

# Math 31B (Lecture 1): Integration and Infinite Series

<https://pabloocal.github.io/Teaching/SMATH31BL12024/>

Spring 2024

## Instructor

**Name:** Pablo S. Ocal

**Office:** MS 5230

**Contact:** <http://www.math.ucla.edu/~socal>

**Lectures:** MWF 9:00-9:50 am

**Office hours:**

W: 8:00-8:45am and 9:00-9:45am  
and by appointment.

**Classroom:** MS 4000A

## Teaching Assistants

**Name:** Haoyang Lyu

**Name:** Mia Zender

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## Prerequisites

- You are expected to be familiar with polynomials, trigonometric functions, exponential and logarithm functions, including manipulating them and knowing their graphs.
- You are expected to be familiar with the materials in Math 31A, including the definition and computation of limits, the definition and computation of derivatives (using the product rule, the quotient rule, and the chain rule), the definition and computation of integrals (using the fundamental theorem of calculus and changes of variable), and the summation notation.

## Textbook

*Single Variable Calculus (2nd edition)* by Jonathan D. Rogawski.

## Homework

Homework will be assigned and collected every week. It will be assigned on Mondays and it will be due the following week on Friday via Gradescope. It will be graded and

promptly returned to you via Gradescope. The assignments will be posted on the course website and on Gradescope. Your score on each homework assignment will be based on completeness, on your work shown, and on a few randomly chosen problems, graded for correctness. The lowest homework score will be dropped. **Late homework will not be accepted. Submissions after the due date will not be accepted.**

## Discussion

During discussion sessions an exercise will be assigned and collected every week. It will be assigned on Mondays and it will be due the Thursday of the same week, via Gradescope. It will be graded and promptly returned to you via Gradescope. Your score on each discussion assignment will be based on completeness, and on your work shown. The lowest discussion score will be dropped. **Late assignments will not be accepted. Submissions after the due date will not be accepted.**

## Exams

During the exams, you may not use notes, calculators, cell phones, or anything other than pen. **There will be no make-ups for missed exams. If you miss a midterm you have to provide a legitimate, documented reason, in advance. You must take at least one midterm. You must take the final exam.** Please bring a photo ID to every exam. The exams are scheduled for the following dates:

- Midterm 1: April 24.
- Midterm 2: May 15.
- Final: June 8.

## Grading

Your final grade in this class will be computed as the maximum of the following.

| Grade 1:       | Grade 2:         | Grade 3:       |
|----------------|------------------|----------------|
| Homework 25%   | Homework 25%     | Homework 25%   |
| Discussion 15% | Discussion 15%   | Discussion 15% |
| Midterm 1 15%  | Max. Midterm 25% | Final 60%      |
| Midterm 2 15%  | Final 35%        |                |
| Final 30%      |                  |                |

Please keep in mind that you have to take at least one midterm.

## Accommodations

If you have a condition that requires accommodation, please contact the Center for Accessible Education (<https://www.cae.ucla.edu>) as soon as possible. They will determine with you what accommodations are appropriate and communicate them to the instructor. This service is confidential. **If you require accommodation, you will take the exams at the CAE's facilities. It is your responsibility to make sure you have contacted the CAE and that they are expecting you. It is your responsibility to make sure CAE contacts me in time to provide the exams.**

## Honor Code

UCLA's Honor Code governs all work in this class. All work submitted for credit must be the student's own and should reflect the student's own understanding of the material.

## COVID-19 Policy

The most updated information is available at <https://covid-19.ucla.edu/>.

- Each of us is responsible, regardless of vaccination status, for wearing an approved mask that fully covers our nose and mouth for the duration of class, office hours, or other course-related activity. Disposable masks are available at the Wooden Center for anyone unable to obtain a mask or who has forgotten to bring one to campus. Appropriate masks include two-ply woven fabric masks, surgical masks, non-woven KN95 masks, and N95 respirators. Scarves, balaclavas and ski masks, single-layer fabric masks and neck gaiters, bandanas, and turtleneck collars are not adequate. For those that have a medical reason not to wear a mask, you can contact the Center for Accessible Education to have this exception approved and sent to me.
- Each of us must be fully vaccinated. Per the COVID-19 Response and Recovery Task Force, unvaccinated students must comply with twice-weekly testing.
- Each of us is required to complete daily symptom checks, regardless of vaccination status.

**Please stay home if sick or potentially exposed.** Be advised that refusal to comply with current campus directives related to COVID-19 mitigation will result in dismissal from the classroom and referral to the Office of Student Conduct. If you have any questions or concerns about UCLA's COVID-19 protocol, go to <https://covid-19.ucla.edu/information-for-students/>.