

Syllabus - Finance 2

Course contents:

After a thorough introduction in stochastic calculus, we treat the essential theory of no arbitrage pricing, including the First and Second Fundamental Theorem of Asset Pricing in the first part of the course. On this basis, we study hedging and pricing of European and American options in complete and incomplete markets in the second part. We move on to characterize optimal portfolios for various types of utility functions. Finally, we sketch new developments in equilibrium theory, credit risk, irreversible investment, and risk measures.

Books:

Duffie, Dynamic Asset Pricing, Princeton University Press, 3rd ed. 2001
Björk, Arbitrage Theory in Continuous Time, Oxford University Press, 2nd ed. 2004