

BEM 109 “Fixed Income and Credit Risk Derivatives”

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Class meetings: Mo, Wed 2:00-3:25

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 do the project or 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 project or final: 33% per day . I do not require you attend the class regularly, but some of the problems in the homeworks and the final exam may be easier to solve if you do. Moreover, I may assign extra work for the students not attending classes on a regular basis.

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. Homeworks and final are open-book, open-notes. You are not allowed to consult others on the final.

Course Material:

The required textbook is

Credit Risk Modeling, by David Lando

Recommended books are

Fixed Income Modelling by Claus Munk

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

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