46-954 Credit Derivatives  
Spring, 2006  

Course Content  
The lectures/recitations detailed below are taken from the text  


**Lecture 1**  
Introduction to the course. Motivate the course with a discussion of relative value analysis. Introduce concepts of z-spread, i-spread, asset swaps, comparing bonds across currencies. Introduce credit derivatives including the Credit Default Swap.  

**Lecture 2, parts chapter 2 and 3**  
Connection between default-free claims and defaultable claims. Pricing defaultable bonds in a simple model and pricing the Credit Default Swap. Introduce intensities and hazard rates and see their relation to pricing basic building blocks.  

**Lecture 3**  
Understanding the mechanics of credit derivatives Legal (ISDA, case studies, definitions), Regulatory (NAIC, Basel II), accounting (FAS 133, 140 FIN 46), operations (DTCC, cash settlement) framework.  

**Lecture 4**  

**Lecture 5, chapter 4 and 5**  
Counting processes and their compensators Stochastic calculus in the jump-setup, including Girsanov’s Theorem. Pricing Credit Derivatives under various intensity assumptions: constant, deterministic and stochastic intensity  

**Lecture 6, chapter 8 and 9**  
More on pricing in the Cox-framework; how to use MC-simulation and the Ricatti equations. Depending on time we will also talk about: Structural approach and rating transitions and pricing derivatives depending on ratings.  

**Lecture 7, essay questions (available on BB at some point)**  
Evaluation. Brush up and exam preparation