MATH 0190 SYLLABUS[1]

Brown University

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Class: Monday, Wednesday, Friday 13:00–13:50.

Office hours: To be announced

Topics: Integration techniques, polar coordinates and complex numbers, differential equations, series and convergence tests, Taylor series, Fourier series

Textbook: You will not need a textbook for this course. I will make any required reading available on the website. You will be able to read about most of the course topics in Gilbert Strang's book *Calculus*, which is available for free online (just google "gilbert strang calculus" and it'll be the first link).

Gradescope: All your graded work in this course will be handled through an online submission and grading platform called Gradescope. Please visit the course website for details on how to sign up. Gradescope has many advantages over a paper-based system, one of which is a protocol for regrade requests, which I encourage students to use in the event that a solution is graded incorrectly.

Homework policy: A set of ten to fifteen problems will be due each week (except during exam weeks) at the **end of the day on Wednesday**. "End of the day" will be enforced via a 4 AM Thursday deadline to minimize deadline stress on your part, but I do not intend to prolong your waking hours: please think of the deadline as "end of Wednesday". In any case, *late work will not be accepted for any reason.* However, your lowest two homework scores will be dropped. Each problem set will cover content from the calendar week preceding its due date.

Some homework problems will be quite challenging, and much of your learning will come from working on problems. Plan to start in advance, ask questions, and work together.

Quizzes: There will be occasional short unannounced quizzes in class. These will be graded for completion (a good-faith effort will receive full points), and the quizzes taken together will count as one homework assignment. The quizzes should not be stressful. Research has shown that short, low-stakes quizzes help students learn and retain material.

[1]Much of the phrasing in this syllabus was copied from the 2014 syllabus written by Prof. Pflueger.

Grading: There will be two midterms, a final, and weekly homework. The two lowest homework grades will be dropped. Your final grade will be weighted as follows:

Homework	10%
Quizzes	5%
Midterm 1	20%
Midterm 2	20%
Final exam	25%
Best exam score	20%

Prerequisites: You must be comfortable with differentiation. You should also some integration techniques, including substitution. Comfort with the content of AP Calculus AB is sufficient.

Exams: The exams are scheduled for 18:00 to 20:00 on the 12th of October and the 9th of November, locations to be announced. The final exam is on the 17th of December from 14:00 to 17:00. Please book your holiday travel for after the final, as the exam will not be administered early.

Collaboration policy: You are encouraged to work together freely on the homework assignments, but you must write your answers entirely by yourself.

Calculators and computers: No calculators or other electronic devices are allowed (or necessary) for the exams. You may use calculators and computers for the homework.

Math 19, 2014 edition: Nathan Pflueger taught this course two years ago, and the materials available on his website might be helpful to you:

https://www.math.brown.edu/∼pflueger/math19/index.html

In particular, his topics list indicates corresponding section numbers in Strang's book.

Course-related work expectations: Students will meet 3 hours per week in class (42 hours total), 1 hour per week in discussion section (14 hours total). Homework and readings are estimated around 8 hours per week (111 hours total). In addition, there is a 3-hour final exam for which approximately 10 hours of review is assumed.

Disability support: Please inform me if you have a disability or other condition that might require modification of these procedures. You should also contact the Student and Employee Accessibility Services at 401-863-9588 or SEAS@brown.edu.