

4/52001 INTRODUCTION TO ANALYSIS I SPRING 2017

Description

We will cover first four chapters of the textbook (see information below) skipping some of the sections and adding a few topics. We will cover: Sets and Functions, Mathematical Induction, Countable/Uncountable sets, Axioms and Properties of Real Numbers, Inequalities, Absolute Value, Infimum and supremum, Limit of a Sequence of Real Numbers, Monotone Sequences, Subsequences and the Bolzano-Weierstrass Theorem, Introduction to Infinite Series, Limits of Functions, Continuous Functions and their Combinations, Continuity and Uniform Continuity.

Text

Elementary Analysis: The Theory of Calculus, any edition.

Contact Info

Instructor: Jenya Soprunova

Office: MSB 219

Phone: (330)672-9086 (I am almost never in my office, please contact me over e-mail.)

E-mail: soprunova@math.kent.edu Please use this e-mail address, not my kent.edu address

Office Hours: I do not plan to hold on-line office hours. I will do individual consultations over e-mail instead. Please e-mail me with question as many times as you need. Work on the problem first. In your e-mail, tell me what you tried and where you got stuck.

Class schedule

We will have a face-to-face meeting on January 17th, 4:25–6:00 pm in MSB 108 for people to meet each other. It is okay if you cannot make it to this meeting especially if you took classes with the program before and know other people taking this class. I want to make sure you have other people to talk to about homework sets. We will have Midterm 1 on February 21 4:25-6:25 and Midterm 2 on April 6 4:25-6:25. Final exam will be scheduled the week of May 8th. My goal is to schedule it on Thursday May 12th starting at 4:25. I will let you know as soon as I find a room.

Grading

Homework (25%) + Midterm 1 (25%) + Midterm 2 (25%) + Final Exam (25%).

Recordings and Homework Assignments

I will usually be posting two to three video recordings each week. Recordings, homework assignments (one per week), and class notes will all be available on Blackboard. You will be assigned homework due Friday of every week, with some exceptions. First homework assignment is due Friday January 20th.

Homework assignments provide you with an opportunity to get some practice and feedback. Do not use internet for searching for problems. This may bring your homework grade up but will bring down your exam grades. If you are working with someone together make sure you do not rely on their help too much. Always make sure that you write up your solutions on your own without other people present and not using notes from discussions with other people. Even if you got a hint from someone make sure you understood it completely and can produce the solution on your own.

Your solutions need to be written in complete sequences. For more information read Don White's Guidelines for Writing Proofs which I will post on Blackboard.

You will be submitting your completed homework assignments on Blackboard. Make sure your name appears on the front page. Please use a dark pencil or pen, preferably a black one. Please check the quality of your scan before you submit. Make sure it's readable.

Submit your assignment as a single pdf file. If you need to merge a few files, look up a merge pdf tool on-line. In this course you are allowed (and even encouraged) to discuss assigned homework with your fellow students but you have to write up your solutions on your own (without other people present and not using notes from discussions with other people).

Time to be spent working on homework assignments

You should expect to spend anywhere from 2 to 8 hours on each homework assignment, not counting the time that you are listening to the recordings.

Exams

- Midterm 1: Face-to-face, room to be announced, on February 21 4:25-6:25 pm.
- Midterm 2: Face-to-face, room to be announced, on April 6 4:25-6:25.
- Final exam: Final exam will be scheduled the week of May 8th. My goal is to schedule it on Thursday May 12th starting at 4:25.

Students with disabilities

University policy 3342-3-01.3 requires that students with disabilities be provided reasonable accommodations to ensure their equal access to course content. If you have a documented disability and require accommodations, please contact the instructor at the beginning of the semester to make arrangements for necessary classroom adjustments. Please note, you must first verify your eligibility for these through Student Accessibility Services (contact 330-672- 3391 or visit www.kent.edu/sas for more information on registration procedures).

Registration Deadlines

The official registration deadline for this course is January 22, 2017. University policy requires all students to be officially registered in each class they are attending. Students who are not officially registered for a course by published deadlines should not be attending classes and will not receive credit or a grade for the course. Each student must confirm enrollment by checking his/her class schedule (using Student Tools in FlashLine) prior to the deadline indicated. Registration errors must be corrected prior to the deadline.

Academic Honesty

University policy 3342-3-01.8 deals with the problem of academic dishonesty, cheating, and plagiarism. None of these will be tolerated in this class. The sanctions provided in this policy will be used to deal with any violations. If you have any questions, please read the policy at <http://www.kent.edu/policyreg/chap3/3-01-8.cfm> and/or ask.

In this course you are allowed (and even encouraged) to discuss assigned homework with your fellow students but you have to write up your solutions on your own (without other people present and not using notes from discussions with other people).