Professor Robert Korajczyk
Asset Management Practicum I and IV
Finance 933C, 936C
Spring 2007

Syllabus

Information about the course is available at:

http://www.kellogg.northwestern.edu/faculty/korajczy/courses.htm

and at the course **Blackboard** site with the title "Kellogg Asset Management Practicum." On the Blackboard site I will post reading assignments (under "Assignments") some required and optional readings and informational links (under "Course Documents"), and miscellaneous information (under "Announcements," "Course Information," or "Staff Information."

Office hours: I will be available at the weekly review sessions on Wednesdays in room G44 from 3:30-5:00PM, or by appointment. If you would like to set up an appointment, please contact my assistant, Ms. Deborah Brauer at d-brauer@kellogg.northwestern.edu or 847-491-2752.

Teaching Assistants: The course teaching assistants are:
Joseph Engelberg, j-engelberg@kellogg.northwestern.edu
Fritz Burkhardt, f-burkhardt@kellogg.northwestern.edu

They are available to help you with data issues.

AMP I (933C) is the first and AMP IV (936C) is the last of a four-quarter sequence in asset management. The focus of this course is to give the students both a theoretical foundations and practical experience in the management of investment portfolios. Students in the Asset Management Practicum are responsible for managing a portion of the University's endowment portfolio. The equity portion of the fund will follow a value investing strategy based on the fundamental security analyses of students in the class. The fund will allow short positions as well as long positions. The fund will also allow the use of quantitative and derivative strategies as an overlay to the fundamental analyses. We may be able to add a hedge fund component over the course of the year

While some classes will consist of lectures by the instructor, others will be lectures by visiting practitioners and presentations of analyses by students in the class. In fact, the primary component of the course will be student presentations of stock analyses, research reports, and reviews of fund performance

Students will also report evaluations of the fund's performance to a board of advisors for the Asset Management Practicum no less than on a quarterly basis. The board consists of the instructor, a representative of the Northwestern University Investment Office, and prominent practitioners. Most advisory board members have made substantial donations to the Asset Management fund.

The ramifications of most portfolio management decisions are only understood over time and with the experience of a multitude of market cycles. Therefore, students registering for Asset Management Practicum I (FINC 933C) in the spring of 2007 must also register for Asset Management Practicum II and III (FINC 934C and 935C) in the fall of 2007 and winter 2008. Students who have completed Asset Management Practicum III have the **option** of registering for Asset Management Practicum IV (FINC 936C) in the spring of 2008.

Since the first three quarters of the course are meant to be taken as an integrated whole, students will receive course grades for FINC 933C, 934C, and 935C at the completion of the sequence.

Prerequisites/Co-requisites:

Asset Management Practicum I

Prerequisites: FINC 441 or FINC 440

Co-requisites: Over the three-quarter sequence students must take four quarter credits in additional asset management-related courses from the following list: FINC 447 Financial Strategy and Tax Planning, FINC 451 Money Markets and the Fed, FINC 460 Investments, FINC 463 Security Analysis, FINC 464 Fixed Income Securities, FINC 465 Derivative Markets I, FINC 467 Derivative Markets II, FINC 925 Advanced Topics in Finance, ACCT 451 Financial Reporting and Analysis, ACCT 452 Financial Reporting and Analysis II.

Students registering for Asset Management Practicum I are strongly encouraged to register for either FINC 463 (Security Analysis) or FINC 925 (Advanced Topics in Finance) either concurrently with or prior to AMP I.

Asset Management Practicum IV

Prerequisites: FINC 460 Investments and FINC 935C Asset Management Practicum III. For spring 2007 the prerequisites are FINC 460 Investments and consent of instructor.

Course Structure:

AMP I and AMP IV will meet together. Students in Asset Management Practicum I will focus on developing fundamental security analyses. Students in Students in Asset Management Practicum IV are responsible for managing the positions of the fund, given the analyses of the students in Asset Management Practicum I.

Students in AMP I will be assigned the role of an equity analyst. They will provide valuation analyses and long and short position recommendations. Students will rotate into different positions in future quarters in AMP II and AMP III.

Students in AMP IV will serve as the investment committee for the portfolios. Currently, I expect there to be four portfolios of differing sizes and slightly different investment philosophies. In addition to their duties on the investment committee, students will specialize in one of several areas: risk evaluation and performance reporting; trading strategies; derivatives strategies; quantitative strategies; asset allocation strategies.

The investment committee members are responsible for decisions about the positions taken in the portfolio, based on the analyses provided by the various analysts. Investment committee members will also assist in evaluating analyst recommendations. Additionally, investment committee members may present equity analyses of their own.

Members involved in risk evaluation and performance reporting will monitor the portfolio to insure that the portfolio meets its investment guidelines and risk parameters, monitor and report portfolio performance to the class and advisory board, and monitor analyst performance.

Traders are responsible for determining the optimal trading strategies in order to minimize the implementation shortfall due to order execution, advising portfolio managers on the appropriate execution strategies, and devising pre-trade estimates and post-trade evaluation of execution costs.

Derivative, quantitative, and asset allocation analyst responsibilities are to advise the investment committee on strategies related to derivative and quantitative strategies designed to complement the fundamental equity analyses and to advise on tactical asset allocation.

Classes:

While the Asset Management Practicum is a half-credit class, it does not conform to the usual first-half/second-half of the quarter timing, hence the “C” designation. We will meet on Monday evenings for most, but not all, weeks of the quarter. We can not just manage the portfolio for half of the quarter. Each class meeting will include an update by the portfolio managers of the positions in the portfolio, the performance and risk profile of the portfolio, and trades made since the last class. Analysts whose recommended stocks are in the portfolio will have an opportunity to update those recommendations. We will then either have a lecture by the instructor, by a visiting practitioner, by a data/software vendor, or by students. Students are expected to attend all class sessions.

On dates when there is a visiting practitioner we may have a pre-class dinner with the visiting speaker for a subset of the class.

"Review" Sessions:

Extra sessions will take place on Wednesday afternoons from 3:30 to 5:00 PM in room G44 -- beginning March 28th. These sessions will be used for training on vendor software and office hours at which we can discuss questions about your projects. We may also use these sessions for additional class presentations.

Grading:

APM I
Students in APM I are required to present analyses for one or two stocks. These do not have to be presented simultaneously. This is the primary deliverable. Students enrolling in APM I through the application process are also expected to learn the operational duties of APM IV Students. In particular, they should familiarize themselves with software and procedures so than they can take over responsibilities at the end of the quarter.

Stock Analyses:	70% (for those assigned an operational role), 80% otherwise
Class Participation:	20%
Peer review:	10% (for those assigned an operational role), 0% otherwise

Completion of year-long sequence (AMP I, II, III): students who do not complete the sequence will receive a failing grade for the quarters registered.
Completion of co-requisites: If a student does not complete the four course co-requisites by the end of the year-long sequence (AMP I, II, III) then a one letter-grade reduction will be imposed for each course deficit. (Part-time students who have scheduling issues should discuss options with me.)

Since the course is a year-long commitment, grades for 933C, 934C, and 935C will be assigned at the end of the course sequence.

APM IV
Students in APM IV are required, in addition to their duties of managing the portfolio and reporting to the instructor and advisory board, to write and present a research paper (approximately 15-20 pages) on a topic approved by the instructor. The topic will be related to the assigned responsibilities of the students. Ideally, I would like to see papers that would be close to publishable in a top-quality practitioner journal like the *Financial Analysts Journal*, *Journal of Portfolio Management*, or *Journal of Investment Management*. Students in AMP IV will also serve as mentors to students in APM I in their areas of specialization.

Research papers:	60%
Portfolio Team performance/peer review:	20%
Class Participation:	20%

Portfolio Team performance/peer review has two components, (1) the instructor's evaluation of the team's performance in its operational capacity and (2) the team's assessment of the contributions of the team members. The latter component is multiplicative. If your contribution (as assessed by your peers) is between 75% and 125% of its proportionate value, you will receive the team grade assigned by the instructor. If your contribution (as assessed by your peers) is below 75% or above 125%, you will receive grade equal to the contribution times the team grade assigned by the instructor.

Possible APM IV Paper topics (topics in boldface must be taken by someone – if not chosen, they will be assigned). I will also periodically post new suggestions to the course Blackboard site:

Risk/Reporting/Portfolio Management:

Design a risk-adjusted performance evaluation system for (a) the entire portfolio and (b) for individual analysts.

Evaluate alternative measures of portfolio risk, such as systematic/idiosyncratic, variance, downside risk, and value-at-risk.

Evaluate the costs and risks associated with short positions in equities and derivative strategies.

Evaluate the types of "rare event" risk is associated with various positions (either in the portfolio or being proposed for the portfolio). How can we evaluate these risks to determine if they are worth taking? (You might want to look at Taleb's *Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets* and Osband's *Iceberg Risk: An Adventure in Portfolio Theory*.)

Devise an optimal approach for converting analyst information (target prices, valuation ranges, time horizon, etc.) into portfolio positions.

What is portfolio resampling? What issues is it designed to address? What are the advantages/disadvantages of the approach?

Trading:

Develop a system for evaluating the execution costs for the portfolio. What are the true costs of trading and what is their effect on portfolio performance? How should order types be determined by the type of information conveyed by the analyst's report or trading strategy?

Evaluate alternative approaches to estimating expected trading cost and evaluating post-trade performance.

What is "algorithmic" trading? What are its claimed advantages? Are there any disadvantages?

Derivative/Quantitative:

Pick a strategy and evaluate the evidence use to support the strategy. What is your forecast about the likelihood that the strategy will produce superior returns? If you believe it will, why? What are the obvious risks of the strategy? Are there any hidden risks? You might want to take a look at a chapter in Damodaran's *Investment Fables: Exposing the Myths of "Can't Miss* for examples of how one might deconstruct a trading strategy. Strategies that one might consider include momentum/relative strength, value, event driven (earnings announcements, merger arbitrage), tax arbitrage, covered call writing, et cetera.

Analyze why backtested portfolios invariably do better than "live" portfolios based on the same strategy.

Analyze "carry" trade strategies in foreign exchange. How might this be incorporated into FX hedging strategies in global equity and bond portfolios?

Asset Allocation Strategies:

How should a manager construct a strategic asset allocation? How should a tactical asset allocation strategy fit into the strategic allocation?

Write a case study and teaching notes discussing the NU Investment Office approach to investing (asset allocation, manager selection, in-house vs. external manager), risk assessment. What is the effect of endowment income on the University budget and how does this impact the investment decisions? What recruiting and retention issues are imposed by the University environment? (Take a look at the Yale Investment Office and Harvard Management Company cases as examples.)

MORS Meets Finance:

Discuss behavioral biases exhibited by investors, analysts, and/or corporate executives. Design trading strategies that take advantage of investor or executive biases. Design an analyst reporting system that helps overcome analyst behavioral biases.

Operational/Business Development Issues:

Assess the operational risks of the Asset Management Practicum Funds. Design procedures to minimize these risks.

Analyze the cost/feasibility of setting up an entity that would allow the Practicum to utilize leverage and/or invest in hedge funds without triggering unrelated business income tax (UBIT).

Write a case study and teaching notes for the merger of the Bank of New York and Mellon Financial.

Textbooks: Since each student will be focusing on different strategies, there is no required textbook for AMP I and AMP IV. There is a required case packet. The book by Maginn, et al. is very general, accessible, and part of the CFA Investment Series. I would recommend getting a copy.

Finance 933C Recommended Texts:

Rappaport, Alfred, and Michael J. Mauboussin, *Expectations Investing*. Boston: Harvard Business School Press, 2001.

Bodie, Zvi, Alex Kane, and Alan J. Marcus, *Investments*, 7th edition. New York: McGraw-Hill, 2008.

Maginn, John L., Donald L. Tuttle, Jerald F. Pinto, and Dennis W. McLeavey, Managing Investment Portfolios: A Dynamic Process, 3rd edition. Hoboken: Wiley, 2007.

Finance 936C Recommended Texts:

Damodaran, Aswath, Investment Fables: Exposing the Myths of "Can't Miss" Investment Strategies. Upper Saddle River: Prentice-Hall, 2004.

Litterman, Bob, *Modern Investment Management: An Equilibrium Approach*. New York: Wiley, 2003.

Maginn, John L., Donald L. Tuttle, Jerald F. Pinto, and Dennis W. McLeavey, Managing Investment Portfolios: A Dynamic Process, 3rd edition. Hoboken: Wiley, 2007.

Tentative Schedule (external speakers' schedules can change without much notice we may need to be flexible):

March 26:	No class
April 2:	Intro to AMP; Risk, Performance Evaluation, and Benchmarking.
April 9:	Guest Speaker, William McLean VP and Chief Investment Officer, Northwestern University: "Understanding Client Objectives - Endowment Portfolios."

April 16:	Thomson One Training.
April 23:	Guest Speaker, David Kabiller ('87), Founding Principal and Head of Business Development, AQR Capital Management: "The Evolution of the Hedge Fund Industry" Student presentations.
April 30:	Incorporating Security Analysis into Portfolio Decisions. Student presentations.
May 7:	No class
May 11:	(Makeup class for Memorial Day holiday) Student presentations.
May 14:	Jeffrey Ubben ('87), Managing Director, ValueAct Capital: "Creating Alpha Through Active Investing." Student presentations.
May 21:	Nicholas Barberis, Professor, Yale School of Management: "Lessons from Behavioral Finance for Asset Managers." Student presentations.
June 4:	Student presentations

Please send your preferences for presentation time slots to Deborah Brauer at d-brauer@kellogg.northwestern.edu by April 10th. We may need to utilize some of the review sessions for student presentations. If there is more student demand than supply for certain dates, allocations will be assigned by random selection among those requesting that period.

Speaker Dinners:

I will invite visiting speakers to dinner before class 5:15-6:15. If you do not have a class ending at 5:00, try to be there at 5:00, otherwise be there by 5:15. For each speaker, up to 10 students may attend the dinner. We have four dinners scheduled for the spring quarter. This is totally optional and attending dinners has no effect on your grade. However, if you sign up for a dinner, you need to be there. Not attending after signing up will adversely affect your class participation grade and access to future speaker dinners. If you wish to attend any of these dinners, please send a ranking of your interest level to Deborah Brauer at d-brauer@kellogg.northwestern.edu by Thursday, April 5th.

Laptop Policy:

Laptops are not allowed to be used in class, unless I specifically make an exception.

Honor Code/Code of Ethics:

All students attending the Asset Management Practicum must abide by the Kellogg Honor Code. If you are unsure of what this means, read the honor code:

http://www.kellogg.northwestern.edu/stu_aff/policies/honorcode.htm

All formal assignments in the Practicum are individual assignments. You may discuss ideas and issues for your assignment with other member of the class, but the final work product must be your original work.

In addition, all students attending the Practicum must familiarize themselves with the CFA Institute Code of Ethics and Standards of Professional Conduct and the Practicum Code of Ethics. Students associated with the Practicum must agree to abide by the Practicum Code of Ethics and must attest to that agreement by giving me a signed copy of the Code.

If you are in doubt about whether something is acceptable under the honor code/ code of ethics, you should not hesitate to ask me.

Other courses:

There are a number of other courses that are relevant for people going into asset management, in addition to the courses on the list of co-requisites. Here are some courses that I would encourage you to consider. DECS 452 Strategic Decision Making, FINC 442 Financial Decisions, FINC 445 Venture Capital and Private Equity Investing, FINC 448 Corporate Restructuring, FINC 931 Wall Street, Hedge Funds and Private Equity (LBO) Funds, FINC 932 Case Studies in Venture Investment and Management, MORS 460 Leading and Managing Teams, MORS 470 Negotiations, MECN 441 Competitive Strategy and Industrial Structure, MECN 450 Macroeconomic Analysis For Management, OPNS 450 Spreadsheet Modeling for Managerial Decisions, and ENTR 902 Entrepreneurial Selling: Skills and Strategies.

Miscellaneous:

I have asked the University Library to place on reserve a number of textbooks related to the course material. Those of you who are interviewing at more quantitative shops might want to take a look at *Heard on The Street: Quantitative Questions from Wall Street Job Interviews* by Timothy Crack.

For some strange reason, many people find it difficult to pronounce my last name. A phonetic spelling is Kōr-ī′-chĭk.