

Fall 2019 – MATH 42001/52001 – Prof. Laura Smithies

Course Information

Course: Analysis I - 15722/15739 - MATH 42001/52001-001-201980.

Semester: Fall 2019.

Meeting Times: Monday, Wednesday, Friday, 12:05 - 12:55 PM.

Meeting Place: MSB room 106

Professor

Professor: **Dr. Laura Smithies**

Office Hours: Mon. and Fri. 10:30 AM - 12:00 PM,
Wed. 10:00 AM - 10:50 AM,
by appointment.

Office: 204 Mathematical Sciences Building

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Website: www.math.kent.edu/~smithies

Course Goals and Overview

This course will begin with a study of foundational material in logic, proofs and set theory. We will then cover the standard 42001/52001 topics: basic structure of the real numbers, Cauchy sequences, convergence, completeness of the real numbers, continuity, differentiation and Riemann integration. This course is a prerequisite for Math 42002/52002. This sequel course covers further development of integration theory, infinite series, uniform convergence, several variable calculus and metric spaces.

Course Calendar

Labor Day: Mon. Sept. 2nd (Holiday)

Fall Break: Fri. Oct 11th (Holiday)

Midterm: T.B.A. - around Oct. 16th

Vets Day: Mon. Nov. 11th (Holiday)

ThanksG Break: Wed. Nov. 27th, Fri. Nov. 29th (Holiday)

Final Exam: Mon. Dec. 9th, 10:15 AM - 12:30 PM (MSB 106)

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Course Requirements

Midterm	100 points
Final Exam	100 points
Homework	200 points (SCALED)
Total	400 points

The exams are in-class, closed-book tests. We will agree on a day around Wednesday October 16th to have the midterm. The final exam is mandatory and comprehensive. Homework will be collected on a regular basis, generally 2 class periods after we cover a chapter. The 200 possible homework points above is based on your SCALED, AJUSTED, homework point total.

Grade Scale

Percent	Grade	Percent	Grade	Percent	Grade	Percent	Grade
93 - 100	A	83 - 86	B	73 - 76	C	63 - 66	D
90 - 92	A-	80 - 82	B-	70 - 72	C-	60 - 62	D
87 - 89	B+	77 - 79	C+	67 - 69	D+	0 - 59	F

Attendance and class participation will be considered in determining borderline grades.

The grade scale may be curved up (in students' favor) but will not be curved down.

Attendance and make up policy

All students are expected to attend essentially every class. If missing a class is unavoidable, you are still responsible for all material covered and all announcements and assignments made during your absence. Students are also expected to complete assigned reading and home exercises, and to participate in class discussions.

Full credit make up exams will not be given except to those students who provide adequate documentation of a true emergency or appropriate university excused absence. See www.kent.edu/policyreg/administrative-policy-regarding-class-attendance-and-class-absence. If you will miss an exam, contact me as soon as possible at lsmithie@kent.edu. Full credit late homework is only accepted for university excused absences. However, your two lowest homework scores will be dropped before your scaled homework score is calculated (See course requirements above.)

Prerequisites

Unless you have instructor permission, to enroll in this class you must have completed one of the following courses, with a C or better.

MATH 22005 ANALYTIC GEOMETRY AND CALCULUS III Study of functions of several variables, including partial derivatives and multiple integrals.

MATH 32051 MATHEMATICAL METHODS IN THE PHYSICAL SCIENCES I Mathematics background beyond calculus I and II for upper-division courses in the physical sciences. Topics include complex numbers and arithmetic, linear algebra, partial differentiation and multiple integrals.

If you are enrolled in 52001, you must have graduate standing.

Required Material

The KSU bookstore carries the following required material for this class:

TITLE: Introduction to REAL ANALYSIS AUTHORS: Bartle & Sherbert

EDITION: 4th ISBN: 9780471433316 PUBLISHER: Wiley

Student Accessibility Services

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).

General Expectations

Each student is responsible for attending class regularly, carefully completing daily reading and homework assignments, coming to class on time and prepared, and actively participating in class. Any student having trouble with the material is responsible for seeking help from the instructor, tutors, or fellow students. Regardless of where you find help with this material, make sure that you write up each homework problem without aid from any source including your book or notes, as you will need to be able to do this on our midterm and final.

Reading is required before each class meeting. The lectures are designed to supplement and amplify your reading, not replace it. That means that you are expected to complete the reading assignment before class so that you can engage in a discussion of the material. Also, you will be accountable for information in the book that will not be covered explicitly in class. **You need to spend 10 to 15 hours per week reading our textbook or working on this material outside of our classroom.**

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Additional Information

- Every class has its own schedule of deadlines and considerations. To view the add/drop schedule and other important dates for this class, go to the Students Tools and Courses tab in FlashLine and choose either View or Print Student Schedule. To see the deadlines for this course, click on the CRN or choose the Drop or Add a Course link and click on the green clock next to the course under Registration Deadlines.
- The official registration deadlines can be found at <https://www.kent.edu/registrar/calendars-deadlines>. This site also gives the dates for the last day to withdraw from this class without receiving a grade of 'W' and the last day to withdraw from this class and receive a grade of 'W'. 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.
- 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/administrative-policy-regarding-student-cheating-and-plagiarism> and/or ask. A condensed version of these policies is on our class website.

This syllabus is a guideline but changes may be announced in class.