

**University of Texas at Dallas
School of Management**

Finance 6310
Investment Management

Professor Day
Spring 2009

Course Syllabus

Course Description:

This course examines a wide range of topics related to the management of investment capital. Our objective is to enhance your understanding of the role of financial theory in the management of financial assets and to develop a framework for addressing current issues related to financial planning and personal investment decision-making. The topics to be covered during the semester include trading, stock valuation, active portfolio management, asset allocation, global diversification, performance measurement, options, and fixed income securities. The learning objectives for the course include understanding the theory of portfolio choice and the impact of residual risk on active stock selection, the advantages and disadvantages of alternative measures of risk-adjusted investment performance, the role of options in investment management, and the techniques that are used to estimate the sensitivity of stock returns to systematic risk factors. Prerequisites Include: Finance 6301 and OPRE 6303.

Course Requirements:

The requirements for Finance 6310 include a midterm and a comprehensive final examination. In addition, you are required to evaluate the risk and the risk-adjusted investment performance of a simulated investment portfolio and to complete several required homework assignments. Your grade in Finance 6310 will be determined by the total number of points accumulated during the semester from the following categories:

Portfolio Risk and Performance Assessment	100
Graded Spreadsheet Assignments	50
Midterm Examination	100
Final Examination	150

In the event of an *approved* conflict with the mid-term examination, the final examination will be weighted more heavily (250 points) in determining your final grade.

Required Textbook and Other Class Materials:

Lecture notes and assigned homework will be available at <http://www.utdallas.edu/~tday/>. Most of the journal articles listed in the course outline can be found on the internet or may be available in electronic format from UTD's McDermott Library. Solutions to assigned homework will be available on the WebCT site for the course. The required textbook for Finance 6310 is:

Zvi Bodie, Alex Kane and Alan J. Marcus. *Investments*. McGraw Hill, Eighth Edition, 2008.

Office Hours:

My office is located in room SM 3.815. I can be reached by phone at 972-883-2743 or by e-mail at tday@utdallas.edu. My scheduled office hours will be Wednesdays from 5:30 P.M. to 6:45 P.M. In addition, I am pleased to schedule late afternoon and early evening appointments on relatively short notice (usually that day).

Portfolio Risk and Performance Assessment Report:

Each student is required to manage a \$1,000,000 portfolio during the semester. Each student will be required to register for an account with Stock-Trak at www.stocktrak.com. The cost of each account is \$25.95. The Trading Rules for the portfolio simulation can be downloaded from the Stock-Trak web site. Trading will begin on Monday September 8 and end on Friday November 14. Your account activity can be monitored at www.stocktrack.com. **Each student is responsible for keeping all records required to track their portfolio's weekly performance.**

Your portfolio must include long positions in **at least ten** but **not more than twenty** stocks, as well as at least **one call option position** of 10 or more contracts, and **one put option position** of 10 or more contracts. **No more than 25 percent** of your portfolio may be invested in any one security. **UTD's** rigid investor suitability requirements **expressly prohibit you from trading commodity futures and currencies**. Each student is required to monitor the impact of option positions on portfolio risk and return on a week-by-week basis. Thus, **you must keep weekly records of the value of these option positions and of the value of the underlying stocks** in order to **account for the impact of option positions on your portfolio's market and firm-specific risks**.

Your Performance Evaluation and Risk Assessment Report is due on April 28. Your report should not exceed **five** double-spaced pages (excluding exhibits). Each report must **include an explicit investment policy statement** and provide a quantitative estimate of the portfolio's **exposure to systematic (beta) and residual (firm-specific/omega) risk**. The residual risk for individual securities can be estimated using a regression analysis of the 52 weekly returns during the 2008 calendar year, or else extracted from a recent estimate for the implied volatility for an at-the-money call option written on the stock. If your portfolio holdings remain relatively constant during the semester, the creation of week-by-week estimates of portfolio risk will not be necessary. However, if you choose to engineer significant changes in your portfolio's mix of assets during the semester, you must provide separate estimates of portfolio risk for those weeks having significantly different portfolio holdings. Each student's performance analysis should include **explicit comparisons of their portfolio's risk and return** with the risk and return for both the overall stock market and for their benchmark performance index. The justification for the benchmark used in evaluating your portfolio's investment performance is an important component of your report. For example, if you plan to invest primarily in large capitalization stocks then the S&P 500 would be a reasonable performance benchmark, while if you invest in both large and small capitalization stocks you should use either the Wilshire 5000 or a composite benchmark. Your report should evaluate the performance of your portfolio using **at least three** measures of risk-adjusted performance, including an explicit estimate of the number of basis points by which your portfolio outperformed or underperformed the market. Your grade for the project will be based on the quality of your performance evaluation and risk analysis, and not on your portfolio's actual performance. However, since money management is about beating your benchmark, I will assign **20 bonus points** to the student who **most convincingly supports** their claim to having the best risk-adjusted performance, with the curve for assigning semester grades to be set prior to the assignment of bonus points.

Spreadsheet Assignments:

Each student is required to complete three problem-oriented spreadsheet assignments. These assignments include an analysis of confidence intervals for the long-run value of a portfolio (**due on February 17--see Lecture 3**), construction of a portfolio optimization model (**due on February 24--see Lecture 4**) and the estimation of the market and factor risk for a group of individual stocks (**due on March 31--see Lecture 7**). Each student is required to build a unique spreadsheet from the ground up (group solutions are prohibited) and provide a numerical answer and an intuitive interpretation of the solution for each of the assigned spreadsheet problems. Although each spreadsheet assignment will require a series of explicit numerical solutions, your ability to describe and discuss the results of your spreadsheet analysis will be an important consideration in determining your grade on spreadsheet assignments. **Late work will not be accepted.**

Homework Assignments:

In addition to three spreadsheet assignments that will be distributed during the semester, I plan to distribute *eight* homework assignments during the semester (distinct from spreadsheet assignments). Although I do not plan to collect the solutions to these assignments (at the present time), I strongly encourage you to work out solutions for these problems to better prepare yourself for the midterm and final examinations. Practicing the concepts and techniques covered by the classroom lectures will improve the quality of the risk assessment and performance measurement required by your portfolio management project, as well as your performance on the midterm and final examinations. I will post suggested solutions to assigned homework on the 2nd Tuesday following the distribution of the respective homework assignments. Solutions to weekly homework problems will be made available on the WebCT site for the course.

Examinations:

Students may be required to show *appropriate photo identification* prior, during, or at the end of examinations. Students entering the examination room will be required to take consecutive seats in the order of arrival (beginning from the left-most seat in the second row) until each row is filled, starting over with the left-most seat in the next row. All examinations will be *closed book* and *closed-notes*. The terms closed book and closed-notes mean that there are no circumstances where students will be allowed to refer to their textbook, class notes, or any other class materials during examinations. To ensure compliance with the requirement that exams be closed book and closed notes, students may not bring textbooks, notebooks, backpacks, or other items to either the midterm or final examinations. Students who inadvertently bring textbooks, notebooks, or backpacks to examinations will be required to place these items on the floor by the lectern at the front of the examination room. Students *will not be permitted to use or have in their possession cell phones or other wireless devices and methods of communication* during examinations.

Students *may use calculators during examinations*. However, the choice of calculators is *restricted to either the Casio fx-65 (available from Radio Shack) or one of the business calculators authorized for use on the CFA examination (the TI BA II Plus and BA II Plus Professional or the HP 12C and HP 12C Platinum)*. Consistent with the procedures governing the use of calculators during the Chartered Financial Analyst examinations, I reserve the right to inspect your calculator prior to the start of the examination. Calculators must remain on your desk in full view during the exam, with inspection of calculators continuing throughout the examination. Use of an unauthorized calculator will be considered a serious violation of the honor code. Although the cover to your calculator, along with the keystroke instructions printed on the back of the calculator or on the cover may be referenced during the examination, the instruction manuals for your calculator are not permitted in the examination room. *The use of a calculator or other electronic device to store and access class materials such as lecture notes and homework solutions during the examination will be treated as a serious violation of the honor code.*

Each student may use (*only*) *one 8.5" x 11"* sheet of paper to transcribe formulas that may be referenced during the examination. The content of your formula sheet is *limited to formulas* and may not include worked examples, notes, labels or definitions of variables. The formula sheet must be *hand written* (you *may not* cut and paste formula's from my lecture notes or other sources) and fully contained *on the two sides of one sheet* of paper *no larger than 8.5 inches x 11 inches*.

Grading Policy:

The semester grades assigned in Finance 6310 will be based on an end-of-semester ranking of students according to the total points accumulated in fulfilling the course requirements. Both the absolute number of points accumulated and students' respective rankings will be used in assigning each student to one of four groups: excellent, good, below average and substandard. While I have a general standard for the number of points required to enter each of the four groups, the precise cutoff points used to assign grades will be an end-of-semester decision based on my perceptions of overall class effort, the difficulty of the exams and assigned homework, and other factors that I consider appropriate. In the past, point totals of 340 and 290 have usually been sufficient to earn an A and a B respectively, while point totals less the 220 have usually resulted in a failing grade. There will be no constraint on the percentage of the class that is assigned any given grade.

Classroom Decorum:

Classroom attire for students may range from casual (e.g., shorts and t-shirts) to business attire (e.g., a coat and tie). However, students attending class must be dressed in *good taste* at all times. Students will be required to wear shoes or sandals at all times during class. Further, students will not be permitted to wear hats, stocking caps, scarves or other head coverings during class. While I am pleased to make *exceptions for any headwear having a traditional link to the observance of religious custom*, no religious significance will be attributed to broad-brimmed hats, stocking caps, or to hats bearing the logos of sports franchises (e.g., Texas Rangers), automotive products (e.g., Valvoline), vacation destinations (e.g., Durango) or the like, whether such headwear is worn forwards or backwards. In the interest of keeping the classroom in good condition, I will *enforce the University ban on the consumption of food and beverages in the classroom*.

Honor Code:

In accordance with the *Rules and Regulations* of the Regents of the University of Texas System, students in Finance 6310 are expected to be above reproach in all scholastic activities, including but not limited to homework assignments and in-class examinations. Many of the homework problems and spreadsheet exercises that will be assigned during the semester have been used previously at UTD by either myself or by my colleagues. The term "above reproach in all scholastic activities" specifically prohibits use of homework solutions or spreadsheet templates from previous semesters, as well as any other materials that have previously been developed at UTD or other institutions of learning. The use of any prohibited materials or violations of any and all rules governing the administration of in-class examinations will be treated as a serious violation of the honor code. To maximize compliance with the honor code during in-class examinations, talking among students is expressly prohibited and will be treated as a serious violation of the honor code. Students sitting in adjacent seats during examinations may be required to take different versions of the respective midterm and final examinations (covering similar conceptual issues). Attempts to circumvent the requirement that students sitting adjacent to one another must take alternate versions of in-class examinations will be treated as a serious violation of the honor code. Although the penalties for violations of the honor code are imposed by the Office of Judicial Affairs, my referral to the Office of Judicial Affairs with regard to any and all violations of the honor code will be accompanied by my *strongest recommendation* that the student in question receive a failing grade for the course and be placed on *permanent academic suspension* from the University. Detailed information concerning the University Policy on Scholastic Dishonesty is available on the University web page.

Course Outline:

The articles listed below are either available on the internet, or can be obtained in electronic format or hard copy from the McDermott Library. Unfortunately, UTD's interpretation of certain legal precedents regarding the 'fair use and distribution' of copyright protected material in electronic format prevent me from making copies of these articles available to you on the WebCT site for the course. However, if you have difficulty obtaining any of the materials listed below I am happy to assist you. All assignments are printed in bold-faced font. Please remember that you are required to **submit detailed solutions for all spreadsheet assignments** (as described previously), although you will **not be required to submit solutions to the weekly homework assignments**.

- I. Market Efficiency, Investment Performance, and Investment Policy *January 13*
- Bodie, Kane and Marcus, pages 279-299, pages 320-324 and Chapter 28.
- Bodie, Kane and Marcus, Review *CFA Exam Questions 1-12* on pages 314-316.
- John Maynard Keynes. "The State of Long-Term Expectations." Chapter 12 of *The General Theory*, Macmillan, 1936.
- II. Stock and Option Trading, Performance Benchmarks, and Mutual Funds *January 20*
- Bodie, Kane and Marcus, pages 35-48, Chapters 3 and 4, pages 671-686
- Gary Gastineau. "Exchange-Traded Funds: An Introduction." *Journal of Portfolio Management*, Spring 2001, 88-96.
- Homework Set 1***
- III. Dividend Discount Models, Implied Alphas, and Long Run Performance *January 27*
- Bodie, Kane and Marcus, Chapter 18
- Arthur B. Laffer and Marc Miles. "Five Factors Distorting P/E Comparisons Over Time." *Laffer Associates Supply-Side Investment Research*, March 19, 2003.
- Jeremy J. Siegel. "The Nifty Fifty Revisited: Do Growth Stocks Ultimately Justify Their Price?" *Journal of Portfolio Management*, Summer 1995, 8-20.
- Jeremy J. Siegel. "Valuing Growth Stocks: Revisiting the Nifty Fifty." *American Association of Individual Investors*, 1998.
- Homework Set 2***
- IV. Forecasts of Expected Returns and the Optimal Asset Allocation *February 3*
- Bodie, Kane and Marcus, Chapters 5 and 7, and pages 935-941
- Roger Ibbotson and P. Chen. "Long-Run Stock Returns: Participating in the Real Economy." *The Financial Analysts Journal*, January/February 2003, 88-98.
- Spreadsheet Assignment 1: Due February 17***

V. Time Diversification and Asset Allocation February 10

M. Kritzman. "What Practitioners Need to Know...about Time Diversification." *The Financial Analyst's Journal*, January/February 1994, 14-18.

Roger Ibbotson and P. Kaplan. "Does Asset Allocation Policy Explain 40, 90, or 100 Percent of Performance?" *Financial Analysts Journal*, Jan/Feb 2000, 26-33.

Spreadsheet Assignment 2: To be handed in on February 24

VI. Stock Selection and Active Portfolio Management February 17

Bodie, Kane and Marcus, Chapter 6 and pages 259-266, 903-910 and 924-935.

Richard C. Grinold. "Real Alphas Don't Get Eaten." *The Journal of Portfolio Management*, Summer 1994, 9-16.

Homework Set 3

VII. Global Diversification and Performance Attribution February 24

Bodie, Kane and Marcus, Chapter 25.

Homework Set 4

VIII. ***Midterm Examination (Lectures I to VII)*** ***March 3***

IX. Estimation of Beta and Tests of Asset Pricing Models March 17

Bodie, Kane and Marcus, pages 266-271, 295-305, 319-324, 332-337 and Chapter 13.

Eugene F. Fama, Jr. "Asset Management: Engineering Portfolios for Better Returns." PCT Publishing, May 1998.

William F. Sharpe. "Asset Allocation: Management Style and Performance Measurement." *Journal of Portfolio Management*, Winter 1992, 7-19.

P. Bernstein. "If Beta Is Dead, Where Is the Corpse?" *Forbes* (July 20, 1992), 343.

N. Jegadeesh and S. Titman. "Returns to Buying Winners and Selling Losers." *Journal of Finance* 48, March 1993, 65-92.

Spreadsheet Assignment 3: Due March 31

X. Performance Measurement March 24

Bodie, Kane and Marcus, Chapter 24.

Stephen L. Nesbitt. "Buy High, Sell Low: Timing Errors in Mutual Fund Allocations." *Journal of Portfolio Management*, Fall 1995, 57-60.

Alan J. Marcus. "The Magellan Fund and Market Efficiency." *The Journal of Portfolio Management*, Fall 1990, 85-88.

Homework Set 5

- XI. Options *March 31*
 Bodie, Kane and Marcus, Chapters 20 and 21
Homework Set 6
- XII. Tests of Market Efficiency and the Profitability of Active Trading Strategies *April 7*
 Bodie, Kane and Marcus, Chapters 11 and 12
 Robert Tumarkin and Robert F. Whitelaw. “News or Noise? Internet Postings and Stock Prices” *Financial Analysts Journal*, May/June 2001, 41-51.
 Kenneth L. Fisher and Meir Statman. “Investor Sentiment and Stock Returns.” *Financial Analysts Journal*, March/April 2000, 16-23.
- XIII. Bond Yields, Default Premiums, and the Term Structure *April 14*
 Bodie, Kane and Marcus, pages 23-35 and Chapters 14, and 15
 Ed Altman and J. Bencivenga. “A Yield Premium Model for the High-Yield Debt Market.” *The Financial Analysts’ Journal*, September-October 1995, 49-56.
 Ed Altman and Guarav Bana. “Defaults and Returns on High Yield Bonds.” *The Journal of Portfolio Management*, Winter 2004, 58-73.
Homework Set 7
- XIV. Interest Rate Risk and Bond Duration *April 21*
 Bodie, Kane and Marcus, Chapter 16
Homework Set 8
- XV. Managing the Interest Rate Risk for Fixed Income Portfolios *April 28*
 Bodie, Kane and Marcus, Chapter 16
Homework Set 8
- XVI. Final Exam *May 5*