**FRE6571**

**Dr. Steve Mandel**

**Course Syllabus**

Week 1

* History and Overview of securitization.
* Overview of Yield Book System
* Calculating mortgage cash flows

Week 2

* Mortgage prepayment measures (SMM,CPR,PSA)
* Nominal P/Y Measures (Yield, duration, convexity)
* Yield Curves (On the Run vs Off the Run Curves)
* Calculation of Par, Spot and Forward Curves

Week 3

* Calculating spreads to Par, Spot, Forward Yield Curves
* Prepayment Models
* OAS Models

Week 4

* Effective Measures ( OAS, Effective Duration, Effective Convexity, Spread Duration)
* Total Return
* Rolling Yield

Week 5

* Tracking A Mortgage Index
* Collateralized Mortgage Obligations (CMOs)

Week 6

* Principal Components and Key Rate Durations
* Review

Week 7

* Final Examination