FALL 2014: SIEO W4150 Introduction to probability and statistics

Meeting Time: Tuesdays & Thursdays, 5:40-6:55PM

Instructor Information:
Karl Sigman

Prerequisites: A working knowledge of calculus (including multiple integrals).

(This is a MS version of SIEO 3600.)

Fundamentals of probability and statistics used in engineering and applied science. Probability: random variables both discrete and continuous, useful distributions, expectations, variance, joint distributions, conditional expectation, moment generating functions (Laplace transforms, etc.), law of large numbers, central limit theorem. Statistics: point and confidence interval estimation, hypothesis tests, linear regression.

Required Text: TBA

In addition to the textbook, some Lecture Notes written by Professor Sigman will be posted on the course web site covering the essential material in a different way and/or an easier way. Weekly homework assignments will typically contain some problems from the textbook, and some that are written by Professor Sigman.

EXAMS

There will be a midterm exam and a final exam; open textbook and open notes.