Instructor:  Mark Reeder, Maloney 519, reederma@bc.edu

Office hours: Mon 2-3, Wed 3-4, Thurs 4-5 and by appointment.

Email is good for quick questions and hints.

Teaching Assistant:  Marius Huber, Maloney 537, marius.huber@bc.edu, Office hours TBA.

Discussion sections:  In addition to the MWF lectures given by the instructor, there are once-a-week discussion sections MATH114801 (12:00) and MATH114802 (3:00) which meet on Thursdays in Gasson 302. You must be registered in one of these sections. Discussion sections are led by the TA, and will include homework discussion, examples, and occasional new material. This is also a place for students to ask questions in a smaller group setting.

Course website:  https://www2.bc.edu/mark-reeder/1103.html

Text:  There is no textbook to purchase. The text for the course consists of the notes here: https://www2.bc.edu/mark-reeder/1103notes1.0.pdf

These notes are in-progress and will be updated as the semester progresses.

Course Topics:  This course is a continuation of MATH1102. Topics include infinite sequences and series, and techniques of integration, with applications. We will also examine the historical origins of calculus. See the table of contents of the notes for more precise course topics.

Prerequisites:  This course is a continuation of MATH1102. You are expected to know the the algebraic and analytic properties of the real number system, functions, limits, derivatives, and to have seen an introduction to integration. You are also expected to have high motivation for mathematics. (See Placement below.)

Homework:  It will be assigned and collected every week, approximately. HOMEWORK WILL NOT BE ACCEPTED AFTER THE DAY IT IS DUE. Your lowest two homework scores will not count, so missing up to two assignments will not harm your grade. You can discuss homework problems with others, but what you hand in should be your own work. Write neatly and staple the pages in the upper left corner. Sloppy or unstapled homework may be rejected! ☹

Exams:  We will have two in-class exams on Friday February 16 and Friday April 6, along with a final exam Thursday May 10 at 9:00 am.

Calculators, phones and other electronic devices may NOT be used on any exam. Using an electronic device will be considered as cheating. See www.bc.edu/integrity.

Cheating on any exam will result in a failing grade in the course!
**Make-up policy** Unexcused absence from an exam results in a zero score. No exceptions. If you have a legitimate reason for missing an exam, you must arrange to take the exam before the scheduled day of the exam. If you are sick the day of the exam, or have a family emergency, etc. go to Health Services or your dean’s office; they will provide me with documentation of your illness or emergency.

If you are a student with a documented disability seeking reasonable accommodations in this course, please contact Kathy Duggan, (617) 552-8093, dugganka@bc.edu, at the Connors Family Learning Center regarding learning disabilities and ADHD, or Paulette Durrett, (617) 552-3470, paulette.durrett@bc.edu, in the Disability Services Office regarding all other types of disabilities, including temporary disabilities. Advance notice and appropriate documentation are required for accommodations.

**Grades:** The scores are weighted as follows. Homework: 30%, Exams: 20% each, Final: 30%. At the end of the course you will receive a number $N$, using this formula:

$$N = \left( \frac{3}{10} \times \text{HW} \% \right) + \left( \frac{2}{10} \times \text{Exam 1} \% \right) + \left( \frac{2}{10} \times \text{Exam 2} \% \right) + \left( \frac{3}{10} \times \text{Final} \% \right)$$

Your grade will be determined by your value of $N$, based on the following two rules: 1) Any student with the highest $N$ gets an A. 2) Students with nearby $N$’s receive nearby grades.

**Placement:** MATH1103 is designed for math and physical science majors (math, chemistry, geophysics, physics), who have had MATH1102 and also have a high motivation for mathematics. It is substantially more challenging than MATH1101, which is for everyone else. No prior experience with infinite series is required or assumed in MATH1103, but we do expect you to have a strong background in functions, limits and derivatives, some exposure to integration, as well as high motivation for mathematics.

If you’ve had calculus in high school, but do not have high motivation for mathematics and are taking MATH1103 because you think it will be an easy class since you “already learned calculus” you will not be happy here, and should instead take MATH1101. But if you’ve had a semester of calculus already and want to learn more and be challenged, this is the course for you!

For a complete walk-through of Calculus placement, please see [https://www.bc.edu/bc-web/schools/mcas/departments/math/undergraduate/about-calculus.html](https://www.bc.edu/bc-web/schools/mcas/departments/math/undergraduate/about-calculus.html)

**Advice:**

1. Attend all discussions. These will have more examples, help with homework, and occasionally new material will be sometimes covered in recitations.

2. Ask questions when you have them! You can ask questions at any time during lectures and discussions, and of course during office hours. Please do not be shy about asking questions in class. If you have a question probably many others also have that same question, and that helps me know what questions I should address.

3. Do some math every day; this is better than cramming the night before.