

Investment Management
MIT Sloan Course 15.439, Spring 2016

Class schedule: MW 8:30-10:00am

Class website: <https://stellar.mit.edu/S/course/15/sp15/15.439/index.html>

Classroom: E62-223

Instructor: Prof. Randolph B. Cohen

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Office hours: Monday 10am-12pm and by appointment

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Course Overview:

In order for an investment management firm to be successful, three things are required. First, the company must have an effective investment strategy. Second, the investment strategy must be implemented efficiently. Third, the company must successfully handle the non-investment elements of the business, such as marketing and compliance. In this course we cover all three elements.

Our primary tool will be case studies of money managers, many dealing with recent developments in global investing. Students are expected to come to class prepared to engage in a spirited discussion of the issues raised by the case. Frequently we will be joined by executives at the relevant firms, who will discuss their experience and take questions from the class. Prior mastery of the material in 15.401 is essential to success in the course.

Grading Policy:

In-class discussion/participation/attendance/punctuality: 30%

Assignments: 30%

In-class Final exam: 40%

General requirements:

Class attendance is required. It is essential that you come to every class and come on time. Attendance and punctuality will be the prime determinants of class participation grades.

In-class discussion participation is highly encouraged and participation quality will determine the remainder of the participation grade.

About 4 assignments will be graded; all other assignments are required and will be necessary for class understanding and participation. Student groups of up to three members per group may turn in assignments jointly.

Final exam will be in class.

Book: Investments (by Z. Bodie, A. Kane and A. Marcus)

Detailed class schedule:

(Please note: changes to this schedule are likely)

15.439 Schedule and Class List

Module 1 -- Valuation

Wednesday, Feb 3 - Introduction and Great Northern Iron Trust

This class features a short introduction to the course followed by the class working together to build a spreadsheet live in class to value the NYSE-listed firm Great Northern Iron Trust (ticker: GNI). We will determine whether the company is overvalued, undervalued, or fairly valued.

Monday, Feb 8 - Valuation of the Stock Market

What is the fair price of the S&P 500 index? What returns should we expect from the market going forward? Does such an expected return justify the risks of stock investing? We will apply several approaches to answering these questions.

Wednesday, Feb 10 - Valuation of Individual Stocks

We will develop simple but flexible approaches for valuing individual Companies and apply them to real-life companies like Google and ConocoPhillips.

Monday, Feb 15 - NO CLASS / PRESIDENTS DAY HOLIDAY

Module 2 -- Patterns in Stock Returns and Quantitative Investing

Tuesday, Feb 16 - MONDAY SCHEDULE -- Dimensional Fund Advisors -- Value Investing
Small stocks and so-called "value stocks" have substantially outperformed the market over time, and Dimensional Fund Advisors was formed to help investors invest in such companies. In this class we explore how and why such an effect could persist, and evaluate the likelihood of continued outperformance for such firms.

Wednesday, Feb 17 - AQR's Momentum Fund -- Momentum Investing

The "momentum effect" is the tendency of stocks that performed well over the prior year to outperform those that didn't. It's difficult to believe that such a simple strategy could work, and yet the historical returns were remarkable in early 2009, when AQR Capital decided to launch a momentum-based mutual fund. The case looks at the pros and cons of such a fund from both the money manager and investor perspectives.

Monday, Feb 22- Martingale -- Low-Beta Investing , Guest Speaker Bill Jacques, Executive Vice President & Chief Investment Officer of Martingale

According to the Capital Asset Pricing Model, any stock's expected excess return is proportional to its market beta. But historically, low-beta stocks have performed far better than such a theory predicts. This case looks at Martingale's attempt to capitalize on the phenomenon.

Module 3 - Execution

Wednesday, Feb 24 - Quadriserv -- Short Selling

In order to take advantage of overpriced, as well as underpriced, securities, it is necessary to master the mechanics of selling short. This class will study in detail how shorting works through careful analysis of the Quadriserve case.

Monday, Feb 29 - AT&T Canada - Implementing a long-short strategy

AT&T has stocks and bonds. AT&T Canada trades on its own and hence also offers stocks and bonds. An investment manager can go long, short, or neutral in each of the four securities, creating 3^4 or 81 possible investment strategies. Our task: select the best of these.

Wednesday, Mar 2 - T. Rowe Price -- Trading

Trading costs have been the death of many well-designed investment strategies. On the other hand, skilled trading can be a source of profit rather than cost. This case examines the challenges faced by a trader during a typical day on the desk.

Module 4 - Portfolio Construction

Monday, Mar 7 - Portfolio Theory

Portfolio theory is the basic framework for measuring risk and weighing it against expected returns. It is near-universally used by professional investors -- even those who criticize it need to understand it so as to understand the bogey they wish to improve upon.

Wednesday, Mar 9 - Portfolio Theory II

Monday, Mar 14 - No Class -- SIP Week

Wednesday, Mar 16 - No Class -- SIP Week

Monday, Mar 21 - NO CLASS -- SPRING VACATION

Wednesday, Mar 23 - NO CLASS -- SPRING VACATION

Monday, Mar 28 - Harvard Management Company -- Portfolio Construction

Like all institutions that are serious about managing their money, HMC applies portfolio theory to attempt to gain maximum expected return with minimum risk. This case digs deep to see how they do it.

Wednesday, Mar 30 - Grantham, Mayo, and Van Otterloo -- Forecasting Asset Class Returns

Jeremy Grantham and his firm, GMO, have an outstanding record of forecasting the returns of stocks, bonds, commodities, and other asset classes. How did they do it? Will it work in the future? And, what are they predicting today?

Module 5 -- Diversification and Concentration in Single Strategies

Monday, Apr 4 – Commodities - Guest Speaker – Jeffrey Currie of Goldman Sachs

Wednesday, Apr 6 - Nephila -- Catastrophe Bonds

According to legend, the Nephila, or Bermudian Hurricane Spider, can forecast storms. Nephila Capital, the Bermuda-based hedge fund, is risking investors' money on its ability to avoid the financial storms real hurricanes can generate. Have they found a better way for the world to share the risks nature creates? Or are they a catastrophe waiting to happen?

Monday, Apr 11 - The Children's Investment Fund – Activist Investing

They have half the fund's money in just two stocks. They don't short or lever. They lock investors' money up for five years. And they give much of the fee income to a charity for children! What kind of hedge fund is this, anyway? And should anyone invest with them?

Module 6 - Managing in a Crisis

Wednesday, Apr 13 – H Partners and Six Flags

When firms fall into financial distress, their bonds can trade at prices that create opportunities for savvy investors if recovery follows. Is that the situation at amusement-park giant Six Flags? Or will investors at H Partners be better served to stay off this ride?

Monday, Apr 18 - NO CLASS /PATRIOTS DAY HOLIDAY

Wednesday, Apr 20 – Life Settlements

Module 7 -- Portfolios of Strategies

Monday, Apr 25 - Protégé Partners -- Fund of Funds -- Guest Speaker – Assignment

We study the fund of funds industry, which provides about half of all capital to hedge funds, through the lens of Protégé Partners, a firm with a specialty in the "seeding" of new funds.

Wednesday, Apr 27 - AQR DELTA -- Guest Speaker

Many attempts have been made to produce returns similar to those of a hedge fund index, but with lower fees and/or greater liquidity, but these attempts have not generally met with success. AQR has a new approach they call DELTA. Will it prove the Holy Grail institutional investors have so long sought?

Monday, May 2 - LTCM Day 1 -- Arbitrage Strategies

Long-Term Capital Management did as much as any firm to turn investing from art into science. We delve into one of LTCM's most compelling strategies.

Wednesday, May 4 - LTCM Day 2 -- Guest Speaker

More on the secrets of the giant arbitrage firm, with guest speaker and former KTCM Partner Eric Rosenfeld.

Monday, May 9 – Where Does Alpha Come From?

Wednesday, May 11 – Final Exam in class