

Math 240 (a.k.a. Calculus III)
Fall 2017
MWF 2:00-2:50 p.m., ANNS 111
University of Pennsylvania

Welcome! I'm looking forward to exploring with you the theory and applications of linear algebra and differential equations this semester.

Instructor: Dr. William Simmons, DRL 3N4C, wsimmo@sas.upenn.edu

(Please contact me in advance if an issue arises. Also, please read the syllabus and class announcements on Canvas carefully; many questions are already answered there.)

Office Hours (held in DRL 3N4C): Wednesdays 9-10 a.m. and Thursdays 1-2 p.m.; others, time permitting, by appointment.

TA: Benjamin Foster, bfost@sas.upenn.edu. Office hours: Thursdays: 9:00-9:30 AM in DRL 2N36, 4:30-5:00 PM in DRL 4C9, Fridays: 3-4 PM in DRL 4C9

Canvas: We will use the Canvas system (<https://canvas.upenn.edu>) as our homepage. Look there for assignments, announcements, and grades. Be sure to check the announcements regularly for changes to assignment due dates and other information. (It is helpful to receive automatic email notifications from Canvas about such things.)

Textbook: Stephen W. Goode and Scott A. Annin, *Differential Equations and Linear Algebra*, 4th ed., Pearson.

Exam and other important dates:

- Add deadline: Monday, Sept. 18
- First midterm: Friday, Sept. 29, in class
- Drop deadline: Monday, Oct. 9
- Second midterm: Friday, Nov. 3, in class
- Withdrawal deadline: Friday, Nov. 10
- Last day of classes: Monday, Dec. 11
- Final exam: Thursday, Dec. 14, 9-11 a.m., location TBA

Assignments: Homework is generally due at the beginning of class on Fridays (the first assignment is due Friday, Sept. 8, in class); any changes will be announced through Canvas. *Late work will not*

be accepted, so please talk to me ahead of time if you face a legitimate extenuating circumstance. Your two lowest homework scores will be dropped.

Quizzes: Most weeks during recitation there will be a quiz (the first will be the week of Sept. 11). Quizzes will be short (15 minutes at most), cover recent material, and are intended to be straightforward if you are keeping up. You may use one handwritten 8.5×11 formula sheet (both sides), but not electronic devices or other notes. It's important not to miss our class discussions and examples, so several times during the semester there will be an attendance "quiz" at the end of class. Your two lowest quiz scores (including attendance) will be dropped.

Exams: There are two midterm exams (on Friday 9/29 and Friday 11/3), both held in class. The final exam is Thursday, Dec. 14, from 9-11:00 a.m.; the location is TBA.

As with quizzes, you may use one handwritten 8.5×11 formula sheet (both sides) but no electronic devices or other notes.

Grades: Grades are determined by the following breakdown:

- 15% homework assignments, 15% quizzes, 35% midterms, 35% final

and correspond approximately to the following scale:

- A: At least 90% of available points
- A-: 85-89% of available points
- B+: 80-84% of available points
- B: 75-79% of available points
- B-: 70-74% of available points
- C+: 65-69% of available points
- C: 60-64% of available points
- C-: 55-59% of available points
- D+: 50-54% of available points
- D: 45-49% of available points
- F: Below 45% of available points

(Note: These are "approximate" because the actual number of A's, B's, etc., available to our section depends on our performance on the common final exam (university and department policy for multi-section courses). In practice this doesn't change things too much, so you always have a good idea of how you are doing.)

Errors in recording and/or grading must be brought up within a week of the assignment being returned. *Grades are determined by the numbers, so please don't request exceptions.*

Keys to success in Math 240:

- (Background knowledge) You should be able to carry out basic algebra, differentiation and integration (including solution of first-order differential equations as covered in Math 104) without much difficulty. Some rust on topics you understood well in the past can be worked through, but if you have serious difficulties with these tools or never really mastered them, we should talk about options to help you. In addition, you need to be curious about mathematics and be willing to think through the material we discuss.
- (Submitted work) Write neatly and show all relevant work needed to understand your thought process. Incomprehensible and/or messy answers may not receive credit. The emphasis is on clear written explanations as well as explicit calculations. Be sure to use complete sentences and correct grammar in your work.
- (Tips) This is a challenging class. Here are some quick tips:
 - Be consistent in your studying and keep up with lectures and homework.
 - Study beforehand the material we will discuss in class (enough to know what you do and don't understand so you can focus on the problem areas).
 - When you study a new concept, explain it to yourself in terms you understand and make connections with things you have already learned. Think deeply about the material over an extended period of time (i.e., not just before exams).
 - Be organized in taking notes and write just enough to remember the main points but not so much that you can't think as we're discussing. Afterwards, study your in-class notes.
 - Lastly (but very importantly), when you encounter concepts that aren't clear, identify what you are confused about and ask me, Benjamin, and each other *lots of questions* until you understand.
- (Getting help) There are *many* resources to help you succeed in Math 240, so be sure to take advantage of them:
 1. Recitation sections exist to help you learn the material. Make the most of the opportunity: Come prepared and ask questions.
 2. Come to office hours (both mine and Benjamin's).
 3. Look at the math department's resources for Math 240 at <https://www.math.upenn.edu/undergraduate/calculus-homepages/calculus/mathematics-240>.
 4. Soon after the beginning of each term (usually the third week), the math department sponsors drop-in help at the Education Commons and campus residences. See <https://www.math.upenn.edu/undergraduate/getting-help/calculus-help> for the schedule and locations. (This is a hidden gem; this service has been historically underutilized, so you should be able to get a lot of personal attention.)
 5. The Tutoring Center, which provides opportunities such as free tutoring appointments on campus as well as online basic math tutorials: <http://www.vpul.upenn.edu/tutoring/index.php>
 6. Helpful videos on calculus topics are found at <https://www.math.upenn.edu/undergraduate/calculus-homepages/math-video-archive>.

7. The Weingarten Learning Resources Center helps Penn students improve their academic performance: <http://www.vpul.upenn.edu/lrc/>.
 8. The math department maintains a list of tutors-for-hire: <https://www.math.upenn.edu/math-department-approved-private-tutors>
- (Accommodations) Please talk to me as soon as possible about accommodations through Student Disabilities Services (Stouffer Commons, 3702 Spruce Street, Suite 300, <http://www.vpul.upenn.edu/lrc/sds/>), scheduling conflicts with religious holidays, athletic events, etc., or working around health issues and other situations.

Above all, let me know if you have questions or concerns. Best of luck for a great semester!