Course Objectives: To introduce the student to an analytical treatment of Investments and Portfolio Theory consistent with the notion of efficient markets. Valuation models and the standard paradigm of portfolio theory will be developed and extended. The course will also address investing in international/global markets.


Supplementary Materials:
1. Wall Street Journal - Daily reading of WSJ is strongly recommended.
2. Problems and Solutions manual will be made available. Problems are attached.
3. The Internet - Selected sites.

Grades:
Midterm Exam (March 27) 35%
Final Exam (May 9) 45%
Stock-Trac (Investment Simulation, handout attached) 20%

Examinations - Exams will a combination of multiple choice questions, short essay questions and problem solving. The final exam will cover only material that follows the mid-term. Students are responsible for all assigned readings plus materials covered in class. A formula sheet may be used while taking exams. Absent written medical reasons, exams must be taken when scheduled, otherwise, make up exams are not permitted. Instructor reserves the right to change the date of scheduled exams, except for the final exam.

Academic Honesty: “Students are responsible for maintaining and adhering to the strictest standards of honest and integrity in every aspect of their lives. Honest in academic matters is a large part of their obligation. Specific regulations governing student academic conduct are contained in the Code of Student Conduct, and these should be read to avoid any misunderstanding.”

Other: Cell Telephones are disruptive and may not be used the classroom

* The course syllabus provides a general plan for the course: Deviations may be necessary.
Jan 28
Introduction: Stock-Trac, The Investment Environment, 1
Markets and Instruments 2

Feb 4
How Securities are Traded 3
Mutual Funds and Other Investment Companies 4

Feb 18
Mutual Funds (con’t), Interest Rates & Risk Premiums 4,5

Feb 25
Concepts and Issues: Risk and Risk Aversion 6
Capital Allocation Between Risky and Risk-Free Asset 7

Mar 8
Optimal Risky Portfolios 8

Mar 11
Capital Asset Pricing Model 9
Single Index and Multifactor Models 10

Mar 18
Mid-Term

Mar 25
Arbitrage Pricing Theory, Market Efficiency 11,12
Empirical Evidence on Returns 13

Apr 8
Bond Prices and Yields, Term Structure 14,15
Fixed Income Portfolio Management 16

Apr 15
Micro Economic Analysis: Equity Valuation Models 17,18
Financial Statement Analysis (reading only) 19

Apr 22
Options Markets: Options Valuation 20,21

Apr 29
Futures Markets: Futures and Swaps 22,23

May 6
Portfolio Performance Evaluation: 24
International Diversification 25

May 13
Final Exam – 8:00-10:00 pm
Problems for Finance 7826

The following problems are assigned. A solutions manual will be made available. Some of these problems will appear on your mid-term and final exam.

Chapter 1:  3,10,12,14
Chapter 2:  2,3,4,5

Chapter 3:  1,3,4,12,15
Chapter 4:  2,4,6,15

Chapter 5:  4, 5, 8,18

Chapter 6:  2,3,11,15
Chapter 7:  2,7,8,9

Chapter 8:  1,2,5,7

Chapter 9:  1,3,6,8,17
Chapter 10:  1,4,5,7

Chapter 11:  1,2,3
Chapter 12:  15,17,23
Chapter 13:  1,3,6

Chapter 14:  5,12,13
Chapter 15:  1,6,11
Chapter 16:  1,2,14

Chapter 17:  3,5,6
Chapter 18:  1,2,17
Chapter 19:  1,7,10

Chapter 20:  3,4,17,18
Chapter 21:  3,4,6,9

Chapter 22:  1,6,13,16
Chapter 23:  1,6,7,12

Chapter 24:  1,3,4,5
Chapter 25:  4,8,9,10
Trading Period: Monday, February 18 until Friday, April 26.
Simulated Funds Available: $500,000

Instructions: Read carefully the instructions for using Stock-Trac (provided) and formulate your investment objectives. After formulating objectives, select securities or portfolios and execute your strategy. You may trade up to 100 times during the Trading Period, but note that trading incurs expenses. You have two accounts—use one for trading (if you wish) and a second account which permits a limited number of trades (20). The second account should be used primarily as a buy and hold account. Comparison of the first and second accounts should prove interesting.

Your final grade (20%) is based on the quality of your final report, to be turned after April 26 and no later than May 6. The report should be at least 10 pages long (5 pages exclusive of figures and charts). Please note that your grade is not significantly determined by your investment returns (there can be sampling error—the report with the highest returns in 2001 had a heavy concentration in Enron!) The report is not limited to, but must include the following:

1. A description of your investment objectives.

2. A description and rationale for your trading activity during the simulation. Include the final portfolio statement from Stock-Trac in your final report.

3. A description, using appropriate statistical measures, of the risk and return of your portfolio over the investment period.

4. An appraisal of your performance. How did your portfolio perform relative to:
   a. Your stated objectives
   b. Your prior expectations
   c. Appropriate benchmarks

5. Did you learn anything in class that would have improved your results? If you were to repeat the project beginning tomorrow, what would you change?

6. Compare the results of your primary strategy with that of the buy-and-hold strategy.

7. Cite references used in your report.

Getting Started (Instructions sent to me from Stock-Trac)
Instruct your students to then go to our web page at www.stocktrak.com/regmat2001.pdf and print out the registration materials/trading rules from our web page. Following the "Read Rules" link in the left hand column of the home page directs them to the same link. After having printed out the trading rules, have your students register their assigned account number at http://www.stocktrak.com/studsignup.htm. This corresponds to the "Open Account" link in the left hand side of the home page. Your accounts will be active on Feb. 18, 2002 with 500,000 and we will send bi-weekly statements to your email address.

**Possible Investment Strategies – Stock Trac Assignment**

1. **Indexing**
   a. Domestic Indexing
   b. Global Indexing
   c. Country or Area Indexes
   d. Indexing Growth or Sector Stocks

2. **Core Indexing** - A large proportion (say 75%) indexed combined with selective stock picks.

3. **Enhance Portfolio with Derivatives**
   a. Protective Put – Add Puts to chosen portfolio to lessen downside risk.
   b. Yield Enhancement – Sell Calls on chosen portfolio to provide additional yield, while forgoing large upside gains in the portfolio.

4. **Derivatives Portfolios**
   a. Buy Index Futures, i.e. S&P Futures contract
   b. Buy Some Index Futures, remaining funds in “Cash”

4. **High Income Portfolios**
   a. High Yield - Portfolios of high yield bonds
   b. Balanced Portfolios - Portfolios with a mixture of bonds and high dividend stocks.

5. **Portfolios with some income and low risk**
   b. Blue Chips with high dividends

6. **Capital Gain Portfolios – For the high income investor.**
   a. High Risk - Minimize taxes and choose portfolios that primarily offer capital gain. Perhaps biotech or internet stocks.
   b. Established “Growth Companies”

7. **Contrarian** – Buy past losers
8. **Value Portfolios** - Buy stocks with low Price/Earnings Ratio or low market to book.

9. **Income Averaging** – Invest so much per week (month, etc) to try to lower average cost per stock. i.e., you buy more shares when prices are low, fewer when prices are high.

10. **Filter Rule Portfolios** - Buy stock which move up x percent in a given time interval (say 2 percent in a given day), then hold them until the fall x percent from a subsequent high.

11. **Momentum strategy** – Buy portfolios or funds which have performed well in the last period.

12. **Go to the Web Pages of Mutual Funds such as Vanguard, Dreyfus, Fidelity, etc.** (all under the URL [www.name.com](http://www.name.com)). They have a lot of educational material plus Mutual Funds Strategies that you may wish to use.

**Obtaining and analyzing Data on Stocks, Mutual Funds or Options**

Sources: NASDAQ, NYSE, CBOE, CBOT, CNNFN … many others.

One especially good source is NASDAQ. There you can get historical data on stocks, mutual funds and derivatives. It can be download into your spreadsheet program as follows:

1. go to www.nasdaq.com
2. enter stock, mutual or option symbol
3. select “info quotes”
4. select stock chart
5. select “check on chart to view data”
6. select number of months, e.g. 36 months.
7. left click to select data
8. right click and select copy (w/left click)
9. select Windows Start, select Run
10. Type Notepad. Then OK.
11. right click, left click and paste
12. name your file and select *.txt document (ANSI ok in next panel)
13. open file in spreadsheet, e.g. EXCEL. There are several menus … select next and then finish.