

UNIVERSITY OF PENNSYLVANIA  
The Wharton School

Investment Management  
Professor Stambaugh

Course Syllabus  
Fall 2008

## 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. Packet of HBS cases available from Wharton Reprographics.

## Course management

### Grading

Course grades will be based on two closed-book exams, four project write-ups, and class participation, primarily in discussing twelve case studies.

	<u>Percent</u>
Exam 1 ( <b>Oct. 20</b> , in class)	30
Exam 2 ( <b>Nov. 24</b> , in class)	30
Project write-ups	20
Class participation	20
Total	<hr/> 100

### 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 case 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 15, October 8, November 12, and December 3.

### ***Case discussions and sign up***

It is expected that team members will work jointly in analyzing cases, but every student in the class should be prepared to discuss each case. In addition, each team will sign up for two cases on which they are assigned primary responsibility for offering summary and insights and advancing classroom discussion. Cases may have more than one team assigned, depending on section sizes. *A second team may sign up for a case only if all cases already have one team.* Case sign up is by webCafé, and the team representative signing up should be the one whose last name comes first by alphabetical order among the team's members.

A team signed up for a case is not expected to prepare slides or to make a formal presentation (though the occasional slide or two are certainly not prohibited). I will ask members of a team to lay out the essentials of the case setting, offer and support their views about key problems and issues raised by the case, and respond to comments by others during the case discussion.

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.

### ***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](mailto: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](mailto:parkjam@wharton), and his office hours are Thursdays, 10:00-11:30, in SHDH 2435. Rob's email is [rready@wharton](mailto:rready@wharton), and his office hours are Tuesdays, 10:00-11:30, 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

	<b>Topics</b>	<b>Cases &amp; Projects</b>
3-Sep	Overview, stock-cash positions, leverage	
8-Sep	Beta, hedging, market-neutral	
10-Sep	Long-short, margin & leverage, portable alpha	<i>The Vanderbilt University Endowment (2006)</i>
15-Sep	Portfolio volatility; predicting volatility	Diversification write-up due
17-Sep	Return factors	<i>Dimensional Fund Advisors, 2002</i>
22-Sep	Behavioral finance	<i>Behavioral Finance at JP Morgan</i>
24-Sep	Strategies and implementation	<i>numeric investors l.p.</i>
29-Sep	Portfolio opportunity sets	
1-Oct	Portfolio optimization	<i>The Harvard Management Company and Inflation-Protected Bonds</i>
6-Oct	Guest speaker: Mark Carhart-Goldman Sachs (4:30 – room TBA)	
8-Oct	Black-Litterman model; Bayesian approaches	Optimization write-up due
13-Oct	no class - fall break	
15-Oct	no-class - 2nd-year MBA interviews	
<b>20-Oct</b>	<b>Exam 1 (in class)</b>	
22-Oct	Hedge funds	
27-Oct	Equity premium	<i>Deutsche Bank: Discussing the Equity Risk Premium</i>
29-Oct	Value investing	<i>Grantham, Mayo, Van Otterloo &amp; Co., 2001</i>
3-Nov	Long-horizon investing	<i>The Vanguard Group, Inc. in 2006 and Target Retirement Funds</i>
5-Nov	Long-horizon investing	<i>The Risk of Stocks in the Long Run: The Barnstable College Endowment</i>
10-Nov	Guest speaker: Gregor Andrade - AQR (4:30 – room TBA)	
12-Nov	Performance evaluation and attribution	Stock-screening write-up due
17-Nov	Pension-fund asset allocation	<i>Pension Policy at The Boots Company PLC</i>
19-Nov	Trading, liquidity	<i>At the T. Rowe Price Trading Desk (A)</i>
<b>24-Nov</b>	<b>Exam 2 (in class)</b>	
26-Nov	no class - day before Thanksgiving	
1-Dec	Simulation approaches	<i>Investment Policy at the Hewlett Foundation</i>
3-Dec	Mutual Fund Investing	Simulation write-up due