STAT 650 (Section 0101), Spring 2013
TuTh 9:30am-10:45am (MTH 1308)

TEXTBOOK: *A First Course in Stochastic Processes - 2nd Edition*

Authors: S. Karlin and H. M. Taylor, Academic Press

PREREQUISITE: STAT410 or equivalent

INSTRUCTOR: Professor G. Yang,

OFFICE HOURS: Rm Math 2311, Tu-Th 2 - 3 PM

GRADING: Homework (**40%**), 1 closed book exam (**25%**), Take home final exam (**35%**)

No make up exams.

Prerequisite: STAT410 or equivalent. Basic concepts of stochastic processes. Markov processes (discrete and continuous parameters), Random walks, Poisson processes, Birth and death processes. Renewal processes and basic limit theorems. Discrete time martingales, stopping times, optional sampling theorem. Applications from theories of stochastic epidemics, survival analysis and others.