

Math 3 Fall 2025 Syllabus

Course Description

This course is a self-contained introduction to single variable calculus. The first two-thirds of the class will cover differential calculus. Topics include: limits, continuity, rates of change and derivatives, differentiation rules, and applications of differentiation. The final third of the course will introduce integral calculus including Riemann sums, the concept of the definite integral and applications of integration.

Although this course is self-contained, it moves through material very quickly and assumes you have a mastery of college algebra and pre-calculus including familiarity with and the ability to manipulate and analyze functions including polynomial, trigonometric, logarithmic, and exponential functions.

If you are unsure whether you should be taking Math 3 versus Math 1, please talk with your Math 3 instructor.

Sections

There are multiple sections of Math 3 each led by an instructor. Below we see the sections and for each section the instructor, the time and place where classes meet, contact information for the instructor and the instructor's office hours.

Section #	Taught by	Meeting times	X-hour	Classroom
1	Phil Hanlon	MWF 12:50-1:55	Tu 1:20-2:10	008 Kemeny
2	Phil Hanlon	MWF 2:10-3:15	Th 1:20-2:10	008 Kemeny
3	Jessica Rattray	MWF 8:50-9:55	Th 9:05-9:55	008 Kemeny
4	Stoyan Dimitrov	MWF 10:10-11:15	Th 12:15-1:05	008 Kemeny
5	Stoyan Dimitrov	MWF 11:30-12:35	T 12:15-1:05	008 Kemeny

A word about X-hours. For those of you who are newly arrived students at Dartmouth, every class has an extra period each week called the X-hour. Your class schedule was put together so that you have no other classes that conflict with your X-hour. It is not expected

that the instructor will use the X-hour every week. But the X-hour is available to the instructor if they want to provide additional coverage of course material or on the rare occasion where the instructor has a conflict and is unable to meet a regularly scheduled class.

This term in Math 3 we will deliver the three Mid-term exams during the regularly scheduled class periods on October 8, October 29 and November 12. Delivering them during the class period will be much more convenient for you in place of evening exams. To accommodate those lost class periods, we will use the X-hours on those weeks for to cover the course material that would otherwise have been covered on 10/8, 10/29 and 11/12.

Your instructor will be sure to remind you on those weeks when the X-hour will be used.

Instructors

Phil Hanlon

Contact information: Philip.J.Hanlon@dartmouth.edu
Instructor's Office Hours: M 3:15-4:15, W 11-12:30 in 204 Kemeny

Jessica Rattray

Contact information: Jessica.Rattray.GR@dartmouth.edu
Instructor's Office Hours: M 10-11:30, W 10-11:30 in Kemeny 239

Stoyan Dimitrov

Contact information: emailtostoyan@gmail.com
Instructor's Office Hours: M 3-4, W 3-5 in 320 Kemeny

Tutorials

Tutorials are drop-in hours available for you to get help on homework, ask questions about course material, and review for quizzes. You are also encouraged to use these as a space to collaborate and study with classmates. These are run by Graduate Student TA Alex Moon joined by a pair of undergraduate TA's. We will post the weekly schedule and location of these tutorials when they are finalized.

Textbook

Calculus Volume 1 by OpenStax (ISBN: 978-1-947172-13-5). This textbook is available for free online at <https://openstax.org/details/books/calculus-volume-1>. It is optional but

recommended to read the corresponding sections in the textbook before each class (and expected if you miss class).

Grading

We will grade this course on a curve. Your position on the curve will be determined by a final score which weights homework, the final exam and each mid-term as follows:

Homework	20%
Mid-term #1:	15%
Mid-term #2:	15%
Mid-term #3:	15%
Final Exam:	35%

Attendance and Engagement

Although we will not grade you on attendance or engagement, they are important aspects of success in this course. When in class, please pay attention, ask and answer questions and do not use technology for purposes not related to class (eg., exchanging email or surfing the web). It is a distraction to your other classmates.

Homework

A homework assignment will be due every Monday starting September 22. Typically, the problems will cover the material from the prior week.

You are encouraged to work together on homework and to seek help at the Math Department tutorial sessions. But each of you needs to write up your own solutions in your own handwriting (i.e., do NOT photocopy someone else's solutions and turn those in as your own).

Meaningful engagement with the homework problems is the best way to prepare for the exams. You should understand what each question is asking and why the solution you've submitted answers that question. Simply copying solutions given to you by other students or by ChatGPT will not prepare you for the exams.

You will need to turn in assignments using the software Gradescope. In the "Files" section of the Math 3 Canvas site you will find a file entitled "Gradscope Instructions" that explains how to use the software. In addition, Gradescope is commonly used for turning in

assignments at Dartmouth. So if you are having difficulty using it, feel free to consult with your peers.

Mid-term Assessments

There will be three mid-terms that will be administered in class according to the following schedule:

Mid-term #1 on Wednesday, October 8

Mid-term #2 on Wednesday, October 29

Mid-term #3 on Wednesday, November 12

The Honor Principle

Academic integrity is at the core of our mission as mathematicians and educators, and we take it very seriously. We also believe in working and learning together.

Dartmouth's Academic Honor Principle applies to all courses, including this one. If you are not familiar with the policy, you should review it here:

<https://policies.dartmouth.edu/policy/academic-honor-policy-undergraduate-students-arts-and-sciences>.

Violations of the Academic Honor Principle will be referred to the Committee on Standards.

On homework, you are encouraged to work with your classmates. If you are part of a group of students that produces a solution to a problem, you cannot simply copy that group answer. You must write up the solution individually and explain your steps in your own words. You must list the names of everyone you worked with at the top of each homework submission (this does not include your instructor or TAs).

You are allowed to use our textbook and notes from class, and you are allowed to use other online reference and educational sources such as the Khan Academy or Wikipedia to reinforce your learning of the concepts covered in class, but you are not allowed to specifically look up solutions to homework problems as a means to avoid thinking about the problem yourself. You are also not allowed to ask for the solution by posting a particular problem on any online Q & A site or help forum.

Accommodations

Students requesting disability-related accommodations and services for this course are required to register with Student Accessibility Services (SAS)(get started at <https://students.dartmouth.edu/student-accessibility/students/where-start>) and request that an accommodation email be sent to their instructor in advance of the need for an accommodation. Then, students should schedule a follow-up meeting with their instructor to determine relevant details such as what role SAS or its Testing Center may play in accommodation implementation. This process works best for everyone when completed as early in the quarter as possible. If students have questions about whether they are eligible for accommodations or have concerns about the implementation of their accommodations, they should contact the SAS office at

student.accessibility.services@dartmouth.edu,
603-646-9900

All inquiries and discussions will remain confidential.

Special Considerations

The academic environment at Dartmouth is challenging, our terms are intensive, and classes are not the only demanding part of your life. There are a number of resources available to you on campus to support your wellness, including your undergraduate dean (<http://www.dartmouth.edu/~upperde/>), Counseling and Human Development (<http://www.dartmouth.edu/~chd/>), and the Student Wellness Center (<http://www.dartmouth.edu/~healthed/>).

Some students may wish to take part in religious observances that occur during this academic term. If you have a religious observance that conflicts with your participation in the course, please meet with your instructor before the end of the second week of the term to discuss appropriate accommodations.

Title IX

At Dartmouth, we value integrity, responsibility, and respect for the rights and interests of others, all central to our Principles of Community. We are dedicated to establishing and maintaining a safe and inclusive campus where all have equal access to the educational and employment opportunities Dartmouth offers. We strive to promote an environment of sexual respect, safety, and well-being. In its policies and standards, Dartmouth demonstrates unequivocally that sexual assault, gender-based harassment, domestic violence, dating violence, and stalking are not tolerated in our community.

The Sexual Respect Website (<https://sexual-respect.dartmouth.edu>) at Dartmouth provides a wealth of information on your rights with regard to sexual respect and resources that are available to all in our community. Please note that, as a faculty member, I am obligated to share disclosures regarding conduct under Title IX with Dartmouth's Title IX Coordinator. Confidential resources are also available, and include licensed medical or counseling professionals (e.g., a licensed psychologist), staff members of organizations recognized as rape crisis centers under state law (such as WISE), and ordained clergy (see https://dartgo.org/titleix_resources).

Should you have any questions, please feel free to contact Dartmouth's Title IX Coordinator. Their contact information can be found on the sexual respect website at: <https://sexual-respect.dartmouth.edu>.