UNIVERSITY OF PENNSYLVANIA

The Wharton School

Investment Management	Course Syllabus
Professor Stambaugh	Fall 2007

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 102 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 (7th 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.

	Percent
Exam 1 (**Oct. 22**, in class)	30
Exam 2 (**Nov. 28**, in class)	30
Project write-ups	20
Class participation	20
Total	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 web*Café*, 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 web*Café*, in order to avoid lateness penalties. Project assignments will be posted on web*Café* at least one week prior to the due dates. Project due dates are September 12, October 10, November 14, and December 5.

Case discussions and sign up

Team members work jointly in analyzing cases, but each student 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; a third team may sign up for a case only if all cases already have two teams.* Case sign up is by web*Café*, and the team representative signing up should be the one whose last name comes first by alphabetical order among the team's members.

Discussion feedback

Individual students can supplement their class-participation grades (up to a 25 percent improvement) by submitting brief assessments of the analysis and discussion of one or more of the teams assigned to a case. These comments are confidential (viewable only by me), should be team-focused (not aimed at individuals), and should be brief (roughly 100 words per assessed team). The quality of reasoning displayed in such feedback is more important than the quantity of comments—it is not expected in any event that each student will necessarily have something to say about each team assigned to each case. This feedback should be submitted using web*Café* by midnight of the day following the case discussion.

Readings and homework problems

I will use web*Café* 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 Tuesdays, 9:00-10:30, in SHDH 2435. Rob's email is rready@wharton, and his office hours are Thursdays, 10:30-12:00, in SHDH 2435.

Questions about course material or course management should be submitted using the Discussion feature on web*Café*. 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.

version : 8-31-2007

CLASS SCHEDULE

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