Stats 3520b
Topics to be covered for the week of 03–07 March 2014

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

1. Some elements of stochastic processes in discrete time (continued)
   These would include the discussion of:
   (a) probability space
   (b) random or stochastic process
   (c) probability measure
   (d) filtration
   (e) general contingent claims
   (f) conditional operator/conditional expectation
   (g) previsible process
   (h) martingales
   (i) law of iterated expectations (or tower law)

2. Generalisation of the Cox-Ross-Rubinstein (CRR) model to an $n-$period framework

3. Asymptotic properties of the CRR model

4. Revisit **briefly** modification to the binomial option pricing when the underlying asset pays dividend; and extension of the binomial option pricing method to options on currencies and options on futures.