# MA747, PROB STOC PROC II, Spring 2006

**Textbook:** A First Course in Stochastic Processes, 2nd Ed. by A. Karlin and H.M. Taylor, Academic Press.
**Instructor:** Professor K. Ito, Room 310, HA, x57140

This course will provide an introduction to the many specialized treatises on stochastic processes. They include the Markov chains, Martingale processes and Brownian motions. You will learn the principal concepts and theory of stochastic processes and also find the relevance and importance of the mathematical treaties to applications in many areas of sciences.

**Office Hours:** MWF 11:10-12:00 a.m., otherwise Appointment.

**Grading:**

Homework: 20% 5-7 Assignments.

2 Tests 50%

Final Exam: 30% Comprehensive

**Lectures:**
Chapters 1 and 6: Basic Probability Theory
Chapters 1-4: Markov Chains and Applications
Chapters 6: Martingale Processes
Chapters 7: Brownian Motions