Instructor: Nathan Pflueger (pronounced "fleeger")

email: npflueger@amherst.edu

office: SMUD 510

office hours: Tuesday 2:00-3:30 (tentative) Wednesday 1:30-3:00 Friday 1:30-2:30

Course webpage: http://npflueger.people.amherst.edu/111/

Time and locations: Monday 9:00-9:50 SMUD 207

Tuesday 9:00-9:50 SMUD **204** (changed from 206)

Wednesday 9:00-9:50 SMUD 207 Friday 9:00-9:50 SMUD 207

We meet at 9am every day except Thursday. Note that we meet in a different room on Tuesdays. Fortunately it is next door to the usual room.

Come to office hours! I am happy to answer your questions and also talk about the course in general. Even if you don't have specific questions, you can come to review material, listen to other students' questions, or just to chat.

email policy: The best way to reach me with course questions (besides office hours) is by email. I generally reply to email within 24 hours. However, **I often do not reply to email on weekends**. I will also reply less quickly on Thursdays, which is the day I devote primarily to research.

Goals and topics: This course introduces the two main ideas of calculus: the derivative and the integral. We cover only the basics of integration, which is explored in greater detail in Math 121. The main goal of this course is for students to develop some intuition about what derivatives and integrals communicate, and what sorts of problems they can solve. Along the way, we will discuss the concept of limits, which form the logical foundation for both derivatives and integrals. The course assumes no background in calculus, but will move quickly and introduce new ideas each day.

Textbook: Single Variable Calculus, **7th Edition**, by James Stewart. There are two versions we recommend, and there should be used copies of both available. Note that this is not the most recent edition of Stewart's book; we have chosen the 7th edition so that it will be easiest to find well-priced used copies.

- The hardcover version with chapters 1-11, ISBN 978-0538497831. This is a good choice if you think you will take Math 121 as well, as it covers the material for both courses.
- The softcover version made for Amherst College with chapters 1-6 only, ISBN 978-1133359791. This is a good choice if you will only take Math 111, as it should be lighter and cheaper.

The softcover edition probably only available at The Option; The Option will likely also have copies of the hardcover edition.

Structure of the course: There will be weekly homework assignments due Wednesday nights (submitted with an online system called Gradescope), three midterm exams (held on 9/27, 10/25, and 11/15; these are all Wednesdays), a final exam, and occasional short quizzes in class. Grades are computing with the following breakdown. There is no set curve or grading cutoffs, but most likely the median grade will be around a B.

 $\begin{array}{cc} \text{Homework} & 10\% \\ \text{Quizzes} & 5\% \\ \text{Your lowest midterm score} & 10\% \\ \text{Your other two midterms} & 20\% \text{ each} \\ \text{Final exam} & 35\% \end{array}$

Note that the lowest of your three midterms will be counted less in your final grade than the other two. This is to prevent a single bad exam from having an outsize impact on your grade.

Missed assignments: To compensate for illness and other emergencies, your lowest two homework scores will be dropped. If you cannot make a due date due to an emergency, you should simply skip the assignment, study and understand the posted solutions to catch up, and focus on keeping up with the new material in the course. Therefore late work will not be accepted for any reason. I find that this is much better for students, as it prevents them from falling further behind.

Missed exams: if you are ill or an emergency arises near an exam, notify me as soon as possible. If you have a time conflict with an exam, notify me as soon as possible, and at least one week in advance (exam dates are listed above).

Accommodations: I strive to make this course welcoming to all students. If you would like to discuss your learning needs with me, please schedule a meeting so that we can work together to support your academic success. Anyone who may require an accommodation based on the impact of a disability should contact me to make arrangements. I rely on Accessibility Services for assistance in verifying the need for accommodations and developing accommodation strategies, so I encourage you to contact them at accessibility@amherst.edu or 413-542-2337.

Intellectual responsibility:

- Homework: Mathematics is a collaborative subject; open and generous communication is one of its core values. Therefore you are strongly encouraged to work with other students, ask many questions, and learn from as many people as possible. However, you must write up the solution yourself. All your submitted work must be your work, written in your own words. Copying solutions from other students or internet sources is plagiarism. You are also expected to list each person your worked with on the front of your homework assignment.
- Exams: You will be allowed one page of notes (front and back) for each exam. No calculators or other aids are permitted. Cell phones should be stowed out of sight during exams. Use of cell phones or other devices during the exams (except in emergencies) will be grounds to receive a 0 on the exam. You are bound by the college's honor code, and all work must be entirely your own on exams.