

UNIVERSITY OF PENNSYLVANIA
The Wharton School

Investment Management
Professor Stambaugh

Course Syllabus
Fall 2009

Course Description

The course undertakes a rigorous study of concepts and evidence relevant to investment management. Topics include asset allocation, diversification, long-short strategies, factor models, long-horizon investing, portfolio optimization, hedge funds, mutual funds, behavioral finance, performance evaluation, trading, and simulation. The course does not deal with individual security valuation, i.e., “equity research” or “stock picking.”

The prerequisites are Fin 601 and Stat 621 (MBA students) or Fin 100 and Stat 101 (undergraduates). Given that investment management requires one to analyze and deal effectively with uncertainty, a good grounding in statistics is essential, and familiarity with statistics should extend through multiple regression, covariance, and correlation.

Purchases

1. *Investments*, by Zvi Bodie, Alex Kane, and Alan J. Marcus (8th ed.), McGraw-Hill. (*Student Solutions Manual* recommended.)
2. Cases available from Wharton Reprographics, via www.Study.Net.

Grading

Course grades will be based on two exams, four project write-ups, and class participation:

| | <u>Percent</u> |
|-------------------------------------|----------------|
| Exam 1 (Oct. 26 , in class) | 30 |
| Exam 2 (Dec. 3 , in class) | 30 |
| Project write-ups | 20 |
| Class participation | 20 |
| Total | <u>100</u> |

Team sign up

At the beginning of the course, students will form teams of three or four members for purposes of submitting project write-ups and preparing for class discussions. Team sign up is via the course eRoom on Wharton’s webCafé, and all members of a team must be in the same course section.

Projects

Team members will work jointly on each of the four projects and submit one write-up per team. Write-ups should be submitted by **9:00 AM on the due date**, using webCafé, in order to avoid lateness penalties. Project assignments will be posted on webCafé about two weeks prior to the due dates. Project due dates are September 23, October 14, November 18, and December 9.

Case discussions

A significant portion of the class participation grade is based on case discussions. It is expected that team members will work jointly in analyzing cases and preparing for class discussions, but every student in the class should be prepared to discuss each case. I will cold-call occasionally but expect students to volunteer comments much of the time. About a week before each case discussion, I will post on webCafé a few pertinent questions about the case. These questions are not intended to be a comprehensive summary of the issues that could arise during the case discussion, but I hope they will be useful when thinking about the case and in stimulating discussion. Written answers are not submitted.

Exams

The exams, given during regular class-meeting times, are closed-book but you may bring one 8½ × 11 inch “cheat sheet” (two-sided) to each exam. Exam answers will be posted on webCafé a day or two following the exam.

Readings and homework problems

I will use webCafé to post assigned readings from the text (“BKM”) and homework problems for you to work (but not submit). In addition, I will often post copies/links of articles and other material for students wishing more depth or background on topics covered in class.

Help and questions

I welcome students to see me outside of class to discuss any aspect of the course. My scheduled office hours, when students may come without appointments, are Wednesday from 4:30 to 5:30 (after my last class) and Thursday from 2:00 to 3:00. I am available by appointment at other times. My office is at 3251 SHDH, my e-mail is stambaugh@wharton, and my phone is 8-5734.

The TA’s for the course are James Park and Robert Ready, who are Wharton Ph.D. students in finance. James’s email is parkjam@wharton, and his office hours are Thursdays, 1:30-3:00, in SHDH 2435. Rob’s email is rrady@wharton, and his office hours are Tuesdays, 1:30-3:00, in SHDH 2316.

Questions about course material or course management should be submitted using the Discussion feature on webCafé. That way all students in the course can view responses that may overlap with questions they have as well.

Note: Non-Wharton students who are enrolled in the course but do not yet have a Wharton computing account (required for eRoom access) can apply online at <http://accounts.wharton.upenn.edu>.

CLASS SCHEDULE

| | <i>Topics</i> | <i>Cases & Projects</i> |
|---------------|--|---|
| 9-Sep | Overview, stock-cash positions, using return swaps & futures | |
| 14-Sep | Beta, hedging, market-neutral | |
| 16-Sep | Long-short, margin & leverage, portable alpha | <i>The Vanderbilt University Endowment (2006)</i> |
| 21-Sep | Return factors | <i>Dimensional Fund Advisors, 2002</i> |
| 23-Sep | Portfolio volatility; predicting volatility | Diversification write-up due |
| 28-Sep | Behavioral finance | <i>Behavioral Finance at JP Morgan</i> |
| 30-Sep | Strategies and implementation | <i>numeric investors l.p.</i> |
| 5-Oct | Portfolio opportunity sets | |
| 7-Oct | Guest speaker: Kent Daniel - Goldman Sachs (4:30 – room TBA) | |
| 12-Oct | Portfolio optimization | <i>The Harvard Management Company and Inflation-Protected Bonds</i> |
| 14-Oct | Black-Litterman model; Bayesian approaches | Optimization write-up due |
| 19-Oct | no class - fall break | |
| 21-Oct | no-class - 2nd-year MBA interviews | |
| 26-Oct | Exam 1 (in class) | |
| 28-Oct | Hedge funds | |
| 2-Nov | Equity premium | <i>Deutsche Bank: Discussing the Equity Risk Premium</i> |
| 4-Nov | Value investing | <i>Grantham, Mayo, Van Otterloo & Co., 2001</i> |
| 9-Nov | Long-horizon investing | <i>The Vanguard Group, Inc. in 2006 and Target Retirement Funds</i> |
| 11-Nov | Guest speaker: Gregor Andrade - AQR (4:30 – room TBA) | |
| 16-Nov | Long-horizon investing | <i>The Risk of Stocks in the Long Run: The Barnstable College Endowment</i> |
| 18-Nov | Performance evaluation and attribution | Stock-screening write-up due |
| 23-Nov | Pension-fund asset allocation | <i>Pension Policy at The Boots Company PLC</i> |
| 25-Nov | Trading, liquidity | <i>At the T. Rowe Price Trading Desk (A)</i> |
| 30-Nov | no class - day before Thanksgiving | |
| 3-Dec | Exam 2 (in class) | |
| 7-Dec | Simulation approaches | <i>Investment Policy at the Hewlett Foundation</i> |
| 9-Dec | Active vs. passive management, liquidity risk & contagion | Simulation write-up due |