S1211Q Syllabus

- **Instructor**
  - Wei Wang
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  - Office hours: TBD
- **Lecture Time and Location**

  Monday - Thursday 2:45p - 4:20p @ 516 Hamilton Hall
- **Course Description**

  We will cover topics including discrete combinatorial probability; common discrete and continuous random variables and their distributional theory; population mean, variance, covariance and their sample analogs; point estimation; confidence interval; hypothesis testing; linear regression; Bayesian methods.

  But since our section meets 95 minutes per day 4 days per week for only 6 weeks, the pace will be more intense than if the course is spread out over an entire semester. We will selectively cover the topics listed above.
- **Prerequisites**

  One semester of uni-variate Calculus. You should be familiar with derivatives and integrals of basic functions, chain rules for differentiating composite functions and integration by substitution and integration by parts techniques. We will also do some statistical computation with `R` statistical computing environment. So some prior exposure to programming is expected.
- **Method of Evaluation**

  There will be 6 homework assignments, due on Thursdays. There will be quizzes on Thursdays of week 1, 2, 4 and 5. One midterm is on the Thursday of week 3, and the final is on the last day of the course. The contributions of different parts are: homework (30%) + quiz (20%) + midterm (20%) + final (30%).
- **Textbook**

  Probability and Statistics for Engineering and the Sciences, 8th edition, Jay Devore, Brooks/Cole, 2012
- **Teaching Assistant**
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