Instructor: Brett D. Wick  Office: Skiles 224
Office Phone: 404-864-4311  Office Hours: MWF 11:00am – 12:00pm
Email: wick@math.gatech.edu or by appointment

Text: The assigned text for the course will be:

Title: “Measure and Integral: An Introduction to Real Analysis”
Authors: Richard Wheeden and Antoni Zygmund
Publisher: Chapman & Hall/CRC Pure and Applied Mathematics
Edition: 1st

Prerequisite and Description: Math 6337 is an introduction to graduate real analysis. Topics covered include: measures, sigma-algebras, outer measures (on abstract measure spaces), Borel measures on \( \mathbb{R}^n \); integration, measurable functions, integrals, monotone convergence theorem, Fatou’s lemma, dominated convergence theorem, Fubini’s theorem (on abstract spaces), Lebesgue integral on \( \mathbb{R}^n \); decomposition and differentiation of measures, signed measures, Lebesgue-Radon-Nikodym theorem, functions of bounded variation.

Prerequisites for the course are Math 4318 (Undergraduate Analysis II) or consent of the School.

Attendance: Attendance is required for all lectures. The student who misses a class meeting is responsible for any assignments and/or announcements made. Office hours will not be utilized to re-teach material presented in class. However, questions to better understand the course are always welcome.

In the event of an absence that will impact your ability to complete your assignments due to travel representing Georgia Tech, you must notify the professor at least two weeks in advance to arrange an early test or other alternative. Otherwise, such absences will be treated as personal.

Homework: This course will have daily homework assignments which should be done before the next class. Homework will be collected and graded.

Exams: This course will have two mid-term exams, and a comprehensive final exam. The exams for the course will take place on:
Exam Dates:

Exam 1    September 23
Exam 2    November 4
Final Exam  Wednesday, December 14 2:50pm - 5:40pm

Learning Disabilities: It is the right of any student with a certified learning disability to request necessary accommodation. Such requests must be made well in advance of the time that the accommodation is required and a letter of documentation from the ADAPTS office must be presented at the time of any request.

Academic Honesty: It is expected that all students are aware of their individual responsibilities under the Georgia Tech Academic Honor Code, which will be strictly adhered to in this class.

Grades: The usual ten-point scale will be used (A: 90-100, B: 80-89, C: 70-79, D: 60-69, F: 0-59), however, if necessary, adjustments will be made to arrive at a standard grade distribution. Grades will be based upon attendance, participation, and exams and homework.

Important Dates for Spring 2011:

August 22    First day of classes
August 26    Last day to register and/or make schedule changes
September 5   School Holiday
October 14   Last day to drop or withdraw with a grade of “W”
October 15 - 18   Fall Break
October 30   Last day to withdraw from school with a grade of “W”
November 24-25 Thanksgiving Break
December 9    Last day of classes
December 14    Final Exam