ISyE 3770 - Statistics & Applications - Spring 2027

Class Times and Place: TR 8:00 am – 9:15 am, George Tower/Scheller Tower 0230

Course Website: Canvas.

Instructor: Josh McDonald; George Tower 1011a; email: jmcdonald32@gatech.edu.

Office Hours: TR 11:00 – 11:45 am, or by appointment if necessary. Please honor these office hours and come *prepared*.

Teaching Assistants:
Please see the Canvas Announcement

E-mail Communication: Feel free to email us. Email is an excellent way to get quick clarification about what we are asking for on a homework problem. If the question is too involved, we might suggest a meeting.

Course Objectives: The objective of this course is to provide an introduction to probability and statistics, emphasizing applications in science and engineering.

Texts (Optional):

Montgomery, D. C. and Runger, G. C., *Applied Statistics and Probability for Engineers* Wiley, 2018. (Or equivalent)

Prerequisites: An appropriate calculus course such as MATH 2551.

Computer Programming: For assignments, you are welcome to use whatever software or programming language you prefer. Examples in class will be done using Excel (used almost universally) and R (free and open source) to assist in developing the necessary thought processes and pseudo-code.

Grading:

10%	Homework	
30%	Test #1	02/18
30%	Test #2	04/01
30%	Final Exam	TBD

Tests:

- Each exam will be cumulative in that it may include all the topics covered in class since the beginning of the semester up to exam time (Some topics build upon previous topics). You will be allowed 1 sheet for exam 1, 2 for exam 2, and 3 for exam 3, where you can write whatever helpful stuff you want.
- Exams will be conducted in person at the usual class meeting time.
- A Canvas announcement will be made approximately a week before each exam giving exam specifics. Please reach out if anything is not clear.
- Never, ever cheat. (See the material below on the Honor Code.)
- If you miss a test, you will need to produce appropriate medical documentation. Your grade in the course will then be based on the remaining two tests (+ HW).
- Sadly, there will be absolutely no makeup exams.
- We will not exempt anyone from the Final.

Other Grade-Related Notes:

- The course will be curved to at most a 3.0 GPA (in accordance with suggested ISyE guidelines). I will never curve grades downwards. A Curve will only occur if there was a mistake on my part that was impactful towards student performance and you should not expect a curve.
- Regrading: If we have made a mistake in grading something, we will be happy to correct it. In order to receive a re-grade, you must submit a request within one week of our handing back the exam.
- Final Grades: A final average of 90 to 100 will receive an A, 80 to 89 will receive a B, and so on (appropriate rounding as necessary).

Homework:

- We do not accept late homework assignments for any reason. The cutoff point for submission will be 11:59 pm est on the day that it is due.
- If you cannont complete an assignment due to illness or other extenuating circumstances, we can exclude the assignment from the final grade calculation. This is rare and only for extreme cases.
- HW will consist of theoretical problems and computer programming projects.
- The first X problems will be graded. Any extra problems will be for practice.
- You can work together in small groups for homework assignments, but everyone must submit their own document.
- All assignments must be submitted through Canvas, in pdf format.
- Problems should be submitted in the order given in the assignment.
- Check your answers. Do your results make sense? If they don't and you can't figure out how to fix the problem, at least stating that you know an error exists will get you more partial credit.

Honor Code and Expectations: You are expected to adhere to the Georgia Tech Honor Code. For more information, see

https://policylibrary.gatech.edu/student-life/academic-honor-code

In addition, faculty and students have drawn up a list of mutually beneficial expectations; please see

https://catalog.gatech.edu/rules/21/

Course Topics: See detailed class schedule.