FM 9561B - Fixed-Income Modelling Outline of Lectures: 03 - 07 February 2014

For this week, we aim to cover the following theories/concepts:

- 1. Risk-neutral or martingale measure and risk-neutral valuation (cont'd)
- 2. The Martingale Representation Theorem
- 3. Self-financing and self-replicating strategies
- 4. Introduction to the pricing of default-free zero-coupon bonds
- 5. Numéraire processes
- 6. Term structure modelling and example of classical models
- 7. The bond price in the Vasiček model
- 8. Bond price solution via the PDE approach