENT MANAGEMENT

Professor:Keith C. BrownOffice:CBA 6.256

Office Hours: MW 11:00 am– 12:15 pm or by appointment

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Voice Mail: 512-471-6520 Course Home Page: via Blackboard

- Objective: To become a successful investor, an individual must command a considerable amount of financial market knowledge as well as a wide variety of qualitative and quantitative skills. This course is designed to provide students with a solid conceptual and analytical basis for making investment decisions. In addition to establishing a background for evaluating financial risk and return dynamics as well as how global capital markets are organized and function, the focus will be on the examination and valuation of the major investment vehicles and strategies popular today. In particular, we will consider how investors allocate their financial assets by forming, managing, and evaluating portfolios consisting of instruments such as stocks, bonds, futures and option contracts, exchange-traded funds and mutual funds. Although the ultimate objective will be to develop a theoretical background upon which the student can expand his or her knowledge of the field of investments, the topical treatment will be rather practically oriented. This course is also appropriate for anyone contemplating a career as professional investment advisor, portfolio manager, or security analyst.
- Prerequisites: Finance 367 is a restricted course for students who are currently enrolled in a major program in the McCombs School of Business. Please note that several prerequisites apply for this course and are published in the Course Schedule. Prior completion of Finance 357 or Finance 357H and its prerequisites are among these requirements. It will be assumed that students enrolled in this course are equipped with all of the accounting, economics, mathematics and statistics tools that have been part of their prior course work.

Required Students will be expected to have access to the following course materials on a continual basis throughout the entire semester:

#### (1) Textbook:

Investment Analysis and Portfolio Management 10e by F. Reilly and K. Brown (Cengage South-Western, 2012)

## (2) Supplementary Readings:

As detailed in the Course Outline, in addition to formal assignments from the textbook there will also be a significant amount of supplementary reading in the form of journal articles and other lecture notes. All of these supplementary readings can be downloaded from the course website.

## (3) Financial Calculator:

Any business calculator with versions of the following function keys will be acceptable: PV, FV, PMT, I, n, CF and IRR. (The HP 12c is considered by many to be the finance industry standard, along with the TI BA II Plus.) The use of a calculator will be required on all examinations in the course.

There will be several sources of evaluation in this course:

Grading Policies:

Examination #1	20%
Examination #2	20%
Examination #3	20%
Examination #4	20%
Group Project #1	14%
Group Project #2	6%
	100%

As noted, your mastery of the course material will be evaluated with two distinct graded components: Examinations and Group Projects.

## (1) Examinations:

The four examinations given during the semester will carry equal weight toward your final grade. The tests will involve a combination of questions designed to assess your analytical and interpretative (i.e., qualitative) skills. Each examination will be designed to include problem-solving, short-answer and multiple choice questions. The difficulty level of the multiple choice questions will be similar that found on professional credentialing examinations, such as for the Chartered Financial Analyst (CFA) designation.

Each test will be closed-book, closed-note. All necessary materials (i.e., test booklet, equation sheet, extra paper) will be provided to you. You will need to bring to each exam the following items: writing instruments, financial calculator, and picture ID card. You will not be allowed to use laptop computers or any other electronic devices during the examinations.

The examinations will test all of the material that is covered in class, some of which may not appear in the textbook or other assigned readings. The quantitative test problems will be modeled after (but not be identical to) the assigned end-of-chapter problems and other numerical examples that are demonstrated during the relevant class sessions. A topic review sheet will be provided prior to each examination to help in the preparation process.

Two other course policies regarding examination should be noted: (i) copies of examinations from past semesters *will not* be released or posted; and (ii) students *will not* be allowed to keep their graded examinations, but will have ample opportunity to review their performance.

## (2) Group Projects:

The Group Projects component of your grade will consist of *two separate projects* that will be spread throughout the semester. These projects will allow you to explore several different aspects of the investment process, including the asset allocation decision, the valuation and selection of individual securities in the context of the portfolio formation process, and a performance evaluation of a security portfolio. The specific descriptions associated with these assignments will be distributed formally beginning in mid-January.

Completion of the assigned projects will require you to work in **groups of four people**. You will be assigned to the same four-person group for the entire semester, but you will be allowed to select your own group. While you will be able to work fully with other members within your assigned group, you *will not be permitted* to collaborate in any form with members of other groups. At the end of the semester, you will have the opportunity to provide a peer evaluation of the other members of the group to help determine the quality of each person's relative contribution.

On each project, the same grade will be assigned to every member of the group, *assuming each person contributes equal effort and output to the assignment*. Further, no late projects will be accepted for any reason.

#### (3) Final Course Grades:

At the end of the semester, the raw number of points that you earned on each graded component will be averaged by the weighting percentages listed above. The weighted total scores for all students in both sections of the course will then be combined to determine a final distribution. The following percentile ranges will be applied to this distribution of final scores:

A:	92.0 and Above
A-:	90.0-91.9
B+:	87.0-89.9
B:	82.0-86.9
B-:	80.0-81.9
C+:	77.0-79.9
C:	72.0-76.9
C-:	70.0-71.9
<b>D+:</b>	67.0-69.9
D:	62.0-66.9
D-:	60.0-61.9
F:	Below 60.0

In considering the assignment of final course grades, there will be *two distinct evaluations* using this grading scale:

(*i*) *Curved Score Evaluation*: For all students *who satisfy* the Class Attendance Policy described below, the raw weighted average score they accumulate over the semester *will be adjusted upwards* by curving the final distribution of eligible students.

(*ii*) *Raw Score Evaluation*: For all students *who do not satisfy* the Class Attendance Policy, the raw weighted score they accumulate over the semester *will not be adjusted upwards*.

Based on past experience, the upward score adjustments associated with curving the final distribution can be considerable. *It is in the best interest of every student to satisfy the Class Attendance Policy and become eligible to be part of the curved distribution.* 

Course The material covered in the course can be divided into the following sections that will be taught over 26 class sessions (excluding periods devoted to examinations):

- I Overview of the Investment Process
- II Portfolio Theory & Asset Pricing Models
- III Investment Instruments: Fixed-Income & Equity Securities
- IV Investment Performance Measurement
- V Investment Instruments: Derviative Securities
- VI Professional Investment Management

## (1) Location of Daily Class Sessions:

The class will meet every Monday and Wednesday of the semester (with the exception of Spring Break week from March 12 -16) in the regularly assigned classroom (UTC 1.104). Each class session will run between 75-80 minutes in length.

# Course(2) Class Session Topic Coverage:Structure:(cont.)The Course Outline gives a specific session-by-session byThe course outline gives a specific session-by-session by

The Course Outline gives a specific session-by-session breakdown of the topics we will cover in class. Throughout the semester, I will announce in class the details of the precise assignment for subsequent sessions; this information will also be posted in the appropriate location on the course home page. If you have any questions about what is to be covered in any class, please consult the website or ask me directly before the class session.

The course home page on Blackboard will also serve as an important mechanism for communicating course-related information. However, anything crucial to your class performance that is posted online also will be available through either more traditional outlets (e.g., e-mail, class handouts) or upon request. In addition to electronic versions of many of the materials distributed in class, the website will contain a file that summarizes the material covered in previous classes as well as one that specifies the required readings and problems for the next session. These files will be updated—assuming there are no network problems—no later than 2:00 pm on the day before a class session.

Electronic files containing the class lecture notes will also be posted no later than 2:00 pm on the day before a class session. As a rule, these notes *will not* be distributed in class; if you would like to have them available during the lecture, you should download them (in hard copy form) and bring them with you to class.

Class sessions will be conducted primarily in a lecture-oriented format, with class discussion always encouraged and occasionally solicited. To get the most out of each session, you should plan to (i) read the assigned textbook passages and supplementary articles in advance, and (ii) consider the assigned end-of-chapter problems and case studies. *Please note that these daily problem assignments will not be collected or graded;* their purpose is to better prepare you for the class sessions themselves. For your convenience, the solution manual to the end-of-chapter problem sets for the entire book has been posted on the course website. Additionally, a supplementary set of problems and solutions has also been posted on the course Blackboard site, for those of you who would benefit from more practice working problems.

## (3) Examination Schedule and Coverage:

The first three examinations will be given during regularly scheduled class periods; the fourth examination will be given during the assigned slot during Final Examination week. The specific dates and topic coverage for the four examinations are as follows:

Examination #1: Wednesday, February 8 (covering Class Session 1-6) Examination #2: Wednesday, March 7 (covering Class Session 8-14) Examination #3: Monday, April 9 (covering Class Session 16-21) Examination #4: Final Examination Week-TBA (covering Class Session 23-29)

It is expected that you will be present at the time and date for each of the examinations. No makeup examinations will be given without the prior consent of the instructor. Such consent will only be given for demonstrable conflicts and with the proper documentation.

Class Simply put, I expect that you will attend and contribute to the course section in which you are enrolled on a daily basis. As noted, a considerable amount of the material that will be covered in class (and on which you will be tested) *will not* appear in the textbook, the supplementary readings or even the class lecture notes that will be posted on the course website. Therefore, I consider consistent attendance to be a crucial element in maximizing your potential for learning to be a successful investor.

That said, I also recognize that myriad issues can arise during a semester (e.g., missed buses, oversleeping) that lead to absences. Accordingly, I will excuse a total of three absences during the semester, regardless of the reason.

After three incidents of absence from class, you will not be eligible to be included in the curved score distribution at the end of the semester and your final grade will be determined *solely* by where your raw weighted average score falls in the percentile range matrix described previously. Further, an excessive number of unexcused absences will be interpreted as a sign of neglect and lack of preparation, which could lead to being dropped from the course.

I will take attendance at the beginning of each class session. You will only be allowed to sign the attendance sheet if you come to class on time and stay for the entire session. That is, *instances of tardiness or leaving class early without explicit prior permission will be counted as the equivalent of an absence*.

Finally, please note **that you may not attend a section of the course in which you are not enrolled** without the prior written (i.e., by e-mail) consent of the instructor. Unauthorized attendance in a different section will be treated as an absence.

Other Class The following additional policies will also be in place this semester: Policies:

#### (1) Academic Dishonesty:

Academic dishonesty (as defined by the Policy Statement on Scholastic Dishonesty for the McCombs School of Business) will not be tolerated and will be dealt with in the most severe manner possible. I assume that all students in this course will act as if bound by this policy and you can expect the same from me. In particular, I will expect that on every individual assignment or examination the work you submit will be entirely your own and that you will provide a level and quality of input to the group projects commensurate with that of your colleagues. Failure to do so may result in failure on the project or failure in the course.

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty are described in detail in the Policy Statement on Scholastic Dishonesty for the McCombs School of Business:

By teaching this course, I have agreed to observe all of the faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all of the student responsibilities described in that document. If the application of that Policy Statement to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification. Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. You should refer to the Student Judicial Services website at <u>http://deanofstudents.utexas.edu/sjs/</u> or the General Information Catalog to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

## (2) Prohibition Against Using Electronic Devices in the Classroom:

Consistent with the policy of the Department of Finance, the use of computers and other electronic devices in class is generally prohibited. On occasion, however, the use of laptop computers may be permitted in class solely for the purposes of note-taking and discussion of the homework problems *and* when authorized in advance by the instructor.

Please note that accessing the internet, recreational programs, or e-mail and messaging accounts will never be permitted under any circumstances and is strictly forbidden.

#### (3) Students With Disabilities:

The Provost's Office offers the following statement to help inform students of available resources and to fulfill due diligence for Americans With Disabilities Act (ADA):

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

## **COURSE OUTLINE**

The following outline lists the topic coverage, reading requirements and problem sets for the semester. The "Assignment" listings refer to the end-of-chapter problems that can be found in the 10<sup>th</sup> edition of Reilly and Brown's (RB) *Investment Analysis and Portfolio Management* textbook. For the RB assignments, the question and problem numbering system refers to the relevant chapter and question or problem (e.g., Q1.2 refers to the second *question* in Chapter 1, P2.3 refers to the third *problem* in Chapter 2). All of the supplemental materials marked by an asterisk (\*) can be downloaded from the "Assigned Readings" folder in the course website on Blackboard.

#### I. Overview of the Investment Process

Class #1: Wednesday, January 18

Topic: The Global Investment Setting: Background and Review Reading: None Assignment: None

#### Class #2: Monday, January 23

Topic: The Global Investment Setting: Background and Review (cont.)

Reading: RB Chapter 1, Appendix 1

A. Smithers, "Surveying Global Economies," CFA Institute Conference Proceedings Quarterly, September 2011 - \*

Assignment: Q1.11, P1.5, P1.9, P1A.2, P1A.3

Class #3: Wednesday, January 25

Topic: The Asset Allocation Decision

Reading: RB Chapter 2

R. Ibbotson and P. Kaplan, "Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance," *Financial Analysts Journal*, January-February 2000 - \*

Assignment: Q2.1, Q2.6, Q2.9, P2.5

#### Class #4: Monday, January 30

Topic: Global Capital Markets & Security Types

Reading: RB Chapter 3, Appendix 3

C. Asness, R. Israelov and J. Liew, "International Diversification Works (Eventually)," *Financial Analysts Journal*, May-Jun 2011 - \*

Assignment: Q3.1, Q3.4, Q3.16, P3.4, P3A.1, P3A.2

Class #5: Wednesday, February 1

Topic: Market Indicators & Indexed Investing

Reading: RB Chapter 5 (pp. 123-133), Appendix 5 Chapter 16 (pp. 551-558)

Assignment: Q5.8, Q5.12, P5.4a-b, P5.5, Q16.4, P16.8

Topic: Security Markets and Trading

Reading: RB Chapter 4

Assignment: Q4.3, Q4.4, Q4.10, P4.2, P4.4, P4.7

Class #7: Wednesday, February 8

Topic: Examination #1

#### II. Portfolio Theory & Asset Pricing Models

Class #8: Monday, February 13

Topic: Risk & Diversification: Fundamentals

Reading: RB Chapter 7 (pp. 181-198)

K. Brown, "A Brief Review of the Portfolio Formation Process," Lecture Notes (pp. 1-6), January 2012 - \*

Assignment: Q7.3, Q7.12, P7.5, P7.6, P7.7

Class #9: Wednesday, February 15

Topic: Risk & Diversification: Efficient Frontier & Capital Market Line

Reading: RB Chapter 7 (pp. 198-201), Appendix 7 Chapter 8 (pp. 207-216)

Assignment: Q7.6, Q7.11, Q8.1, P8.3

Class #10: Monday, February 20

Topic: Risk & Expected Return: Capital Asset Pricing Model

Reading: RB Chapter 8 (pp. 216-229, 232-234)

K. Brown, "Some Useful Facts About Beta," Lecture Notes, January 2012 - \*

Assignment: Q8.3, P8.5, P8.7, P8.8

Class #11: Wednesday, February 22

Topic: Risk & Expected Return: Arbitrage Pricing Theory & Multi-Factor Models Reading: RB Chapter 9 (pp. 241-247, 250-261)

Assignment: Q9.2, Q9.5, P9.2, P9.4

## III. Investment Instruments: Fixed-Income & Equity Securities

Class #12: Monday, February 27

Topic: Fixed-Income Investing: Instruments & Valuation

Reading: RB Chapter 17 (pp. 591-598, 615-620) Chapter 18 (pp. 623-632, 640-647)

K. Brown, "The Fundamentals of Bond Valuation," Lecture Notes, January 2012 - \*

Assignment: Q17.2, Q17.8, P17.4, P18.2

Topic: Fixed-Income Investing: Valuation (cont.)

Reading: RB Chapter 18 (pp. 654-674)

M. Kritzman, "What Practitioners Need to Know about Duration and Convexity," *Financial Analysts Journal*, September-October 1992

Assignment: Q18.7, Q18.8, P18.3, P18.7

Class #14: Monday, March 5

Topic: Fixed-Income Investing: Strategies

Reading: RB Chapter 19 (pp. 691-699, 713-722)

Assignment: Q19.1, Q19.8, P19.1, P19.7

Class #15: Wednesday, March 7

Topic: Examination #2

Class #16: Monday, March 19

Topic: Equity Investing: Market Efficiency & Behavioral Finance

Reading: RB Chapter 6 (pp. 149-161, 165-177)

G. Bhandari and R. Deaves, "The Demographics of Overconfidence," *Journal of Behavioral Finance*, First Quarter 2006 - \*

Assignment: Q6.24

Class #17: Wednesday, March 21

Topic: Equity Investing: Valuation Process & Discounted Cash Flow Analysis

Reading: RB Chapter 11 (pp. 327-347), Appendix 11

K. Brown, "The Foundations of Stock Valuation," Lecture Notes, January 2012 - \*

Assignment: Q11.1, Q11.8, P11.4, P11.6, P11.15

Class #18: Monday, March 26

Topic: Equity Investing: Discounted Cash Flow Analysis (cont.)

Reading: RB Chapter 14 (pp. 467-477)

K. Brown, "Some Thoughts on Cash Flow," Lecture Notes, January 2012 - \*

Assignment: Q14.8, P14.8, Company Valuation Analysis Case Study - \*

Topic: Equity Investing: Relative Valuation & Strategy

Reading: RB Chapter 11 (pp. 347-352) Chapter 14 (pp. 494-499) Chapter 16 (pp. 558-573)

K. Brown, "The Conceptual Relationship Between DCF and Relative Valuation Techniques," Lecture Notes, January 2012 - \*

Assignment: Q14.10, Q14.21, Q16.9, P16.5, Comparable Multiples Valuation Case Study - \*

## IV. Investment Performance Measurement

Class #20: Monday, April 2

Topic: Traditional Evaluation Measures: Peer Comparisons and Basic Risk-Adjusted Measures

Reading: RB Chapter 25 (pp. 959-972)

Assignment: Q25.3, P25.1, P25.2, P25.3

### Class #21: Wednesday, April 4

Topic: Traditional Evaluation Measures: Advanced Risk-Adjusted Measures

Reading: RB Chapter 25 (pp. 972-978, 980-982, 990-993)

V. Harlow and K. Brown, "The Right Answer to the Wrong Question: Identifying Superior Active Portfolio Management," *Journal of Investment Management*, Fourth Quarter 2006 - \*

Assignment: Q25.4, Q25.5, P25.4, P25.6

Class #22: Monday, April 9

Topic: Examination #3

#### V. Investment Instruments: Derivative Securities

Class #23: Wednesday, April 11

Topic: Forward & Futures Contracts: Fundamentals Reading: RB Chapter 20 (pp. 741-747, 754-755, 767-768)

Chapter 21 (pp. 781-785)

Assignment: Q20.2, P20.1a(1)-b(1), P20.2a(1)-b(1), P20.3a(1)-b(1)

Class #24: Monday, April 16

Topic: Forward & Futures Contracts: Valuation & Strategy

Reading: RB Chapter 21 (pp. 786-796, 800-806)

Assignment: Q21.7, P21.4, P21.8, P21.9

Class #25: Wednesday, April 18

Topic: Option Contracts: Fundamentals

Reading: RB Chapter 20 (pp. 747-750, 755-760, 768-772) Chapter 22 (pp. 821-828)

Assignment: P20.1a(2)-b(2), P20.2a(2)-b(2), P20.3a(2)-b(2), P20.4, P20.5a-b

Class #26: Monday, April 23

Topic: Option Contracts: Basic Valuation

Reading: RB Chapter 20 (pp. 760-765) Chapter 22 (pp. 830-839)

Assignment: P20.5c, Q22.5, P22.2, P22.3, P22.4

Class #27: Wednesday, April 25

Topic: Option Contracts: Advanced Valuation & Strategy

Reading: RB Chapter 22 (pp. 839-847, 850-859)

K. Brown, "The Foundations of Option Valuation," Lecture Notes, January 2012 - \*

Assignment: Q22.4, P22.6, P22.10, P22.11

#### VI. Professional Investment Management

Class #28: Monday, April 30

Topic: Traditional Asset Management: Private Firms & Mutual Funds
Reading: RB Chapter 24 (pp. 911-929)
C. Ellis, "The Winner's Game," *Financial Analysts Journal*, Jul-Aug 2011 - \*

Assignment: Q24.1, Q24.5, P24.1, P24.8

Class #29: Wednesday, May 2

Topic: Alternative Asset Management: Hedge Funds & Private Equity Reading: RB Chapter 24 (pp. 929-945) Assignment: Q24.8, P24.10

## **Biographical Sketch of the Course Instructor**



Keith C. Brown University Distinguished Teaching Professor & Fayez Sarofim Fellow

Department of Finance University of Texas at Austin

Keith Christopher Brown currently holds the positions of University Distinguished Teaching Professor and Fayez Sarofim Fellow in the Department of Finance at the McCombs School of Business, University of Texas at Austin. He received his M.S. and Ph.D. in Financial Economics from the Krannert Graduate School of Management at Purdue University. Since leaving school in 1981, he has specialized in teaching Investment Management, Portfolio Management and Security Analysis, Capital Markets, and Derivatives courses at the BBA and MBA levels and has received eighteen awards for teaching innovation and excellence. In 2006, he was elected to the University's prestigious Academy of Distinguished Teachers. Keith's publications have appeared in such journals as Journal of Finance, Journal of Financial Economics, Review of Financial Studies, Journal of Financial and Quantitative Analysis, Review of Economics and Statistics, Financial Management, Journal of Financial Markets, Financial Analysts Journal, Journal of Portfolio Management, Journal of Investment Management, Journal of Fixed Income, Journal of Applied Corporate Finance, and Advances in Futures and Options Research. He received a Graham and Dodd Award from the Financial Analysts Federation as a co-author of one of the best articles published by Financial Analysts Journal in 1990 and a Smith-Breeden Prize from the Journal of Finance in 1996. Keith is also a co-author of two textbooks, Interest Rate and Currency Swaps: A Tutorial (with Donald J. Smith) and Investment Analysis and Portfolio Management, 10e (with Frank K. Reilly).

Keith is the co-founder and Senior Partner of Fulcrum Financial Group, a portfolio management, business valuation, and investment advisory firm located in Austin, Texas and Las Vegas, Nevada. For more than twelve years, he has served as President and Chief Executive Officer of The MBA Investment Fund, LLC, a private capital appreciation fund managed by students at the University of Texas and also was the Director of the Department's Hicks, Muse, Tate & Furst Center for Private Equity Finance. From May 1987 to August 1988 Keith was based in New York as a Senior Consultant to the Corporate Professional Development Department at Manufacturers Hanover Trust Company. He has also lectured extensively in the global Executive Development programs for companies such as Fidelity Investments, Commonfund Institute, JP Morgan Chase Bank, Merrill Lynch, Lehman Brothers, Chase Securities, Union Bank of Switzerland, Chemical Bank, Chase Bank of Texas, USAA Investment Management, Security Commission of Malaysia, The Beacon Group, Motorola, Halliburton, Association for Investment Management and Research, and spent thirteen months as a senior planner with a San Diego, Californiabased financial planning firm. In August of 1988, Keith received his charter from the CFA Institute. He currently serves as Advisor to the Board of Trustees of Teacher Retirement System of Texas and the Board of Directors of University of Texas Investment Management Company and as Associate Editor for Journal of Investment Management, Journal of Behavioral Finance and International Journal of Portfolio Analysis & Management. For five years he held the position of Research Director for the Research Foundation of the CFA Institute.