

MATH104-003 SPRING 2018

INTRODUCTION

Welcome to MATH104-003!

To help get things started, I have assembled below some important information about this course, including details on Homework Assignments, Exams, Grades, etc. Please READ CAREFULLY and in its entirety. This and much more information can be found in the course webpage:

<https://www.math.upenn.edu/~rbettiol/2018teaching104.html>

If you have any further questions, please come talk to me before/after class or send me an e-mail!

1. About this course.

- (i) This is undoubtedly a VERY EXCITING course, where you will continue learning about one of the foundations of modern Mathematics. Besides its intrinsic interest, without a good working knowledge of Differential and Integral Calculus, it is virtually impossible to become familiar with modern techniques and scientific advances in Physics, Engineering, Economics, Statistics, and even Biology and Chemistry. In terms of materials covered, as you can see from the centralized syllabus (available at the Mathematics Department website), this is a second semester undergraduate course on single-variable differential and integral calculus, with main topics being: volumes, integration techniques (parts, substitution, trigonometric substitution, partial fractions), sequences and series, and first-order differential equations.
- (ii) This is also a VERY DIFFICULT course: students in previous semesters report spending around 10 hours/week outside of the classroom to digest the material and complete homework assignments. Please keep this in mind for planning your weekly schedule and adjusting your study habits. If you notice that this course is demanding considerably more time, you should contact me (the earlier you do so, the more actions we can take – waiting too long can render your situation virtually unsolvable). That said, rest assured you will have my full support throughout the semester to hopefully enable you to overcome any mathematical challenges that the material may pose.

2. **Classes.** Classes will take place on Tuesdays and Thursdays, 10.30am-11.50am, at DLR A6 (ground floor). Attendance is mandatory.

3. **Online.** There are 4 main websites you will use for this course, listed in order of importance:

- (A) The course MAIN WEBSITE: <https://www.math.upenn.edu/~rbettiol/2018teaching104.html>
This is where the weekly written homework (and solutions) will be posted, as well as practice problems for the Exams, links to extra material (video lectures by N. Rimmer), and other learning resources.
- (B) MyMathLab: <http://www.pearsonmylabandmastering.com/northamerica/mymathlab/>
This is where you will complete your weekly online homework. Please sign up as soon as possible, using the following Course ID: bettiol50377. Detailed instructions on how to sign up can be found in (A).
- (C) Math Dept Course Website: <https://www.math.upenn.edu/undergraduate/calculus-homepages/calculus/mathematics-104>
Here you will find the official syllabus, as well as Old Final Exams, which are a very valuable resource to prepare for our own exams.
- (D) Canvas: <https://canvas.upenn.edu/>
This is where you will see your grades for homework assignments and exams. Effectively, we will only use Canvas as a gradebook communication device. All relevant course materials will appear in (A).

4. **Homework.** There will be weekly online and written homework assignments, posted on the website (A) on Tuesday mornings. Online homework is due on the following Tuesday (delivered via MyMathLab), and written homework is due in the following week's recitation (delivered to your TA).

5. **Exams.** We will have 2 Midterms and 1 Final exam, scheduled as follows:

- (i) Midterm 1, February 13, 10.30am - 11.50am (in class)
- (ii) Midterm 2, March 27, 10.30am - 11.50am (in class)
- (iii) Final, May 8, 12pm-2pm (Room TBA)

On each of the exams, you will be allowed to bring 1 letter-size front and back handwritten “cheat sheet” including any formulas, summaries, etc. No calculators or any electronic devices will be allowed.

6. **Grades.** Final grades will be determined based on weekly written and online homework (10% each), Midterm 1 (25%), Midterm 2 (25%), and Final (30%). Letter grades are *curved* across all sections, based on the Final Exam distribution. Here is a quick explanation given by N. Rimmer on what this means:

The final exam is used to set the curve at the end of the course, it determines the grade distribution. For example, after grading the final exam the Math 104 professors get together and decide what grade is considered an A, B, C, D, or F and then we tally the performance of each class to determine the distribution of each grade. Say for instance the distribution for my class is 32% A, 38% B, 25% C, 4% D and 1% F. This then becomes the course grade distribution, all students will be ranked from highest to lowest and the top 32% will be given some form of an A, the next 38% will be given some form of a B, and so on. The + or - cutoffs are determined by gaps in the distribution. No curve occurs until the end of the course so each midterm isn't curved. Usually, curving grades only benefits students and almost never results in a lower grade than what the un-curved distribution would give.

To the above, I would add that you may expect the average of the class to fall within the B range, so staying close or above that benchmark would be your best indicator of grade performance along the semester.

7. **Students with disabilities.** Students with a disability documented and recognized by the University must communicate directly with SDS / Weingarten Center (<https://www.vpul.upenn.edu/lrc/sds/>) to request the necessary accommodations. All exams will be taken by such students at the Weingarten Center, starting at the same time as the rest of the class. It is your responsibility to ensure that you are registered with SDS / Weingarten Center, and request the necessary accommodations *before each exam*. Data from previous semesters indicates it is essential to submit such requests at least 1 week in advance, since last minute requests might not be granted due to logistic difficulties at SDS / Weingarten Center.

8. **Academic integrity and class policies.** The highest levels of academic integrity, as detailed in the Pennbook, must be upheld in all activities related to this course. Students are encouraged to discuss homework problems with each other, but are required to write their solutions independently. The university-wide policies and procedures that are in effect regarding academic integrity, attendance, student conduct, secular and religious holidays, students with disabilities, etc are clearly stated in the Pennbook, and will be followed strictly. Absence from an exam will result in a zero grade for that exam, except in extraordinarily unusual circumstances, with both a valid written excuse and instructor approval. Any requests for grade revision must be submitted in writing.