

MILLSAPS COLLEGE — DEPARTMENT OF MATHEMATICS

REAL ANALYSIS (MATH 4630 – 01)

Spring 2026

Instructor: Dr. Priyadarshi Dey**Email:** deyp@millsaps.edu**Time:** TTh 9:55am – 11:25am**Place:** Sullivan-Harrell Hall 268.**Office Hours:** MW 1 : 00 pm–2 : 30 pm (in-person) or *by appointment*.**Office Location:** Sullivan-Harrell Hall 362.**Textbook:** *Understanding Analysis*, 2nd edition, by Stephen Abbott (Springer).

Course Objectives: This course provides a rigorous treatment of the real number system, developing from first principles the notions of limits, sequences and series, differentiation, and integration, among other core topics. The goal is not only to strengthen technical understanding, but also to challenge and refine mathematical intuition. As the text emphasizes, real analysis is more than a refined version of introductory calculus: students encounter the subtle structure of the real line, the nuanced distinctions among modes of convergence, and the intellectual richness that emerges from the paradoxes of infinity.

Course Prerequisites: MATH 2240 (Calculus III) and MATH 2310 (Introduction to Adv Math).

Course Structure: Homework assignments (approximately every other week), student presentations, tests (two in-class exams and a final exam), and class participation are the major components of this course and together make up the most substantial portion of your grade. The class has several components:

- *Homework Assignments:* You are expected to complete and submit assigned problem sets through Course Connect approximately every other week. Homework assignments will typically be posted in advance, and you will be given sufficient time to work through the problems carefully.
- *Student Presentations:* There will be a regular student presentation component throughout the semester, occurring roughly once per week. Students will present selected problems, examples, or proofs related to the course material. Presentation topics and problems will be announced ahead of time to allow for adequate preparation.
- *Exams:* There will be two in-class exams during the semester and a comprehensive final exam. The in-class exams will assess your understanding of definitions, theorems, and proof techniques covered up to that point, while the final exam will emphasize synthesis of ideas from across the course.

Tests and Makeup Policy: There will be two (in class) Tests, and a cumulative Final. Tentative dates are:

Test	Date	Time
Test #1	Thursday, February 19	In-class
Test #2	Thursday, April 2	In-class
Final Exam	Tuesday, May 5	9 – 11am

You must take tests on the specified dates. Usually, makeup exams will not be given. If a student misses an exam for reasons that are serious, unavoidable, and beyond student's control, the situation will be handled on an individual basis. When possible, the student should notify the teacher before missing work. Employment schedules, family reunions, vacations and athletic training/practice schedules of students do not comprise a valid excuse for absences. The Final exam will not be rescheduled for discretionary reasons, including conflicts with work schedules, conflicts with classes and exams at other colleges, and travel plans.

Grading and Scale:**Grading Breakdown**

Component	Weight
Homework (~ every other week)	15%
Student Presentations (weekly)	15%
Midterm Exams (2 total)	20% each
Final Exam (cumulative)	30%

Final Grading Scale

Numerical Average	Letter Grade
$93 \leq x \leq 100$	A
$90 \leq x < 93$	A–
$87 \leq x < 90$	B+
$83 \leq x < 87$	B
$80 \leq x < 83$	B–
$77 \leq x < 80$	C+
$73 \leq x < 77$	C
$70 \leq x < 73$	C–
$67 \leq x < 70$	D+
$60 \leq x < 67$	D
$x < 60$	F

Important dates for Spring 2026:

Date(s)	Event
Monday, Mar. 9 – Friday, Mar. 13	Spring Break, no classes
Wednesday, Mar. 25	Deadline for dropping with grade W

Policies of the Instructor

- If your score on the cumulative final exam is higher than your lowest midterm exam score, then the final exam score will replace that lowest midterm score. Otherwise, all exam scores will remain unchanged.
- You are allowed to take *one extension* on a weekly homework assignment during the semester. The extension must be requested before the original due date and will provide an additional 24 hours to submit the assignment. No further extensions will be granted, and late work without an approved extension will not be accepted.
- Any violation of the Millsaps Honor Code will be reported to the Honor Council. This includes (but is not limited to): cheating, plagiarism, lying, submitting someone else's work as your own, submitting work which you do not understand (in the case of group projects), and unauthorized assistance on any graded assignment. See <https://millsaps.edu/academics/the-millsaps-experience/academic-integrity/>.
- Class communications will be made by Millsaps e-mail. It is assumed that students will check and thoroughly read their Millsaps e-mail at least once per day.
- Grades for all assignments will be posted in a timely manner (typically within one week of submission) on Course Connect. While a “running average” will not be calculated in real time, your standing in the course can be estimated using the course grade breakdown and letter grade scale on the first page. One-on-one discussion with the instructor about grades or standing is welcome.
- Content of this syllabus is subject to change by the instructor.

College-wide Statements (Spring 2026)

- **ADA Accommodations:** Under the requirements of the Americans with Disabilities Act (ADA) and Section 504, accommodations can be made for students with disabilities or learning differences. If you require accommodations or have questions about academic accommodations, please contact the Student Support Coordinator at ada@millsaps.edu.

Accommodations will not be granted until you have met with the Coordinator, your letters/documentation have been processed, and you have met with your instructor.

- **Attendance:** Irregular attendance under normal circumstances may indicate that a student is having difficulties adjusting to the course or to the College. Students should email their professors with any questions or concerns about engaging in courses when they miss classes due to illness.

In-person attendance for all class, lab, or studio meetings is the expectation for all students. Students should notify their instructor prior to the meeting time if they need to miss a session, providing a valid reason for their absence. Faculty will regularly report attendance to the College, regardless of whether or not attendance is a factor in a student's grade.

- **Course Connect Support:** Course Connect is Millsaps' learning management system. Your courses in Course Connect will provide access to syllabi and important course information. To access Course Connect, visit <https://courses.millsaps.edu> and log in with your Millsaps username and password.
- **ITS HelpDesk:** The ITS HelpDesk is the resource for technical support for students. The HelpDesk is located in AC100 and can be reached by phone at 601-974-1144 or by email at help@millsaps.edu.
- **The Writing Center and CASE:** All students are strongly encouraged to visit the Writing Center and CASE (the Center for Academic Success and Excellence). Both centers are staffed by peers trained as academic consultants who support learning and writing across all disciplines of study. Visit millsaps.mywconline.com for more information.
- **Title IX:** As an instructor, one of my responsibilities is to help create a safe learning environment on campus. I also have a mandatory reporting responsibility as a member of the faculty. I will seek to keep information you share private to the greatest extent possible. However, if I am made aware of information regarding sexual misconduct or information about a crime that may have occurred on campus, I am required to share it with the College. If students wish to speak with someone confidentially, they should contact Student Life at 601-974-1200.
- **Millsaps-Wilson Library:** Library resources can be found on the [library's webpage](#). Librarians are available to assist with research requests Monday–Friday. You can email librarian@millsaps.edu to ask questions or set up a meeting.
- **CARE:** If you find yourself struggling with managing your coursework, physical or mental health, finances, relationships on or off campus, or any other aspect of being a student, Millsaps has resources available to help you. All emergency concerns should be reported to Campus Safety at **601-974-1234**.
- **Honor Code:** Millsaps College is an academic community dedicated to the pursuit of scholarly inquiry and intellectual growth. The foundation of this community is a spirit of personal honesty and mutual trust.
Each examination, quiz, or other assignment that is to be graded will carry the affirmed pledge: **“I hereby certify that I have neither given nor received unauthorized aid on this assignment. (Signature)”**

All the best for the semester!