**2014 G8325 Quantitative Risk Management**

**Instructor**:

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**Time and Locations**:

**Recommended Textbook**

1. McNeil, A.J., Frey, R., and Embrechts, P. (2005). *Quantitative Risk Management: Concepts, Techniques, and Tools*. Princeton University Press, New Jersey.
2. Lai, T.L. and Xing, H. (2008). *Statistical Models and Methods for Financial Markets*. Springer, New York.

**Grading policy:**

 The grade is based on homework, term project, and presentation.

**Course description**

 This course will covers various topics in quantitative risk management and related statistical tools.

 Economic principles of risk management

 Market risk

 Statistical modeling of time-to-default

 Econometric modeling of default risk

 Ratings-based models of credit risk

 Correlated default: Frailty and contagion