



Credit risk has drawn lots of attentions since the subprime crisis. In this course, we consider credit risk modeling and credit derivatives evaluation. Contents of this course should include the following

1. Credit Risk Modeling - Structural Form and Reduced Form.
2. Credit Derivatives - Single Name (CDS) and Multi Names (BDS, CDO)
3. Estimation of Default Probability.
4. Copula Methods.
5. Importance Sampling and Large Deviations.

Recent research papers on these areas will be reviewed. Students are expected to implement major results from some reference papers. No textbooks. Papers and course notes will be provided.

Instructor: Chuan-Hsiang Han (韓傳祥)

Department of Quantitative Finance, NTHU

Office: Room 756 TSMC Building(台積館)

Phone: 03-5742224

Email: chhan@mx.nthu.edu.tw

URL: enter from <http://mx.nthu.edu.tw/~chhan>

Class Time: TBD

Location: TBD

Office Hours: TBD

Prerequisites:

Stochastic Financial Theory, Continuous-Time Finance, or equivalent courses.

Grading:

Assignments 30%, Exams(midterm and final) 40%, Course Project 30%.