

Math 31B: Integration and Infinite Series

<https://pabloocal.github.io/Teaching/WMATH31BL22023/>

Winter 2023

Instructor

Name: Pablo S. Ocal

Office: MS 5234

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

Lectures: MWF 10:00-10:50 am

Office hours:

M: 11:00 am to 1:00 pm

and by appointment.

Classroom: MS 4000A

Teaching Assistants

Name: Ethan Alwaise

Discussion 2A: T 10:00-10:50 am

Discussion 2B: R 10:00-10:50 am

Contact: ealwais at math dot ucla dot edu

Classroom: MS 5127

Classroom: MS 5127

Name: Erica Fagnan

Discussion 2C: T 10:00-10:50 am

Discussion 2D: R 10:00-10:50 am

Contact: efagnan at math dot ucla dot edu

Classroom: BOELTER 2444

Classroom: BOELTER 2444

Name: Zi Li Lim

Discussion 2E: T 10:00-10:50 am

Discussion 2F: R 10:00-10:50 am

Contact: zililim at math dot ucla dot edu

Classroom: PAB 1434A

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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.

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% | | |

Homework

Homework will be assigned and collected every week. It will be assigned on Mondays and it will be due the following week on Wednesday via Gradescope. It will be graded and promptly returned to you via Gradescope. The assignments will be posted on the course website and announced in class. 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.**

Discussion

During discussion sessions an exercise will be assigned and collected every session. It will be assigned on Mondays and it will be due on Thursdays, 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.**

Exams

During the exams, you may not use notes, calculators, cell phones, or anything other than pen and pencil. There will be no make-ups for missed midterms. If you miss one midterm for a legitimate, documented reason, your grade will be computed using the second scheme above. If you miss both midterms for a legitimate, documented reason, your grade will be computed using the third scheme above. You must take the final exam in order to pass the class. Make-ups for the final exam are permitted only under exceptional circumstances, as outlined in the UCLA student handbook. The exams are scheduled for the following dates:

- Midterm 1: Wednesday, February 8.
- Midterm 2: Wednesday, March 1.
- Final: Saturday, March 18.

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 assured that you will not be penalized for doing so. 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/>.