

MATH 115 Spring 2021
Calculus I

Instructor: James Phillips

Email: jp100@wellesley.edu

Office: Clapp 308

Office Hours: Monday, Tuesday, Thursday, Friday 11:15 - 12:15
and by appointment

Textbook: The primary textbook for this class is *Calculus Simplified* by Oscar Fernandez. This book is available for free through the Wellesley College Library at <http://luna.wellesley.edu/record=b4496385>. It is also inexpensive to purchase. Another traditional text is *Calculus: Early Transcendentals* by James Stewart, which has many good practice problems and whose order of topics syncs with our course. For a more rigorous look, one can look at *Calculus* by Michael Spivak.

General Policy: Classes will be held synchronously over Zoom at the scheduled time. You are strongly encouraged to attend synchronously, although I recognize that this may not be possible for some of you. All lectures will be recorded and posted to Sakai. Even though the course is held remotely, students are nonetheless encouraged to participate and ask questions during class; I also encourage you to have your camera on during class time, if possible. Class periods will be a mix of lecture and group-based problem solving.

In class, please be courteous: arrive on time and stay until the end of class. Lectures are a good starting point, but the best understanding comes from getting your own hands dirty: give the material a look before lecture, and spend some time reviewing and practicing afterward.

All graded work will be collected through the website Gradescope. The graders and I will do our best to grade and return any work promptly.

This is certain to be a strange term. I will do my best to keep things as steady as possible, but our flexibility may very well be called on. Thus, communication will be vital. Even in a typical semester, I understand that things do come up. **If a circumstance arises that affects your performance in the course, you should inform me before it influences your grade.** If anything were to arise, we can work together to figure out an appropriate plan.

I reserve the right to modify this syllabus and the course as needed. Any changes will be announced before they can affect anyone's grade.

Topics: This course is meant to serve as an introduction to single variable calculus. In the course of this, students will develop their problem-solving skills and their ability to communicate mathematics to others. Topics include functions, limits, asymptotes, derivatives, linear approximation, curve sketching, optimization, antiderivatives, integrals, transcendental functions.

Warm-ups: Starting with the second class period, there will be a short collection of warm-up problems due on Gradescope due one hour before class. I intend for these assignments to be relatively quick and will often use them to either give some practice

for the previous class's material or lead into the current lesson. These will be graded primarily based on effort and engagement.

Homework: There will be two homework assignments per week, due at 7:00 PM Tuesday and Friday evenings. Homework assignments will often be a mix of computation practice and problem-solving exercises. Some problems may be difficult, so be sure to start early to give yourself time to work through problems that might take more creative energy. You are also welcome to work together on homework, but any work submitted must be your own. Late homework will not be accepted. Your lowest two homework scores, however, will be dropped.

Quizzes: There will be a quiz each Wednesday covering the material from the previous week. The quiz will be posted at 12:00 AM on Gradescope and should be submitted to Gradescope no later than 11:59 PM. You may use your notes on the quizzes but no other outside material is permitted. Working on quizzes together with other students is not permitted. Once you begin a quiz, you may take up to one hour to complete it. This hour does not include time spent scanning and uploading solutions. Your lowest quiz score will be dropped at the end of the semester.

Exam: There will be a self-scheduled final exam following the term. It will be posted to Gradescope at the beginning of the final exam period and will be due no later than the end of the final exam period. Like quizzes, the final exam will contain a mix of computational and theoretical questions covering the material from the entire term.

Reflections: At the end of each week, I will ask you to complete a short reflection to let me know how things are going in the class. Often, I will ask what went well during the week and solicit any suggestions for change during the upcoming week. Reflections comprise 5% of your overall grade in the course.

Grading: Each of the above components contributes the following amount to your overall grade in the course:

Homework: 25%

Warm-ups: 10%

Quizzes: 40%

Reflections: 5%

Final: 20%

Final grades will be assigned according to the following standard:

Numerical Range	Letter Grade
$98 \leq \text{grade} \leq 100$	A+
$93 \leq \text{grade} < 98$	A
$90 \leq \text{grade} < 93$	A-
$87 \leq \text{grade} < 90$	B+
$83 \leq \text{grade} < 87$	B
$80 \leq \text{grade} < 83$	B-
$77 \leq \text{grade} < 80$	C+
$73 \leq \text{grade} < 77$	C
$70 \leq \text{grade} < 73$	C-

The above table should be viewed as a “floor” for grades; that is, if you receive a final score in a given range, you should expect a grade no less than the one specified above. Grades below 70 will be handled on a case-by-case basis.

Honor Code: On homework, collaboration is expected and encouraged. You should feel free to talk to other students while you are in the process of thinking about a problem. You will need periods of concentrated individual study, but it is also helpful to spend time talking about the subject. However, solutions should be written up on your own, to gain practice and confidence in your ability to problem solve. Exams and quizzes are completed individually. Feel free to direct any questions to me.

Accommodations: If you have a disability or condition, either long-term or temporary, and need reasonable academic adjustments in this course, please contact Accessibility and Disability Resources (ADR) to get a letter outlining your accommodation needs, and submit that letter to me. You should request accommodations as early as possible in the semester, or before the semester begins, since some situations can require significant time for review and accommodation design. If you need immediate accommodations, please arrange to meet with me as soon as possible. If you are unsure but suspect you may have an undocumented need for accommodations, you are encouraged to contact (ADR). They can provide assistance including screening and referral for assessments. If the course schedule includes quiz or exam dates that conflict with your religious observances, please let me know at least one week in advance in order for us to make an alternative arrangement.

Resources: Anastacia Castro, our embedded tutor, will run weekly office hours. She has already mastered the course material and will be keeping pace with our class. Drop-in online tutoring is also available through the Math Department. A schedule will be posted when one is available.