

Honors Math I
Math 295 - Fall 2019
U(M)

Administrative Information:

Instructor: Sarah Koch; please call me 'Sarah'

Office: 3855 East Hall

E-mail: kochsc@umich.edu

Office Hours:

Monday, 8:30p-9:30p in EH3866

Tuesday, 9-10a in EH3855

Wednesday, 9-10a in EH3855 and 8:30p-10:30p in EH3866

Course Assistants:

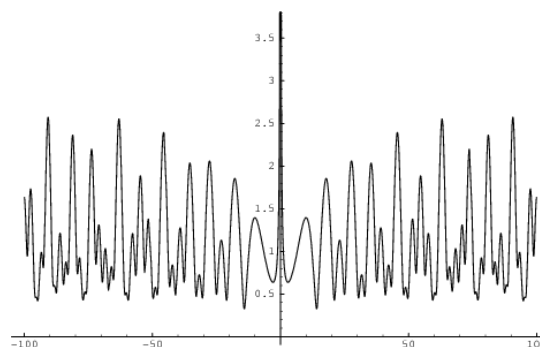
Noah Luntzlar, nluntzla@umich.edu

Annie Xu, wanqiaox@umich.edu

Discussion Section: Monday, 7-8p in EH3866

Noah's Office Hour: Tuesday, 7-8p in EH3866

Annie's Office Hour: Wednesday, 6-7p in EH3866



Course Information: The goal of this course is to understand why calculus really works, to learn how to prove mathematical statements, and to develop the ability to think mathematically. It is assumed that you have already shown yourself to be a strong student of the mechanics of calculus. Math 295 develops the entire theory of calculus from first principles, with emphasis on concepts, abstraction, and the internal structure of calculus, rather than on computation or applications. You will be required to work hard: about n hours each week beyond class time, for some $n \in [18, \infty)$.

Your prime number: 53

Textbook: Spivak's *Calculus*, 4th edition

Homework: There will be weekly homework assigned. Late homework will not be accepted. The two lowest homework grades are dropped. *Homework is by far the most important part of this course.* You are encouraged to discuss the problems with other students, as well as the course assistants, but you must write up your solutions independently. **Please write the names of all collaborators on the top of your problem set when you turn it in.** Warning: It is unbelievably easy to detect plagiarism in mathematics; if you are caught, you will fail. To facilitate the grading of homework: do the problems in order, and use standard sized paper. No credit will be given for misstated problems.

You may want to type up your homework; most mathematicians use LaTeX when they write. Have a look at <http://www-personal.umich.edu/~kochsc/295F2019.html> for a sample LaTeX file to get started.

Exams: We will have two midterm exams and a final exam in this course. There are no alternate or makeup exams (except in cases of extreme human tragedy). The exam problems will be similar to homework problems. In other words: do your homework and understand it!

Exam 1, in class on Oct 11

Exam 2, in class on Nov 27

Final Exam, in Weiser 260 on Dec 20, 1:30-3:30p

Grading: Your course grade will be determined by the following scheme:

40% Homework

30% Midterm exams (15% each)

30% Final

Concluding remarks: on the grading policy in Math 295, and more importantly, on being nice.