BEM 109 "Fixed Income and Credit Risk Derivatives"

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Class meetings: Mo, Wed 2:30-3:55, unless otherwise agreed on.

Prerequisites:

A basic knowledge of calculus based probability/statistics and knowledge of the material covered in BEM 105 Options.

Grading: 50% homeworks, equally weighted, 50% project, or final exam. For those taking the course on Pass/Fail: you must pass the final exam and you must receive 50% of the grade for each homework to pass the course. Penalty for late submission of homework: 10% per day. Penalty for late submission of final: 33% per day.

Collaboration Policy: Discussions of class material are allowed; on homeworks fellow students can give hints - but please report them; no collaboration allowed on the final exam. Homeworks and final are open-book, open-notes. You are not allowed to consult others on the final exam.

Course Material:

Recommended books are:

Credit Risk Modeling, by David Lando

Quantitative Risk Management by Alexander J. McNeil, Rudiger Frey, and Paul Embrechts,

Interest rate modeling: post-crisis challenges and approaches, by Zorana Grbac and Wolfgang J. Runggaldier

A book with a lot of details for practical implementation of various models is Brigo and Mercurio: Interest Rate Models - Theory and Practice. Moreover, the students will be provided with preliminary lecture notes written by Grasselli and Hurd, and lecture notes by Kay Giesecke.