

## FINA 7A23 - Portfolio Theory and Practice

This course covers the portfolio theory, its applications and several other important concepts in investments.

The development of portfolio theory is considered to be a major achievement of modern finance. The course begins by looking at the history of interest rates and returns of assets of different risk levels. This leads to the discussion of investor's attitude toward risk and risk aversion, and naturally the relationship between risk and expected return. The analysis of portfolio starts with the simple case of two assets and then generalizes to the N-assets case. The concept of optimal portfolio and the efficient frontier is then developed and the Capital Asset Pricing Model is derived.

The application of portfolio theory and CAPM begins with the popular concept of "Beta" and the index models. The APT is presented as a tool for managing factor risk and developing investment strategies.

Options are introduced and the Black-Scholes option pricing model is an important highlight of the course. An application of the options concept is portfolio insurance. The final part of the course covers the efficient market hypotheses and the development of behavioral finance.