STAT S1211Q Introduction to Statistics (with Calculus)

- **Instructor**

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- **Lecture Time**

  6:15-7:50pm Monday-Thursday, 503 Hamilton Hall, July 2nd-August 9th

- **Course Description**

  We will typically 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 univariate 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, 2 midterms and 1 final exam. Their contributions to your grade will be respectively 30%, 35% and 35%. A tentative calendar is given in Table 1.

- **Textbook**

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

Table 1. Tentative calender of all homework due dates and exam dates.

	Mon	Tue	Wed	Thu	Fri
Week 1			Holiday		HW1 Due
Week 2			HW2 Due	*Midterm 1*	
Week 3		HW3 Due			
Week 4		HW4 Due		*Midterm 2*	
Week 5		HW5 Due			
Week 6		HW6 Due		*Final*	

- **Teaching Assistant**

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