ISyE 6739 — Statistical Methods — Summer 2017

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Course Website: www.isye.gatech.edu/~sman/courses/6739

Class Times and Place: TV Land!

Meet The Professor: I’ll try to schedule WebEx sessions so that we can go over 
problems together in an informal setting. More on this later!

Office Hours: Feel free to catch me anytime you can. It’s best to set up an appointment 
by email, but you are welcome to get ahold of me by office phone, cell phone, email, 
or Skype (the latter two methods will be best from May 28 – June 13 and June 28 – 
July 27).

Course Objectives: Provide introduction to probability and statistics, emphasizing 
applications in science and engineering.

Prerequisites: You should be familiar with a spreadsheet package like Excel. You 
should also know enough calculus to be able to integrate any easy function.

Grading:

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<tr>
<th>Weight</th>
<th>Component</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>1/3</td>
<td>Exam 1</td>
<td>≤ Friday, June 23 (suggested)</td>
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<tr>
<td>1/3</td>
<td>Exam 2</td>
<td>≤ Friday, July 21 (suggested)</td>
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<tr>
<td>1/3</td>
<td>Final</td>
<td>≤ Friday, August 11 (suggested)</td>
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bility for Engineers*, John Wiley & Sons. (The text is meant to supplement the notes 
that I give in class. As such, any reasonable text would do just fine.)

Homework: I assign HW almost every week. HW consists of theoretical problems and, 
occasionally, computer programming problems. You are allowed to work in small 
groups on HWs — just turn in one copy with all of the group members’ names on it.
IMPORTANT! TV students can email their HWs (or put them in the T² dropbox), but they must be a single, easy-to-print document.

Regrading: If I make a mistake in grading something, then I'll be happy to fix things. But in order for a test to be regraded, you must submit a Grade Grovelling form, www.isye.gatech.edu/~sman/courses/gradegrovel.pdf.

Honor Code and Expectations: You are expected to adhere to the Georgia Tech Honor Code. For more information, see http://www.honor.gatech.edu

In addition, faculty and students have drawn up a list of mutually beneficial expectations; please see http://www.sga.gatech.edu/expectations

Course Outline:

1. Probability Intro
2. Random Variables
3. Discrete Distributions
4. Continuous Distributions
5. Normal Distribution
6. Descriptive Statistics
7. Point Estimation
8. Confidence Intervals
9. Hypothesis Testing
10. Discrete Data Analysis
11. Simple Linear Regression
12. Multiple Linear Regression (time permitting)
13. Analysis of Variance (time permitting)
14. Experimental Design (time permitting)

Frequently Asked Questions:

You write pretty fast on the board. Are there any notes available? Answer: Yes, just go to my website. You’ll find nice sets of notes there, which I update occasionally.
I see that you have nice notes on the website. So why should I even go to class or watch the videos? Answer: I do extra examples and other material that isn’t on the current set of notes. Believe me, you don’t want to miss out on all of that good stuff. In addition, I give lots of hints concerning the content of upcoming tests.

What is the loneliest number? Answer: One is the loneliest number (though two can be as bad as one). See http://www.youtube.com/watch?v=UiKcd7yPLdU for a proof.

Summer means fun. What if I get behind due to business or family matters? Answer: That’s fine as long as you let me know in advance. I’ll be very, very flexible this semester.

You’re a busy world traveler. How can I get ahold of you? Answer: You can always set up an appointment, and I’ll do my best to accommodate you via email, phone, or Skype. However, note that there will be a couple of periods where I’ll be somewhat difficult to get ahold of — so please don’t get annoyed if I’m occasionally hard to find.

Why do you love The Zombies and hate Justin Bieber? The Zombies mesh pop perfection with subtle, breezy, intelligent jazz underpinnings; whereas Justin Bieber is an idiot.

Are you actually as ugly in real life as you appear to be on TV? Answer: Yes, I am. My own children can’t even look at me, and I scare creepy clowns.